

FACTS ABOUT MADRAS

Area (Tenth largest State in area)	130,357 sq. kms. (50,331 miles)
Population	33,686,953 (33.7 crores)
Density (Fifth largest State in Density of population)	258 persons per sq. km. (672 persons per sq. mile)
Rate of population growth in 1951-61	21.4 per cent
Length of Land boundary	1,200 kms. (750 miles)
Coastal Length	992 kms. (620 miles)
Districts	13
Taluks	103
Towns and Cities	338
Revenue Villages	14,124
Total number of Villages including hamlets	19,120
Members of Parliament: Lok Sabha	41
" " Rajya Sabha	18
Members of Legislative Assembly	207
Members of Legislative Council	63
Percentage of Literacy	33.4 per cent
Universities	69
Arts and Science Colleges	6
Medical Colleges	5
Engineering Colleges	1
Veterinary College	19
Teachers' Training Colleges	1,998
High Schools	30,138
Primary Schools (as on 30th September 1964)	88
Schools for Prof. Education	374
Panchayat Unions	12,523
Panchayats	373
Development Blocks	14,817
Net sown area	24,638,800
Livestocks	17.1 per cent
Area under Forests	17,236 sq. miles
Area of Reserved Forests	17,579
Towns and Villages Electrified (upto 1st October 1964)	6,572
Registered Factories (by the end of 1963)	

Madras Information

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THIS MONTH'S COVER

Swami Vivekananda in his early days.

No price is Too High To Pay for Freedom

CITIZEN'S DUTIES

1. To render all possible help and assistance for the defence personnel.
2. To increase the production of his factory.
3. To intensify efforts for increased production of agricultural and small-scale industrial commodities to make his State self-sufficient.
4. To avoid all strikes and lock-outs that may hamper production.
5. To maintain the price level of all essential commodities and curb the tendencies of hoarding and profiteering by conforming to the various legislative and other popular measures.
6. To maintain the supply lines of essential commodities.
7. To contribute generously in the form of money and gold for the war effort.
8. To inculcate the highest sense of duty and responsibility.
9. To join the various organizations set up for the defence of the country.
10. To prevent anti-social and anti-national activities of the fifth columnists.
11. To observe strict austerity in consumption of food, clothes and other essential goods and save for the National Defence Fund.
12. To avoid unnecessary travel so that more important and essential movement may not be hampered.
13. To keep up the morale of the people and prepare them for sacrifices.
14. To check rumour-mongering and to disseminate true and faithful news and information.
15. To join or help Citizens' Committee, N.C.C., Territorial Army and Lok Sahayak Sena and Rifle Clubs.
16. To pray for the victory of our Motherland in this struggle and set aside all differences of caste, creed or party.

MADRAS
Information

7624



123
456
789
1011



JAN 1961
MADRAS



New tyre or TVS retread?

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NAREN

meets his MASTER



Swami Vivekananda's 101st birthday falls on 7th of this month. The mention of his name lights a pride in the hearts of Indians, whose exposition of Hinduism at the Chicago Congress of Religions placed India on the highest pedestal in the eyes of the World. The following article describes his first meeting with Sri Ramakrishna Paramahansa his great Master.

In a small room of the Kali Temple at Dakshineswar sat a middle aged priest. He had a gentle, kindly face and seemed to be meditating. He sat cross-legged, his eyes half closed, and a peaceful smile upon his lips. From time to time he would look towards the entrance of the room, as though he was expecting someone to come in. The doors to the room lay wide open.

At Dakshineswar

Many people, young and old, sat round the priest, looking at him with attention. Suddenly his face lit up with joy. A youngman had appeared in the doorway. He was carelessly dressed and seemed to be deep in thought. It was Narendra Nath (pre-sargusa name of Swami Vivekananda).

After going to many religious men, Naren had come to Dakshineswar because his College Principal had once spoken with great admiration of the priest there. Naren had come in the hope that the priest would be able to clear his mind.

The priest nodded to him to come in. It seemed that it was for him he had been waiting all this time. Naren came in, greeted the priest and sat down. The priest talked to him lovingly, as though he had known him for a long time. He asked Naren to sing. The bhajan Naren sang was so full of feeling, that the priest closed his eyes as he listened.

Afterwards the priest took Naren to another room. He told him with tears in his eyes how anxiously he had been waiting for him. He also told Naren that he was to fulfil a great mission in life.

Have you seen God?

The boy was puzzled at all this. For a moment he even thought that the priest was perhaps a bit mad.

After some time Naren asked the priest the question which has puzzled so many men of religion before: "Have you seen God, Sir?"

"Yes, I see him just as I see you here, but in a more intense form" said the priest.

This was the first time that anybody had given a real answer to Naren's question. He was thrilled. "One can see and talk to Him, as I am going with you", the priest added. His voice was so full of sincerity that Naren had to believe him.

"Even if this man is a bit mad, he is a true Saint", Naren thought. He felt that he had at last found the teacher and guide he had been looking for. This priest was Sri Ramakrishna.

Sri Ramakrishna's Search for Truth

Sri Ramakrishna was not a scholar. He had not even gone to school regularly. Ever since he was a boy,



Mr. Rudin of Russia and Sri J. M. Somasundaram were awarded with medals at the 12th Tamil Writers Conference held on 25th December 1964, for translating Tamil books into other languages. The Russian Consul General received the prize on behalf of Mr. Rudin, Justice Sri M. Ananthanarayanan awarded the prizes.

he had wanted only to discover the Truth for himself. He had been able to think of little else.

The first thing Sri Ramakrishna did was to study his own religion. But then, he thought he must discover the truth of other religions as well. He began to live with a Muslim saint. After that, he tried to follow the true religion of Christ. He went to all the religious sects, one after the other, and tried to live truly according to what they taught.

When he had gone through all this, he realized that the aim of all religion was the same. He thought it a wonderful thing that there were so many religions. Each one of them was a way to God. If there had been only one path to God, perhaps it would have suited only one kind of people. The more paths there were, the greater was the chance that each individual would one day discover God and Truth.

After the very first meeting, Naren felt himself strangely drawn to Sri Ramakrishna.

Once Sri Ramakrishna was in deep meditation. Naren sat near him. When he opened his eyes he gently touched Naren. Something like an electric current passed through Naren. For sometime, he forgot who he was, where he was, and what he was doing. It was as though he had seen the greatness of Sri Ramakrishna with his own eyes.

He began to visit Dakshineswar very often after this. Sri Ramakrishna loved Naren very much. He knew the wonderful power of his mind. He felt there was some divine power in Naren's mind which blazed like the Sun.

Sri Ramakrishna knew quite well that Naren did not agree with all his beliefs. But this did not make the least difference to his affection. In fact he was very happy that Naren thought everything out for himself independently.

Difficulties on the way

At this time Naren's father suddenly passed away. This was a great blow to him. He had never known want before. His father had left nothing but debts. Friends whom Vishwanath Datta had helped so much, now turned their backs upon his widow and children. Some relations even tried to push the family out of their house. Creditors were always knocking at the door. Naren often did not know where their next meal was coming from. He was in great distress.

"I was the only hope of the family, the only one who could do anything to help them. Sometimes I would pray for five or six days and nights together without stopping. Oh, the agony of those days. I could not bear to see those who were nearest and dearest to me suffering." This is what Naren himself later said about those unhappy times.

At this time Naren was in the Law College. He was the poorest of the students. It often happened that he had to go without meals for many days. He would faint with hunger and weakness. But he would not accept any help from his friends. Sometimes he did not even eat at home, so that someone else in the family could have his share.

He went in search of a job. But he had no luck. He began to doubt whether God was kind, whether God existed at all. He became extremely cross with God. For months he kept away from Dakshineswar. People thought that he had stopped believing in every thing. They said unkind things about him. But there

was one person whose faith in Naren was unshaken. This was Sri Ramakrishna. He alone knew that the doubt in Naren's mind was just a passing shadow.

At last Naren got a small job in an attorney's office. He also managed to get some translation work to do. This gave him just enough money to keep his family from starvation. There was no fixed income. The worry and the fear about how his family would live never left him in peace.

Prayed for knowledge

One day a strange idea occurred to Naren. Why not ask Sri Ramakrishna to request God to take away his poverty? God would surely listen to Sri Ramakrishna.

Naren rushed to Dakshineswar and threw himself at the feet of his master. When Sri Ramakrishna had heard him, said, he "My boy, I cannot possibly make such a demand. Why don't you go and ask the Divine Mother yourself?" He persuaded Naren to go to the temple of Kali.

Naren returned from the temple after some time. He looked calm and contented. Sri Ramakrishna asked him whether he had prayed to the goddess to take away his poverty. Naren was startled at the question. He had entirely forgotten the purpose for which he had gone to the temple. He had just stood before the goddess and prayed with utter devotion for her love. Sri Ramakrishna asked him to go again. He went but came back having once again forgotten his object. Sri Ramakrishna even sent him for the third time. But the third time too he prayed for knowledge and devotion and for nothing else.

Some of you may think this as an amusing instance of absent mindedness. But it was far from that. Sri Ramakrishna did feel sorry for the plight of Narendra Nath and his family. But in his heart of hearts he was delighted at this incident. He was so full of joy that he blessed Narendra Nath and prayed that he and his family might never again be in want of food and clothing.

Naren found that Sri Ramakrishna was able to clear all his doubts, whatever they might be. He could explain the most difficult problems of philosophy through the simplest stories and parables.

Sri Ramakrishna once told his disciples this story. "A fisherwoman was returning home in the evening after she had sold her fish in the market. Suddenly thunder storm came and it grew dark. Another woman who happened to be a flower seller, gave her shelter in her house. She treated the fisherwoman very kindly. She gave her food and a place to sleep near the room

where the flowers were kept. Although the fisherwoman was very tired she could not sleep. She tried hard to close her eyes but could not. Something was troubling her. At last she discovered what it was. She was not used to the scent of flowers. So she got up and brought her fish basket from outside. She put her face close to the fish basket and in a moment was sound asleep." The meaning of the story was that it is very difficult for a man of the world to turn his face towards God.

Meaning of Advaita Vedanta

Sri Ramakrishna taught Narendra Nath and his other disciples the meaning of Advaita Vedanta. He taught them to concentrate and to meditate deeply. He taught them how they could be near God. Naren seemed to understand his master more than any of his brother disciples. He even explained to them many of the things Sri Ramakrishna said. In this way they seemed to understand more clearly. Naren spent five years with his master. In this period he not only learnt a great deal, but also got a kind of spiritual power.

Once when Naren was in deep meditation, one of his brother disciples touched him. It is said that the disciple got a shock as he would from an electric battery and his hand began to tremble.



Sri Naranadurai Kannan was awarded with a shield at the 12th Conference of Tamil Writers for his outstanding work in Tamil.



Chief Minister and Sri C. R. Pattabhiraman, Deputy Minister in the Ministry of Information and Broadcasting at the 7th anniversary celebration of the Madras Reporters' Guild.

Sri Ramakrishna did not want Naren to lose himself in things of the spirit at such a young age. "You have still to serve humanity", he said. "Let that be your mission. Let that be your purpose, because the service of man is the worship of God."

Employees' State Insurance Scheme Extended—Benefit for 1,500 more Factory Workers

The Employees' State Insurance Scheme has been extended to the areas of Vedapatti and Othakkalmandapam in Coimbatore district and Tirunagar in Madurai district in the State of Madras from the midnight of November 28, 1964. As a result, about 1,500 more factory workers will get benefit under the Scheme.

This brings the total number of insured persons covered under the E.S.I. Scheme in Madras State to about 2.64 lakhs and in the entire country to about 29.32 lakhs.

To provide medical benefit to workers in Vedapatti and Othakkalmandapam areas, a mobile dispensary has been provided.

It was this lesson of Sri Ramakrishna that made it possible for Naren to become "one of the great founders of the modern national movement in India". There was another great lesson that Naren learnt from the master. This was that all religions are but various phases of the same Truth. He made up his mind that one day he would teach this to the whole wide world.

After some time Sri Ramakrishna fell seriously ill. Narendranath and his other disciples—about a dozen young men—served their Gurni day and night. Even as he lay on his sick bed, Sri Ramakrishna was preparing them for monastic life. He had trained Naren to be the head of the group. He gave him all that he had to give, a great treasure of wisdom and spiritual power. Narendranath was destined to scatter this treasure over the whole earth. Sri Ramakrishna was confident of the powers of his disciples. "The time will come when he will shake the world to its foundations through the strength of his intellectual and spiritual powers", he said.

Ramakrishna Order

Two days before he passed away, Sri Ramakrishna called his young disciples to his bed-side. He initiated them as monks and gave them garua robes and rudraksha. This was the beginning of the great Ramakrishna Order.

Sri Ramakrishna passed away on August 16, 1886. It was the end of a great life. Before the light of this life was blown out it had lighted another bright lamp. Sri Ramakrishna passed away, but his spirit continued to live in his dearest disciple.

Panchayat Raj



MAHATMA GANDHI

Independence must begin at the bottom. Thus, every village will be a Republic or Panchayat having full powers. It follows, therefore, that every village has to be self sustained and capable of managing its affairs even to the extent of defending itself against the whole world. It will be trained and prepared to perish in its attempt to defend itself against any onslaught from without. Thus, ultimately, it is the individual who is the unit. This does not exclude dependance on and willing help from neighbours or from the world. It will be free and voluntary play of mutual forces. Such a society is necessarily highly cultured, in which everyman and woman knows what he or she wants and, what is more, knows that no one should want anything that others cannot have with equal labour.

This society must naturally be based on Truth and Non-violence which, in my opinion, are not possible without a living belief in God, meaning a self-existent, all knowing living force which inheres every other force known to the world but which depends on none and which will live when all other forces may conceivably perish or cease to act. I am unable to account for my life without belief in this all embracing living light.

In this structure composed of innumerable villages there will be ever widening, never ascending circles. Life will not be a pyramid with the apex sustained by the bottom. But it will be an oceanic circle whose centre will be the individual always ready to perish for the village, the latter ready to perish for the circle of villages, till at last the whole becomes one life composed of individuals, never aggressive in their arrogance but ever humble, sharing the majority of the oceanic circle of which they are integral units.

Therefore, the outermost circumference will not wield power to crush the inner circle but give strength to all within and derive its own from the centre. I may be taunted with the retort that this is all Utopian and therefore not worth a single thought. If Euclid's point, though incapable of being drawn by human agency, has an imperishable value; my picture has its own for mankind to live. Let India live for this true picture, though never realizable in its completeness. We must have a proper picture of what we want before we can have something approaching it. If there ever is to be a republic of every village in India, then I claim variety for my picture in which the last is equal to the first, or in other words, none is to be the first and none the last.

In this picture every religion has its full and equal place. We are all leaves of a majestic tree whose trunk cannot be shaken off its roots which are deep down in the bowels of the earth. The mightiest of winds cannot move it.

Justice Sri P. Chandra Reddy being sworn in as the Chief Justice of Madras High Court on 23rd November 1964.



Panchayati Raj Conference Recommendations

The State Ministers of Community Development and Panchayati Raj in their two-day Conference held recently in New Delhi discussed the need for a close link between Community Development and Co-operation and the measures to help the weaker sections of the community.

The Conference suggested that Panchayat Samitis must take active interest in convening meetings of Gram Sabhas in their jurisdiction. Panchayat Samitis should draw up in advance a schedule of meetings for Gram Sabhas, earmark officers or members of the Samiti for each Gram Sabha and associate other social workers in the meetings of Gram Sabhas.

Finances

On Panchayati Raj Finances the view was expressed that expenditure on staffing village panchayats should be shared equally by the Central and the State Governments. Alternatively, the Conference suggested implementation of the recommendation of the Santhanam Study Team for a provision of Rs. 1 per capita per annum for Village Panchayats to be shared equally by the Central and State Governments.

About Panchayati Raj Finance Corporations, the Conference felt that it would be desirable to set up such Corporations in one or two States which have come forward to do so. Based on their experience the question of setting up such Corporations in the remaining States should be examined.

The Ministers also considered the report of the Study Team on Nayaya Panchayats. It was agreed that States which have accepted the recommendations should complete legislation and those which have already enacted legislation should implement them by March 31 next. The Conference reviewed existing arrangements for supervision of Nayaya Panchayats and was of the view that each State Government should designate appropriate supervisory authority at the sub-divisional level.

Incentives

The Conference reviewed steps taken by State Governments to give incentives to Panchayati Raj bodies for fulfilling agricultural production targets, maintaining completed works and raising resources; also the arrangements made for giving them matching grants. It emphasised the importance of taking a long term view of the capacity of Panchayati Raj bodies for resource generation. It was also agreed that the Union

Ministry of Community Development and Co-operation should evolve criteria for judging the work of Panchayat Samitis and providing suitable incentives, without increasing the existing load and paper work, at the block and higher levels.

Safeguards

The Conference consider safeguards in Panchayati Raj and recommended that they be provided under four broad categories, namely, election procedures, enquiry procedures, accounting and audit and staff methods. It expressed the view that the existing terms of reference of the Committee on Panchayati Raj Elections are wide enough to cover the efficient and effective functioning of Panchayati Raj institutions.

The Conference noted that necessary machinery for prompt enquiries had been established in most of the States and emphasised that similar machinery should be set up in the remaining States also. The power to sanction prosecution against office-bearers at the village panchayat level, the Conference felt, might vest in the Collector, while for the higher-level Panchayati Raj bodies this power might vest in the State Government.

Fourth Plan

The Conference decided that in the Fourth Plan, Community Development and Panchayati Raj institutions must make all-out efforts towards increased agricultural production by maximum use of rural manpower. Also they must help in the preparation and execution of integrated block and district plans. Welfare of the weaker sections of the community should also be given adequate priority. A lump-sum provision of Rs. 400 crores, as recommended by the Santhanam Committee, might be made in the Fourth Plan for local works, like drinking water supply, roads and rural dispensaries.

Weaker sections

The Conference discussed in detail measures to assist the weaker sections of the community and suggested that assistance could be provided through the rural works and industries programmes and by organising labour co-operatives and co-operative farming societies. In the execution of the rural works programme, preference should invariably be given to labour co-operatives. And in no case should contractors be employed. The Ministers were of the view that Panchayati Raj institutions and the Block extension agency should assist co-operative farming societies in drawing up agricultural production programmes. In addition, assistance should be given in preparing schemes of mixed farming

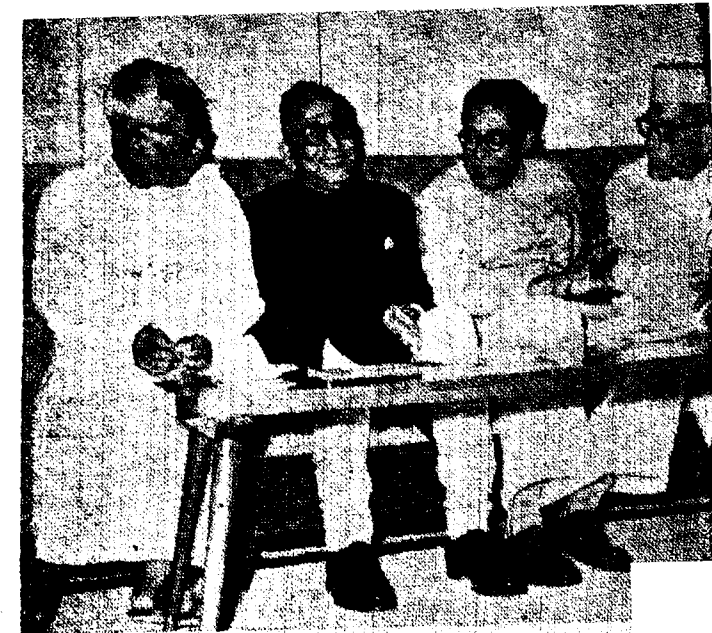
The requirements of co-operative farming societies, such as fertiliser, seed and irrigation facilities should be met on a priority basis.

Co-operation and Community Development

The Ministers agreed that Panchayati Raj institutions and Co-operatives should come closer to each other so as to meet the requirements of increased agricultural production. The question of institutional co-ordination at all levels could be studied in the light of the experiments made in Rajasthan. It was also agreed that Panchayati Raj institutions should invest their surplus funds in co-operatives as deposits, etc. Service societies and central co-operative banks should be fully associated with the preparation of production plans so that there might not be subsequent bottlenecks in the free flow of credit. The extension agency and members of Panchayati Raj institutions should assist village co-operatives in recovering their dues.

Family Planning

The Conference also emphasised the need to give family planning the highest priority and suggested that the programme be taken up as an integral part of the



Chief Justice of Madras High Court Sri P. Chandra Reddy is seen with Sri M. Bhaktavatsalam and others after being sworn in as the acting Governor of Madras.

Block programme with well-defined targets for reduction of the birth-rate. Supply of contraceptives should be facilitated by establishing local depots. Co-operative societies and post offices might undertake their sale on a no-profit no-loss basis.

Sixth Unit of the Neyveli Thermal Station

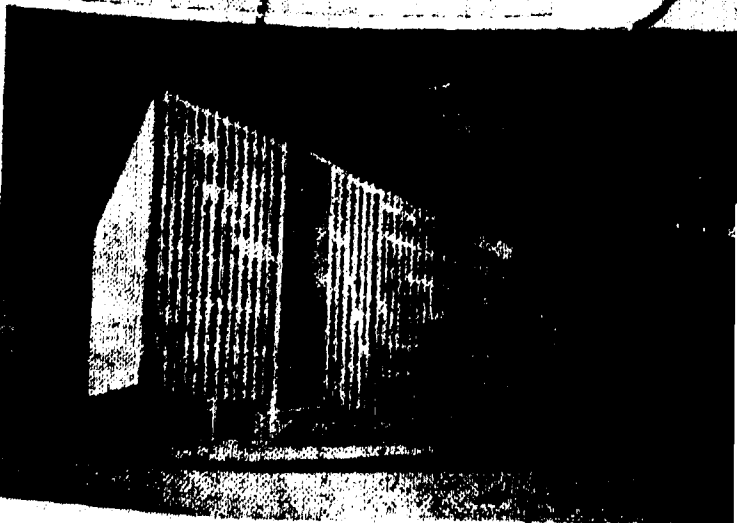
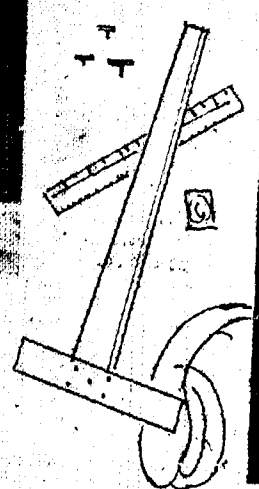
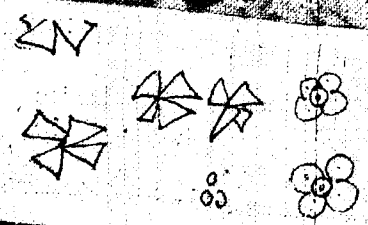
The sixth 50 MW unit in the expansion programme of the Neyveli Lignite Power Station is expected to be commissioned by March 1965 and the seventh unit of 100 MW by June 1966.

The expansion programme of the power station envisages increasing the capacity from 250 MW to 400 MW in the first phase of expansion during the Third Plan period. It is proposed to increase the capacity to 600 MW in the second phase of expansion.

Up to the end of October this year, 2,090 million units of energy were generated by the power station. Of this about 1,650 million units were fed into the Madras State Electricity Grid.

Up to the end of October this year, 2.5 million tonnes of lignite had been mined. The target of production of 3.56 million tonnes per annum will be reached by February 1966 when all the lignite consuming units are expected to be commissioned. The mine capacity is being increased from 3.56 million tonnes to 6.3 million tonnes to meet the requirements of the expanded power station.

Up to the end of October 1964, 7,700 tonnes of washed clay was produced in the Clay Washery Plant.



1. Sri M. Bhakavassalam and Sri A. Lakshmanaswamy Mudaliar after the Chief Minister laid the foundation stones for the buildings of the Association of Surgeons of India and the Madras Centre of the Institution of Engineers (India).
2 and 3. An artist's sketches of the buildings.
4. Chief Minister laid the foundation for the Kalikurichi Co-operative Sugar Mills Ltd., on 8-12-64.
5. Interior view of the Tank Factory at Avadi, Madras.

Avadi TANK Project TAKES Shape

Self-reliance and self-sufficiency in defence industry being the sheet anchor of the Government's policy, the establishment of the heavy vehicles factory naturally formed part of the general expansion of defence production. In realisation of this programme, work has been going apace since December, 1961 when the foundation stone was laid at Avadi for the establishment of the factory. The work was given a fresh impetus within a year of the foundation-laying when the insidious Chinese aggression culminated in an open attack on our soil.

The heavy vehicles factory was set up under the Ministry of Defence in collaboration, *inter alia*, with the U.K. firm Moens. Vickers-Armstrongs (Engineers), Limited, with whom the Government of India concluded an agreement in 1961. The project estimated to cost Rs. 16 crores, when completed would establish production capacity not only for all types of armoured fighting, tracked vehicles, but also other items of heavy engineering equipment required by the Defence Services. When fully equipped the factory will be a self-contained and integrated unit and will manufacture all the major parts of the armoured tank including the engine, gear-box and the suspension. To begin with, it would be necessary to import 60 per cent of the machinery, which has already arrived.

Medium tanks

Medium tanks will be the major item of production of the factory at the beginning. Medium tanks, as distinct from light tanks which weigh 13 to 20 tons and heavy tanks above 45 tons, will range in weight from 20 to 45 tons. The special steel required for the manufacture of the tank will be produced at Rourkela and supplied. Each medium tank would cost about Rs. 10 lakhs. To start with the factory will be making use of indigenous materials up to 30 per cent and in the long

run it might go up to 80 per cent. Indeed, for the very nature of its organisation and programme of manufacture of the specialised kind of armoured vehicles with a wide versatility in its use from the plains to the high altitudes with precipitous terrain, the factory can be described as a unique venture in the world. Further, no other factory in the world is known to produce all the components like the hull, the engine and the turret under one roof. Some 200 Indian trainees are receiving intense instruction and training from foreign experts at the Factory in the various stages of production of the tank.

Negotiations are also under way with firms abroad for production of light tanks, which are capable of being transported by air and used in areas inaccessible to conventional armoured cars.

A prototype of the Indian-made tanks was demonstrated at Ahmednagar on 25th October 1964. The Defence Minister Sri Y. B. Chavan named the vehicle "Vijayant" meaning "Final Victory" and the first India made tank will roll out of the factory towards the end of 1965.

The Tool Room of the Factory commenced production in November last as per schedule and is in full commission now. It is now working in double shift. The other shops are expected to start functioning according to a phased programme.

Training school and township

The Artisan Training school started a little earlier in November 1961 as a nucleus to train skilled workmen with a strength of 100 trainees has now doubled its strength. These trainees have been recruited on an all-India basis after detailed psychological and aptitude tests. When they complete their training for one year



Sri T. A. Varghese, Chief Secretary to Government, chatting with the visiting members of the Hungarian Technical Mission.

in the school, they would be given floor training for another year in the different ordnance factories. The first batch of artisans, who completed the prescribed technical training in the Artisan School attached to the factory are now manning the machinery.

The factory and residential colony are located in a 1,400 acres site, of which the Madras Government have given free of cost 770 acres. The State Government has also made arrangements for permanent water and power supply to the factory. The factory will have a floor area of nearly 12½ acres. Eighty per cent of this has already been constructed and the rest of the work is likely to be completed by the middle of next year. The estimated cost of the project includes the cost of plant and machinery, accommodation for officers and the workers and the colony. Civil construction including the factory buildings and the township is proceeding accord-

ing to schedule and is expected to cost Rs. 6 crores. The greater part of the 1,000 residential quarters of all types for employees is nearing completion. The township is estimated to accommodate a population of 5,000.

Employment potential

Avadi was a military base during the Second World War for units of South East Asia Command. The present site had several initial advantages like the ready availability of suitable developed land and railway spurs and proximity to Madras. An important consideration was the availability of skilled labour, that is to say labour that would become skilled. These initial advantages have not only reduced the capital expenditure but have also saved time in execution of the project.

The factory will be one of the biggest industrial establishments in the country with an initial employment opportunity for 3,000 workers both skilled and unskilled. The ultimate employment potential on a single shift basis is expected to be of the order of 3,500.

As one drives to the tank project area one sees on either side en route a number of factories set up to manufacture a variety of items. This tank project is expected to open up opportunities for a number of ancillary and feeder industries and give a fresh fillip to industrial activity in the area.

When the tanks start rolling out of the factory, the two-fold objective of the country's economy—defence and development—will have been realised to a considerable extent.

Dilli Mirror

The "Dilli Mirror" and "Dilli Sandesh" English and Hindi editions of the Quarterly Journal brought out by the Directorate of Public Relations, Delhi Administration, is an informative journal providing particulars about the schemes and activities relating to the development of the capital. The standard of the journal is very good and its contents are interesting.

BHAKTAVATSALAM Committee Report On Women's Education



The following is a summary of the main recommendations of the committee.

The important point emphasised by the Bhaktavatsalam Committee on Women's Education was that official action must collaborate closely with public initiative to carry out a programme of girls' education. The main recommendations made by the Committee were :—

Public Co-operation

Direct co-operation of the public should be encouraged in the following fields :—

- (i) Establishing private schools.
- (ii) Putting up of school buildings.
- (iii) Contributing voluntary labour for construction of school buildings.
- (iv) Helping in the maintenance of school buildings.
- (v) Helping in providing suitable accommodation for teachers and students, particularly in rural areas.
- (vi) Popularising co-education at the primary stage.
- (vii) Creating public opinion in favour of the teaching profession and to give greater respect to the teacher in the community.
- (viii) Undertaking necessary propaganda to make the profession of teaching for women popular.
- (ix) Encouraging married women to take up at least part-time teaching in village schools and to work as school mothers.
- (x) Initiating action and participating in educative propaganda to break down traditional prejudices against girls' education.
- (xi) Setting up and organising school betterment committees, improvement conferences.
- (xii) Supplying mid-day meals.

(xiii) Supplying uniforms to poor and needy children.

(xiv) Supplying free text books and writing materials to needy children.

State Councils

The State Councils for Women's Education are the most suitable agency for mobilising community effort. They should function as part of the net work of which the District Councils and Mahila Mandals and similar voluntary bodies would be strong and active links.

State Governments

(i) The State should educate Public opinion in favour of girls' education through school improvement conferences, seminars, audio-visual aids, enrolment drives and by assisting voluntary organisations and others engaged in the field.

(ii) The State should provide necessary schooling facilities in all areas and habitations; the existing functional deficiencies of schools should be remedied.

Women's wing of the Madras City Home Guards was inaugurated by the Inspector-General of Police, on 6th December 1964. In the picture Women Home Guards are reading the pledge.



and periodical inspection made to ensure their structural soundness and suitable sanitary facilities.

(iii) States should appoint women teachers in primary schools and a greater number of women teachers in mixed schools. The basis of recruitment should be widened and conditions of work made more attractive, and salary scales improved. Special allowances for hilly, isolated or other specific backward rural areas should be given.

(iv) Attempts should be made to bring back to the teaching profession married women who have left it in recent years and women from other occupations to supplement the teaching staff.

(v) Training schools with hostels should be located in the rural centres.

(vi) Women teachers should be provided with quarters near the schools.

(vii) States should make education free for all girls up to the secondary stage and make all reasonable provision for the advancement of girls' education and earmark such funds.

(viii) In schools which lack accommodation but with a rush for admission, the double-shift system may be tried as a temporary measure.

(ix) Adjustment of school hours and holidays to seasonal requirements for some time to come will act as an helpful inducement.

(x) Determined efforts should be made to increase literacy classes for women in rural areas and carry out intensive campaigns for the spread of literacy among women.

Central Government

Central assistance on a hundred per cent basis should be given to States :—

(a) at the elementary stage for—

(i) preparation and employment of women teachers ;

(ii) grant of free books, writing materials and clothing to girls ; and

(iii) twin quarters for women teachers ; and

(b) at the secondary stage for—

(i) provision of separate schools for girls ;

(ii) hostels ;

(iii) grant of free books, writing materials and clothing to girls ; and

(iv) preparation and appointment for women teachers in increasing numbers.

Either hundred per cent Central assistance or long-term Central loans should be provided for construction of suitable school buildings.

Village Leadership Programme at Gandhigram

An action research programme involving the natural leaders of the communities in the educational and service aspects of Family Planning was started initially in 1962 by the Family Planning Communication Research Centre, Gandhigram, a rural research centre in the district of Madurai, Madras State.

The leadership programme is in vogue in 36 villages of the Project area covering a total population of 41,756. In these villages 120 male leaders and 66 female leaders are serving as contraceptive depot holders in their communities. Through these leaders about 900 couples are obtaining supplies of contraceptives and have been motivated to practice Family Planning methods. Through these leaders, 361 eligible males and 52 eligible females have been motivated to accept permanent methods of sterilization during the period 1-1-1963 to 30-4-1964, and the vasectomy and salpingectomy operations have been carried out at the Primary Health Centres at Athoor and Chinnakant increase in the number of vasectomies carried out in the Project area due to the implementation of the leadership programme. For example, when only 24 vasectomies have been carried out in 1962, 62 vasectomies were done in 1963 and 299 were done in the first half of 1964 from the programme villages. Some reduction in the registered births between 1962 and 1963 have been noticed which requires further studies.



Cultural tree

1. The members of the U.A.R. cultural Troupe is keenly watching a dance performance arranged in honour of them by the Madras State Sangeetha Nataka Sangam on 22-11-64.
2. A scene from the Police Cultural meet held at the Children's Theatre on 3-12-64.
3. Sri R. Venkataraman with the delegates of the XXII Session of the International Geological Congress who visited Madras recently.
4. A cultural programme was arranged for them. The delegation is seen in the picture with the cultural troupe.
5. A scene from the variety entertainment held recently in Tiruchy in connection with the Madras State Police Inter-range Games Meet.

Leprosy

Problem in Madras State

The Leprosy in Madras State is highly endemic—the districts of South Arcot, North Arcot, Chingleput, Salem and Madurai being the most affected. A detailed account of the problem of Leprosy in Madras State and the various efforts taken to control this disease is given below. It will be read with interest in view of the 9th All-India Leprosy Worker's Conference to be held in Madras towards the end of this month.

Leprosy relief work in Madras State, at first, started with the establishment of 'Colonies' by the various Christian Missionaries, who took the leading part in this work then.

Prior to 1955, no mass Leprosy Control Work was done; but the following sanatoria were in existence:—

(1) Central Leprosy Teaching and Research Institute, Tirumani, Chingleput (Central Government).

(2) Government Children's Leprosy Sanatorium, Ethapur, Salem district.

(3) Government Gandhi Memorial Leprosorium, Tholurpatti, Tiruchirappalli district (taken over by the Government).

(1) Sacred Heart Leprosy Hospital, Sakcottai, Kumbakonam

(2) Schieffelin Leprosy Research Sanatorium, Kari-giri, North Arcot district.

(3) Dabendranath Mallie Leprosorium, Vedathora-salur, South Arcot district.

(4) St. Joseph's Leprosy Home, Arokiapuram, Tuticorin, Tirunelveli district.

(5) Kasturba Kushta Nivaran Nilayam, Mazhavan-thangal, South Arcot district.

(6) Holy Family Hansenorium, Fatimanagar, Tiru-chirappalli district.

(7) Dayapuram Leprosy Hospital, Manamadurai, Ramanathapuram district.

(8) C. P. Memorial Leprosy Hospital, Colachel, Kanyakumari district.

Since 1955, the control work by the modern field methods in an extensive area, started in this State on the pattern of the National Leprosy Control Scheme. The units established thus in the Five-Year Plan periods were two types of units, i.e.—

DISTRICTWISE INCIDENCE OF LEPROSY

The rate of incidence of leprosy in the various districts of the Madras State:—

1 South Arcot	..	More than 4 per cent.
2 North Arcot	..	4 per cent.
3 Salem	..	3 ..
4 Chingleput	..	3 ..
5 Madurai	..	2 ..
6 Ramanathapuram	..	2 ..
7 Tiruchirappalli	..	2 ..
8 Thanjavur	..	2 ..
9 Tirunelveli	..	1 ..
10 Coimbatore	..	1 ..
11 Kanyakumari	..	0.9 ..
12 The Nilgiris	..	Nil.

(i) the treatment and study centre (one at Tirukoyilur).

(ii) the Subsidiary centres at various places in the State.

Study centre at South Arcot

The Leprosy Treatment Study Centre at Tirukoyilur is one among the four such centres in India which not only gives mass treatment, but also engages itself in maintaining accurate record of the progress of patients on treatment as well as epidemiological study of the disease. This centre has been expanding its activities so much so that this unit now runs O.P. Clinics at Villupuram and Mannalupet. There are facilities in the centre for Physiotherapy, Hospitalization, Laboratory Investigations and Surgery also. The work of this centre was assessed (August 1962) by two officers deputed

LEPROSY IN ANCIENT INDIA

Although leprosy has been prevalent since ancient times in India, China and Africa, authentic reference to this disease is found only in the ancient literature of India. In Sushruta Samhita (600 B.C.) one finds a reasonable good account of the clinical feature and treatment of the disease. In this ancient book references to leprosy are made under Vat Rakta or Vat Shonita and Kushta. Vat Rakta or Vat Shonita is characterised by presence of hyperaesthesia, anaesthesia and deformities, etc., without skin diseases in general, but one variety (Arun Kushta) corresponds to leprosy. Two kinds of skin diseases have been described under Arun Kushta; in one the prominent symptoms are anaesthesia and deformities, etc., and in the other, ulceration, falling off of fingers, etc., (Comparable with the Neuromacular and the Lepromatous forms of leprosy).

Reference to Kushta is also made in earlier Indian literature, for example, in Manusmriti. In the absence of clinical descriptions in the Manusmriti, one cannot feel sure that the term mentioned there refers to leprosy, but the context makes it very probable that leprosy is actually meant. Manu forbids marriage into families with certain diseases and defects, and Kushta is one of these. Again Manu says that "a person who gives his daughter suffering from Kushta in marriage after openly declaring the fact, is not liable to punishment."

—From "Notes on Leprosy"

LEPROSY RESEARCH CENTRES

In the Madras State, there are four important Leprosy Research Centres. They are:

1. The Central Leprosy Teaching and Research Institute, Tirumani.

2. The Hand and Foot Research Unit of the Christian Medical College and Hospital, Vellore.

3. The Schieffelin Leprosy Research Sanatorium, Kari-giri.

4. The Government Leprosy Treatment and Study Centre, Thirukkoyilur.

Third Plan Provision for these schemes is Rs. 60 lakhs (This is in addition to the expenditure on institutions already opened in I and II Plan period and other items).

by the I.C.M.R. who commented that the method of work of this centre is on the ideal lines of control unit and also that there is an improvement of the leprosy situations in the area served by the centre. The period of work chosen for assessment was from 1955 to 1962.

Leprosy Subsidiary Centres

Subsidiary centres which have been established since 1955 have engaged themselves in mass treatment, intensive survey and observation of healthy contacts and health education about leprosy.

So, till the beginning of the Third Five-Year Plan, there were 14 Government Centres covering a population of 12 lakhs. These centres also engaged themselves in a continuous case-finding programme.

A novel scheme of Leprosy Control Work was started in the year 1959 called the Wallajah Scheme as the area of operation of this scheme is the Wallajah taluk of North Arcot district. The headquarters of the Scheme is at Ranipet and the General Medical Institutions in the taluk take part in the schemes as peripheral centres. The area covered by this project is 395 square miles with population of 3 lakhs and consists of 18 sub-centres.

The Government have taken over during 1960 the Belgian Leprosy Centre started by Dr. Hamerijckx with the existing staff. The population involved in this area is 5 lakhs and the area covered is about 800 square miles. There is a mass control programme covering a large area, i.e., almost three taluks in Chingleput district. This centre is well equipped with facilities for Physio-

Below 1 per 1000 population (Below .1%)

1 to 3 " " (1 to .3%)

3 to 5 " " (.3 to .5%)

5 and over " " (.5% over)

A rough idea about the distribution of leprosy in the various continents will be found in the following table:—

Source--"Notes on Leprosy"

Third Five-Year Plan

During the Third Five-Year Plan Period, it is proposed to establish the following units in accordance with the Government of India Pattern :—

The Government have already sanctioned the establishment of Leprosy Control Units at the following places :—

- (1) Palani, Madurai district.
- (2) Kancheepuram, Chingleput district.
- (3) Elathur, North Arcot district.
- (4) Namakkal, Salem district.
- (5) Kallakurichi, South Arcot district.
- (6) Krishnagiri, Salem district.
- (7) Sivagiri, Tirunelveli district.

- (1) Palni
- (2) Elathur
- (3) Kancheepuram
- (4) Namakkal
- (5) Kallakurichi
- (6) Krishnagiri

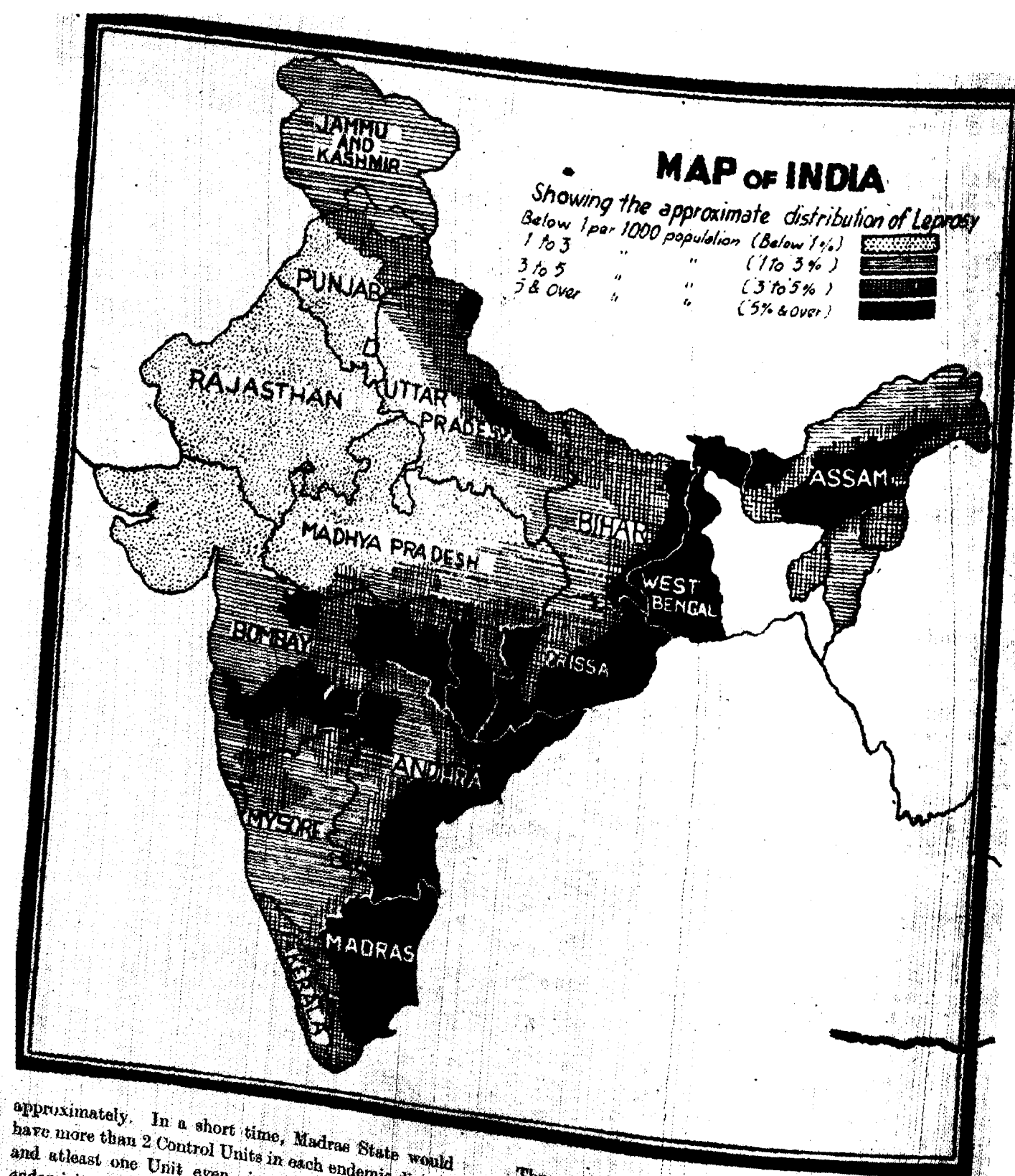
The Government have sanctioned the establishment of 30 S.E.T. Units during 1962-63 and out of the 30 units 2 units are now functioning at Valavanur, South Arcot district, and Sriperumbudur, Chingleput district respectively. Proposals for the establishment of 38 S.E.T. Units during 1963-64 have been deferred in view of the National Emergency.

The S.E.T. Units

The S.E.T. Units (Survey, Education and Treatment) will be established in areas having an incidence of less than ten per thousand and these units will be attached to the existing health services, i.e. Dispensaries, Primary Health Centres, etc., with specially trained additional staff of Para-Medical workers and Non-Medical Supervisors. Each Para-Medical worker is to cover a population of 15,000. However in hilly areas each such worker will cover a population of 5,000 because of difficult terrain in hilly areas. The non-medical supervisor should be a University Graduate, trained in Leprosy and each should look after the work of 5 Para-Medical workers of the S.E.T. Units. He will be placed under the overall control of the State Leprosy Officer and the District Medical Officer of the concerned district.

It is also decided to convert even the old subsidiary centres as well as the Treatment and Study Centre into Leprosy Control Units, in the near future.

Thus, when all these Control Units start functioning there will be in Madras State 21 Control Units which would be expected to cover a total population of 2,500,000.



approximately. In a short time, Madras State would have more than 2 Control Units in each endemic district and at least one Unit even in districts having low endemicity. In addition, even in low endemic districts wherever there are pockets of endemicity, these areas will be covered by the establishment of S.E.T. Units though only 30 units have been sanctioned now, more S.E.T. Units would be sanctioned in the near future.

Thus every effort is made to cover the entire State with adequate leprosy relief.

Tirukoilur training centre

A Training Centre has already been established at Tirukoilur to train Para-Medical Workers only. It can train 30 candidates in each batch of 9 months duration. The Government have sanctioned the 000.

RECENT ESTIMATES OF LEPROSY IN INDIA

Recent estimates indicate that there are about 15 lakhs or 1,500,000 cases in India. Though cases of leprosy are found throughout India, the disease is not equally distributed in the different parts of the country. The distribution of leprosy in the various States in India is roughly shown in Table given below.

States	Population	Number of estimated cases of leprosy	Estimated incidence per thousand	Rate of per
Andhra	28,077,000	110,806	4.2	
Assam	8,963,000	49,540	4.4	
Bihar	40,224,000	122,788	3.0	
Bombay	47,825,000	161,855	3.5	
Madhya	21,260,000	84,722	3.0	
Madras	35,096,000	295,410	8.4	
Mysore	1,927,000	12,782	0.66	
Orissa	10,694,000	80,984	7.5	
Punjab	12,642,000	1,451	0.11	
Uttar Pradesh	54,992,000	80,030	1.4	
West Bengal	24,140,000	341,885	14.1	

Source: "Notes on Leprosy"

version of this Centre into a full fledged Training Centre according to the Government of India pattern which can train 60 Para-Medical Workers and 10 Non-Medical Supervisors, at a time. It will also provide orientation Course of 2 to 4 months for Medical Officers. The course for the third batch of Para-Medical Workers has commenced from 1st July 1963.

In Madras State, we are lucky to have quite a good number of Voluntary Organisations, who are engaged in Control work, many of them are doing excellent work. An important feature of the work in this State is the close co-operation between Government and Voluntary Organisations. The Government are paying a per-capita grant to leprosy sanatorium and homes and this grant has been increased this year from Rs. 12 to Rs. 18 per month. Voluntary Organisations are also receiving help from the Government for control work.

Present set-up

So, we have to-day, one Leprosy Treatment and Study Centre, 13 Subsidiary Centres, 2 S.E.T. Units, 6 Leprosy Control Units of the Government and two fully aided (Voluntary) Control Units at Polambakkam and Wallajah

Scheme; in addition 8 voluntary organisations partly-aided doing control work. Thus in about a few months time, Madras State would have fairly adequate coverage.

We have already received the following aid from UNICEF:—

1. Sapsone Tablets 5,149,000.
2. Motor Vehicles 5 (Four for control Units at Elathur, Kancheepuram, Palni and Namakkal and one for the Training Centre at Tirukoilur).
3. Skimmed Milk Powder.

There is an industrial workshop attached to the Central Leprosy Teaching and Research Institute, Tirumani, consisting of different sections such as Carpentry, Smithy, Weaving, Cobblery, Binding, Mat-making, where facilities for the occupational therapy and rehabilitation of the patients are provided. The requirements of the Sanatorium, i.e., furniture, repair works, cloth for patients, shoes for patients, etc., are met out by these sources.

With the help of the Gandhi Memorial Leprosy Foundation, the Christian Medical College and Hospital, Vellore, has established a Rehabilitation Centre at College Hill. The cured patients are taught Carpentry, Toy-making, Poultry-farming and work with plastic materials.

The Daya Sadan, Madras, is a care home for disabled, diseased, aged destitutes and orphans, where leprosy patients are admitted and provided with shelter.

Sri P. Kakkam, Minister of Home, distributing tools and appliances to the Scheduled caste artisans.





Chief Minister with the High Commissioner for Malaysia.

food and clothing. There is an industrial section with the following sections:—

Weaving, Gardening, Vegetable growing, slate-pensils-making, Tailoring, etc.

Rehabilitation by way of providing employment, etc., to ex-leprosy patients is undertaken by the Sacred Heart Leprosy Hospital, Sakcottai, Kumbakonam.

The Shieffelin Leprosy Research Sanatorium, Karigiri, is also maintaining a Rehabilitation Centre with Mat Industry Centres at two places. They also propose to establish two more centres.

The St. Joseph's Leprosy Home, Arokiapuram, is maintaining a Rehabilitation Centre with Candle-making industry, Poultry-farming and Gardening, Carpentry, Weaving, Tailoring, Laundry, Bee-keeping and Smithy. Seventy-five Charkas have been provided. Fish net-making and brush making are conducted for the women to provide work and remuneration.

The proposal for the establishment of a Rehabilitation Centre has been deferred by Government in view of the National Emergency.

Surgery

Reconstructive surgery is undertaken at the Christian Medical College and Hospital, Vellore. Deformative of

the hand, foot and face, are regularly treated with surgery. Since this is a Research Unit, regular follow-up of work is carried out on almost every single case that has been operated on. This unit provides facilities for training in reconstructive Surgery in Leprosy. Surgical treatment for Leprosy patients is available in the Central Leprosy Teaching and Research Institute, Tirumani, where till recently a surgeon from the Medical Department was posted as visiting surgeon. The Central Leprosy Teaching and Research Institute have since employed a full-time surgeon for their institute and the arrangements made for the visiting surgeon have been discontinued.

In Shieffelin Leprosy Research Sanatorium, Karigiri, several new methods of reconstitutions of hands, feet and face, are under trial and surgical treatment of rehabilitation is provided to the patients.

In the Polambakkam Leprosy Centre, there is department of Surgery and Physiotherapy, where operations are carried out.

Leprosy Co-ordination Committee

As there are a large number of voluntary and Government organisations engaged in Leprosy relief work in Madras State Dr. Sushila Nayyar, Union Health Minister suggested that efforts should be made to co-ordinate the activities of all these organisations so as to encourage an exchange of ideas on the various aspects of Leprosy work among the Leprosy workers of the State. So, the Director of Medical Services formulated a Leprosy Co-ordination Committee in the State with the State Leprosy Officer of the State as the convenor and Secretary.

The first meeting of the committee comprising of selected research and field workers (both voluntary and Government), took place in March 1963 at Karigiri. The methods of Co-ordination were discussed at the meeting and it was decided to have a meeting at C.L.T.R.I., Tirumani in June 1963 to discuss Leprosy Reaction and another at Karigiri in January 1964 to discuss Trophic ulcer.

The second meeting of this committee took place at Chingleput in July 1963 in the premises of the C.T.R.I., when the subject Leprosy Reaction was discussed. It is worth mentioning that specialists of allied fields of medicine, i.e., Dermatology, Pathology, Venereology, Internal Medicine also took part in the meeting. There was also a meeting of field workers on the occasion when the records for field work, i.e., Records for survey were discussed.

DONATE BLOOD-

Save the dying patients

Every day we hear about fatal accidents of one kind or another. Unless there is sufficient stock of blood it is not possible to save the lives of those met with these accidents. In advanced countries there are a number of Blood Donors' Associations which take the trouble of contributing the blood voluntarily. In our country blood is received mostly from paid donors. Even this is not sufficient to meet the demand. The Blood Donors' Club, Madras branch of the Red Cross Society, is doing a very good work in this sphere. The following is the inaugural speech of Dr. (Kumari) A. B. Marikar, Director of Medical Services, at the anniversary of the above Club.

Although blood is an essential commodity to be donated by the people, it did not have as much importance as it should have in this country and only when the enemy came to our frontiers we were made conscious of our duty to donate blood to those who are in need of it. Even though the enemy might have retreated, there is still emergency in the country. Emergencies will always exist as long as there are buses, railways, etc. Sudden calamities might happen in the form of a bus accident, or a train accident or a plane accident. So the necessity for blood co-exists with these emergencies.

Necessity for blood donation

The history of blood transfusion is very fascinating indeed and I do not want to enter into it now. But once upon a time blood was donated perhaps by a servant to his master out of sheer devotion to him or by a husband to his wife or by a wife to her husband or by a father to his son and so on. They had donated blood to save the life in jeopardy. Now on account of modern accidents, the blood transfusion officers remove blood only from the donor who could give it without detriment to his health. So much so, in these

days, it is safe to give blood than it was before the blood transfusion system was started. The blood thus donated is either stored or given immediately to the person in need of it. It has never been wasted and it is utilized to the maximum extent and it is kept in safe conditions by the concerned officers.

Sri M. Bhaktavatsalam, Chief Minister is talking with the U.N. team which came to Madras to study the water supply conditions of the City.





A citizens' meeting was held at Rajaji Hall on 8th December 1964, to felicitate, Dr. Martin Luther King, the American Negro Leader who has been awarded Nobel Prize for Peace for the year 1964.

About the necessity for blood donation, I need not explain to you in greater detail. I have been a midwife for a major part of my life and I know how much blood is needed for blood transfusion when a patient under labour pains is on the table and she is bleeding profusely. The life of the patient has to be saved and the anxious husband would be waiting outside. In such cases blood is necessary and that can be given by their relatives or friends or dear ones. Without blood, you know, how much difficult it is for a surgeon or physician or obstetrician to save the life of the patient. Similarly a mill labourer might meet with an accident. It might be that his limb is lost or his hand is lost or he might have sustained a deep cut which would be bleeding profusely and he is brought to the hospital. That is immediately necessary is not the skill of a surgeon but the blood which has to be given by another person so that he will be in a fit condition for an operation. Where are we to get blood? We can buy medicines. We can buy even costly medicines which are available in the market but we cannot buy blood from any source. Also a person might be his closest transfusion. His blood group must be of the same blood group of the patient. Now how are we to get that blood? Where are we to get the blood? Can we get it from the market or anywhere else? This

commodity which is much needed, has to be donated by a person to resuscitate the life of a patient. This country has got a large number of doctors and hospitals but not a large number of donors.

Blood Donors' Association

In many advanced countries, especially in Western countries, there are Blood Donors' Associations which take the trouble of taking their members to the hospital and group their blood. The name of the donor and his address and the blood group to which he belongs, are all registered in some register. By this system, the it is possible in an emergency for a doctor to take advantage of their blood group which is required for a particular patient. We should also think on those lines. It is true that the majority of our population are under-nourished and cannot be in a fit condition to give blood but it does not mean that all our people are unable to give blood. I appeal to the students' associations, young jawans and other young people to donate their blood. It will also be good for them to donate blood. Irrespective of political affiliation or communal consideration, you can donate your blood for the needy. It may perhaps save your own life also when there was need for it. And you will have the satisfaction too of donating blood to the cause of saving the life of a patient.

People should come forward

Our State has got a well-organised blood donating centres in all the hospitals in the Madras City and in the District headquarters. Even some of the taluk hospitals have some sort of resuscitation centres and I think in the last year itself, we have done about 26,000 blood transfusions. That is a very big number compared to the number of people. So, I would once again appeal to you all to take a very active interest in the good work of blood donation and persuade your neighbours, friends and people who work with you to donate blood in the nearest institutions. I am sure, that with the zeal and enthusiasm shown by the Chairman, Dr. R. G. Krishnan and his band of very sincere workers, your efforts will be crowned with success. This is a social service and I have no doubt that every one of you will help this good cause.

Donate Blood Liberally

METRIC SYSTEM IN CLINICAL THERMOMETERS

The Indian Standard Specification for Clinical Thermometers was finalised and approved for printing at the Fourth Meeting of the Laboratory Glassware and related Apparatus Sectional Committee (CDC 33) of the Indian Standards Institutions of 29th June 1964. Earlier on 25th and 26th June the Thermometer Sub-Committee (CDC 33.2) considered the comments on the draft standard as a result of wide circulation.

There was considerable discussion whether the Fahrenheit scale should also be provided on the stem of the thermometer. In view of the fact that the metric change-over in industries has to be completed by April 1966 (See Metric Measures, July 1964, pp. 19-20) it was generally agreed that the Celsius (Centigrade) scale alone should be recognised. For the interim period, i.e., up to April 1966, manufacturers may, if they desire, inscribe the Fahrenheit scale in addition to the Celsius (Centigrade) scale on the upper side of the

thermometer with the bulb to the left when the thermometer is held in the horizontal position the Fahrenheit scale being marked only in whole degrees, i.e., 96, 97 F. After April 1966 the provision relating to the Fahrenheit scale would remain withdrawn.

The stem of the thermometer would be graduated from 35 C to 43 C, the subdivisions being at every 0.1 C. In the absence of data on average normal human body temperature in India, the indication for normal temperature would be located at 37.0 C.

Besides the above important details other technical requirements and methods of test of the thermometer were also finalised. It is expected that the standard specification will be printed shortly.

For familiarising the public with equivalents of the two scales, the conversion table given below may be used:—

CONVERSION TABLE °C to °F.

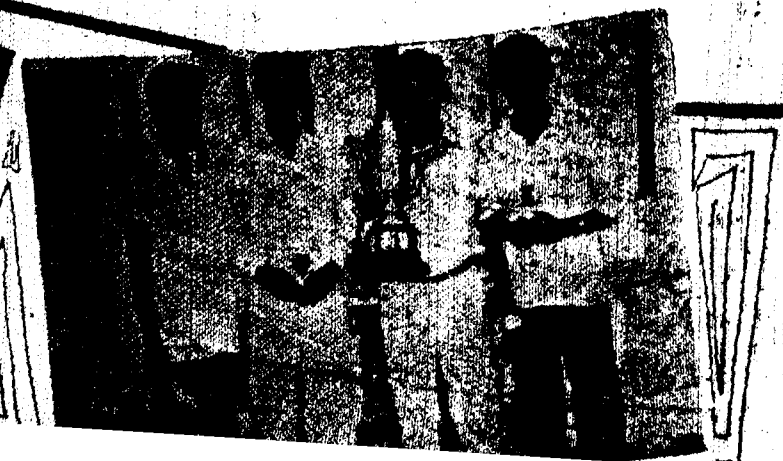
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
35	95.0	95.2	95.4	95.5	95.7	95.9	96.1	96.2
36	96.8	97.0	97.2	97.3	97.5	97.7	97.9	98.1
37	98.6	98.8	99.0	99.1	99.3	99.5	99.7	99.9
38	100.4	100.6	100.8	100.9	101.1	101.3	101.5	101.7
39	102.2	102.4	102.6	102.7	102.9	103.1	103.3	103.5
40	104.0	104.2	104.4	104.5	104.7	104.9	105.1	105.3
41	105.8	106.0	106.2	106.3	106.5	106.7	106.9	107.1
42	107.6	107.8	108.0	108.1	108.3	108.5	108.7	108.9
43	109.4							



Sports Meet



(1) The Annual State Police Sports was held on 5-12-64. Srimathi Gnanasundaram Bhaktavatsalam awarded the prize. (2) Governor of Madras is presenting the medals to the Madras Fire Service for their meritorious services. (3) Sri M. A. Manickavelu is presenting a shield to Sri. Madhavan Nair in connection with the Territorial Army Day Celebrations held on 21-11-64. (4) S. K. Chettur, Chief Secretary to Government is handing over the Kumaraswamy Memorial Cup to the Commandant-General of Home Guards (I.G. of Police). (5) Sri F. V. Arul is presenting shield to the winner in the Madras State Inter-Range Games Meet held in Tiruchy. (6) Winners in the 400 metres relay race conducted on the occasion of the Annual Police Sports Celebrations.



State Police Inter-Range Games Meet, 1964

This year's Madras State Police Inter-Range Games meet was held at Tiruchirappalli at the Armed Reserve grounds from 21st to 24th October, 1964. Sri E. L. Stracey, Deputy Inspector-General of Police, Western Range, inaugurated the tournaments.

Inspector-General of Police, Central Range, Sri S. M. Diag, Deputy Inspector-General of Police, Southern Range and Sri P. Kuppusamy, Deputy Inspector-General of Police, C.I.D., were also present.

Teams representing the three ranges, Western, Central and Southern, Railway Armed Police and Madras City Police, participated in the Football, Hockey, Volleyball, Gymnastics and Wrestling tournaments.

In the keenly contested match, Railway Armed Police beat Central Range by four goals to one. Thus Railway Armed Police annexed four Trophies for football, hockey, gymnastics and wrestling, while volleyball Trophy went to the Central Range.

In the opening semi-final football match, Central Range, defeated Madras City Police by six goals to nil. The same day in the evening, the Railway Armed Police won the hockey match defeating Western Range by ten goals to nil. It was a field day for the Central Range, which also reached the finals in the volleyball beating Railway Armed Police by two straight sets, 15-12 and 15-5. The Railway Armed Police dominated the proceedings on 22nd by entering the final round in football, defeating Southern Range by three goals to nil and winning the hockey semi-final against the Central Range, decided on the basis of penalty corners and securing the first place in the gymnastics event with 546.25 points. Havildar Narayan and Naik Krishnamurthy, both of Railway Armed Police carried the laurels in the gymnastics. In the evening in volleyball semi-final spectacular spikings by Hussan of Western Range enabled his team to gain a lead over Southern Range by 9-15, 15-13 and 15-8.

After the meet, the Inspector-General of Police, distributed the prizes. While congratulating the players, the Inspector-General of Police said that annual sports and game meet were conducted not only with a view to affording recreation for the Police Force, but also to create opportunity for establishing cordial and friendly relations with the public. Sri C. V. Narasimhan, Deputy Inspector-General of Police, Central Range, welcomed Sri K. V. Raghavan, Superintendent of Police, Tiruchirappalli, proposed vote of thanks.

In the night, there was a variety entertainment by the Policemen and their families.

Farewell parade by the Police in honour Sri S. K. Chettur on 1st December 1964 who has retired from service as Chief Secretary to Government on 2nd December 1964.

The third day of the meet also went in favour of Railway Armed Police. They wrestled the wrestling championship by securing 30 points while at the same time winning the hockey tournament after a tough fight in the final match against Southern Range. Decision had to be taken on the basis of penalty corners, since both the sides did not score a goal.

On the concluding day, a huge gathering of football fans turned up to witness the final match between Railway Armed Police and Central Range. Sri F. V. Arul, Inspector-General of Police, Madras, Sri E. L. Stracey, Deputy Inspector-General of Police, Western Range, Sri C. V. Narasimhan, Deputy



Role and Functions of the FOOD CORPORATION

Sri C. SUBRAMANIAM,
Union Minister for Food.

Sri C. Subramaniam introduced a Bill for the establishment of Food Corporation in the Parliament in November 1964, for the purpose of trading in food-grains and other foodstuffs. The Corporation will have commanding position in the field to prevent the unscrupulous elements often holding the community to ransom. Here he discusses the role and functions of the Corporation.

Experience in the last two months had confirmed that unscrupulous elements do not hesitate to exploit difficult situation to their advantage and hold the community to ransom. Recent events have shown

Sri A. K. Sivaramakrishnan, Treasurer of the Flower Show Arrangement Committee is handing over a cheque for Rs. 4,630 to the Chief Minister in aid of the Burmese repatriates.

how necessary it has become, in the face of frequent disturbances on the food front and reported shortages and panic hoarding by consumers as well as the various anti-social elements in the society to regulate, reorganise and re-coordinate the production and distribution system of foodgrains along scientific lines for the future with confidence.

Commanding position

We have already taken action on the Jha Committee's recommendation in regard to ensuring fair prices at the producer, wholesaler and retailer levels. We have also set the machinery in motion for enforcing this price pattern. Steps are being taken to strengthen the enforcement machinery in the States with additional financial assistance from the Centre. Other regulatory measures are being taken but the most important will be the setting up of the Food Corporation of India. None of the regulatory measures like licensing or requisitioning or regulation of movements can succeed and no price policy can be administered unless there is a State agency which can secure for itself a commanding position in the foodgrains trade in course of time.

Procurement for internal distribution at approved prices has been a feature of our food policy for several years now. Similarly, the building up of buffer stocks has been one of the objectives behind this procurement. The procurement policy itself received considerable attention in the hands of a committee headed by Sri C. Thirumal Rao in 1950. Even at that time, the Committee came to the conclusion that the aim of Government food policy must be the achievement of a stable and reasonable price level for foodgrains and supplies to the consumer at this price and that this meant a controlled system for the procurement and distribution of grains; the Committee also recommended that a uniform system of procurement and distribution is not only practical but desirable and necessary.

Seven years later, we had the benefit of the recommendations of the Foodgrains Enquiry Committee under the Chairmanship Sri Ashoka Mehta. One of the Terms of Reference of this Committee was to make recommendation to ensure a level of prices which would provide the necessary incentive to the producer with due regard to the interest of the consumer and the maintenance of a reasonable cost structure in the economy. I have referred to this to show that the objective then was the same as it is today. This Commission recommended the setting up of a foodgrains stabilisation organisation and observed "Prices of foodgrains can be successfully controlled only through controlling the demand and supply of foodgrains. The way in which demand and supply of foodgrains can be regulated is through undertaking timely and effective purchase and sale operations, arranging for necessary procurement and imports and maintenance of sufficient stocks. We consider however that for the specific functions of open market purchases and sale, procurement of foodgrains and maintenance of stocks, it will be desirable to have a separate organisation called Foodgrains Stabilisation Organisation under the Ministry". It was suggested that the Organisation should operate as a trader in the foodgrains market with branches or agencies of its own in all important munda particularly in surplus areas and centres of distributive trade.

Aim and functions

The Food Corporation Bill is precisely intended to set up such an organisation as an autonomous statutory Corporation. We hope that the Corporation will effectively protect the producer against the cyclic and seasonal fluctuations in prices and ensure that he gets a steady return which would also act as an incentive for increased production. It will be our main instrument for protecting the consumer from the exploitation and vagaries of speculative trade.



Sri M. Bhaktavatsalam is seen giving away Rs. 2,000 to Sri S. K. N. Mohammed Aliyar of Tirunelveli district, who won the first prize in the "State Crop yield competition in Paddy" for 1963-64.

What is important from our point of view is to see that the Corporation acts quickly and functions efficiently on the lines of a commercial undertaking, alive to the heavy responsibilities placed on it. The structure of the Corporation has been evolved bearing this aspect in view. It should have a considerable measure of freedom and autonomy in its working. It should be enabled to evolve its own set-up in a manner that will lead to quick results and it should have the strength even at the outset to withstand and face effectively not merely healthy competition but judging from present trends even unhealthy opposition.

Storage

There is then the important problem of storage. It is admitted on all hands that faulty storage at all levels from the consumers to the producers who are poor and are in millions results in our losing a very high percentage, almost equal to about 15 per cent of our grains every year and as long as our storage is not perfected, even more production would only mean more loss of foodgrains. It has been estimated that a rat can eat foodgrains every day equal to its own weight and 10 rats can eat one man's food a day. You will imagine, therefore, in a big country like this what an amount of work is ahead of us even in this direction and how millions of people will have to participate in facing the problems and trying to solve them for the country. We shall

have to regulate storage at all levels even by legislation and at the same time build up silos and other storage facilities on modern lines so that we can save all that we grow.

We envisage that with the proposed initial capital of Rs. 100 crores and the borrowing facilities that will be available to the Corporation it should be in a position to start and conduct operations in the Southern Zone where its activities will be largely confined to start with. In due course, the Corporation will extend its sphere of operations to other areas and take on additional responsibilities. It is also envisaged that in due course it may be entrusted with powers to negotiate and procure supplies from abroad.

The objectives behind the establishment of this Corporation cannot be achieved unless we secure for the Corporation not merely the blessings of State Governments but their active and continued co-operation and, in fact, the participation in a big way of the State Government machinery. This important aspect has been considered carefully, particularly in consultation with the panel of administrative experts consisting of high officials from State Governments set up by this Ministry. It was the view of this panel that the partici-



Mrs. Varghese, wife of the Chief Secretary to Government, is handing over presentations to the Pope on behalf of the Government of Madras at Bombay.

pation of State Governments could either be secured by the setting up of Regional Boards of Management or by setting up Corporations, functioning within the framework of the policy of the Corporation of India. In the Bill, we have made provision for setting up either Boards of Management or State Food Corporations depending upon the advice and wishes of the particular State Government concerned.

Credit to farmers

It is not necessary for me to explain in any great detail the provisions relating to Finance, Accounts and Audit. The Corporation can borrow money from banks and financial institutions against stocks under Government guarantee. It will function in the same way as a trader and also to facilitate additional investment by producers.

In this connection, I may observe that credit will be the principal means by which the farmer is brought closely to the Corporation's activities. It is through credit that the private trader has been making his inroads into the farmers and gathers the marketable surplus. The Corporation will be expected to use the credit mechanism to ensure that the farmer is able to meet his requirements fully. In the long run, increased production can be obtained only by putting in more inputs like better seeds, fertilizers, etc., and the Corporation should, in due course, undertake the supply of these productive inputs along with credits to those farmers who enter into suitable agreements with the Corporation. We have to bear in mind that it is the first time that a commercial organization established by Government comes into direct contact with the farmers. The business of buying and selling can be used for mutual benefit and profit.

The Corporation will be expected to utilize fully the storage facilities of the Central Warehousing Corporation and the State Warehousing Corporations and, if necessary, storage facilities at the disposal of the Ministry. The storage will be arranged at such strategic points so that the responsibilities for distribution to deficit areas would be quickly discharged. The accounts and audit will be based on commercial practice. The Corporation is expected to submit an annual report which, together with the audit report, will be placed before Parliament.

A commanding position

I have observed earlier that it will be necessary if our policy is to succeed that the Corporation should, as quickly as possible, build for itself a commanding position in the foodgrains trade in the areas where it op-

erates. Any tendency or moves on the part of the trade to place obstacles in the way of the Corporation in its efforts to achieve these objects will have to be dealt with firmly by the Government concerned. I may perhaps herein emphasize the point that the Corporation will succeed in its objective fully only when it is able to build adequate buffer stocks. There should be no apprehension that by the setting up of this Corporation it loses its complexion as Government entity. It, in fact, must function as an essential limb in the integrated set up of Central and State Government machineries for the implementation of an All-India food policy. If, therefore, circumstances warrant a necessity of resorting to the powers of requisitioning under the Essential Commodities Act or the Defence of India Act, such action will be taken.

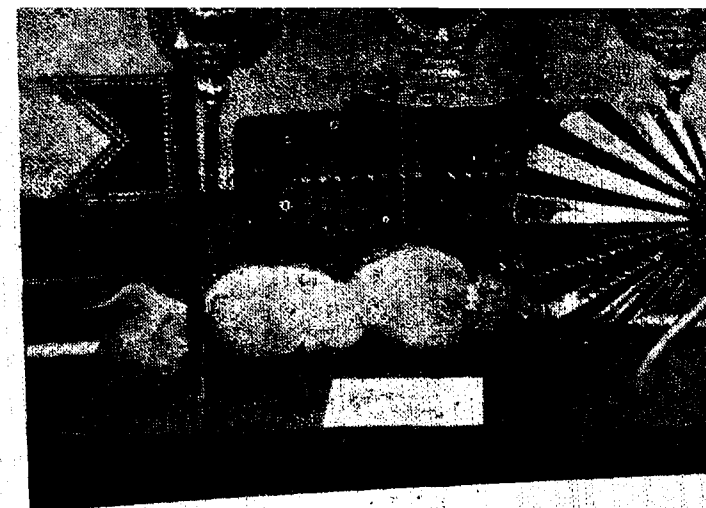
Future role

In drafting the provisions of the Bill, we have confined ourselves generally to the need for securing for the Corporation such powers and authority as are necessary in the fulfilment of our overall objectives. Whilst immediately the Corporation will be expected to concentrate in the discharge of its primary functions of trade in foodgrains, we envisage that in due course the Corporation should assume for itself and play a much wider role in the matter of achieving the long-term objective, namely, of assisting in an overall increase of agricultural production. It may then be necessary for the Corporation to take the lead in the matter of modernizing agriculture by introduction of mechanization, attention to subsidiary foods, food processing, etc. It is only a Corporation of the standing and resources as now being set up that can effectively achieve success in this direction. The Corporation, therefore, has not merely an immediate role to play but a broader and more vital role in due course.

Maximum and Support Prices of Paddy for 1964-65 Season

The Government have notified the statutory maximum prices for different varieties of paddy and rice in this State for the 1964-65 season. Complaints are not infrequent that the traders and commission agents unduly depress the prices in certain areas, and thereby, exploit the producers. Though the maximum prices fixed for paddy are for naked grain, it appears in some cases the merchants desire to purchase the produce at prices lower than the notified prices and that too inclusive of the cost of gunny. Government are anxious that the interests of the producers must be safeguarded,

and that they should be assured of a minimum prices for their paddy. They have accordingly fixed support prices for paddy of different varieties which are a rupee less than the corresponding maximum prices for the different varieties. A statement showing the maximum and support prices per quintal of paddy fixed by Government for different varieties for 1964-65 season is given at the end of this note for information. The Government desire to take this opportunity to clarify as to how the scheme for minimum and maximum prices is intended to be worked.]



In the picture are the articles presented to the Pope on behalf of the Government of Madras.

There is no doubt that the success of the Corporation depends largely on the efficiency and achievements of its Purchase Division. The Corporation should have enough freedom to choose from co-operatives, commission agents, wholesale traders, rice mills for its own personnel at the market centres. It may even be desirable to set up multiple purchasing agencies at the same points not only to fulfil the target but also to act as mutual checks on each other so as to increase the operating efficiency.

The gravity of the present situation demands an overall and determined effort. I earnestly hope that the Corporation will play an important role in protecting the interests of particularly the producer who should realize that, very soon, he will have an office or agent of the Corporation to go to where he can get the minimum price which has been assured to him.

It is customary for the purchasers themselves to go to the villages and offer a price for the paddy by mutual negotiations at the threshing floor. While offering the price to the producer, the purchaser makes an appraisal of the nature of the paddy, its moisture content and impurities and determines what reductions or cuts will have to be made in order to make the price of paddy at the nearest approved assembling point not more than the maximum and not less than the minimum notified prices. If the producer is not satisfied with the price offered, it is open to him to bring his paddy to the approved assembling point and ask the official or agency nominated for this purpose by the Collector of the district to purchase all his paddy at the minimum price fixed with due cuts for deviations in quality from the standard prescribed. Arrangements are being made to publicise in each district the approved assembling points for this purpose. In the event of any difficulty being felt by the producers in selling their produce, the producers are advised to contact the concerned Taluk Supply Officer, District Supply Officer or the Collector, who will be willing to render all possible assistance to them to dispose of their produce at this support price.

The scheme, in short, is intended to guarantee a minimum price for the producer and the Government hope that producers all over the State will take advantage of the scheme and on the basis of this assured return for their efforts, take steps to increase production.

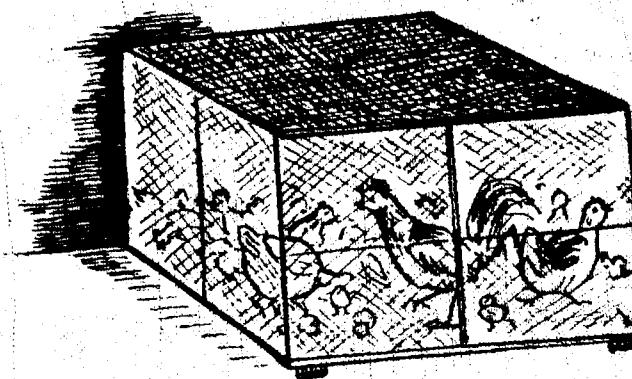
Maximum and support prices of paddy of different varieties for 1964-65 season.

Name of variety.	Maximum price per quintal for naked grain.	Support price per quintal for naked grain.
(1) Fine.	(2) Rs.	(3) Rs.
Garudan Samba, Kuruvai Sirumani, Thuyamalli (Fine).	40-70	39-70
Vallai Samba, Nellore Samba (Fine), Red and White Sirumani, Vayyakonda, Chingleput Sirumani (Co. 19), Sadai Samba, Pattarai Samba, Kothamalli Samba, Kuduraival, Thanga Samba, Milagi or Gundu Samba.	41-55	40-55

Insist on Metric Measure

Name of variety.	Maximum price per quintal for naked grain.	Support price per quintal for naked grain.
(1) Fine.	(2) Rs.	(3) Rs.
Co. 2 or Poonhalai, Periakichili, P.T.B. 15, P.T.B. 16, Co. 5 or Chinna Samba, Ottukichilli, Karthiganai Samba, Ikki Samba, Sithayan Samba.	43-94	42-94
CEB. 24, Doppi, Anaikomban, Ayan Samba, Konakurivai, Thidam Kichili, Kichadi or Arent Kichadi.	45-24	44-24
Kamban Samba and Jeeraga Samba.	48-12	47-12
Other local fine varieties	40-70	39-70
Medium.		
Vellaikar, Vedau Samba, Muthu Samba, Thuyamalli (Coarse), Rangoon Samba, Onnarai Samba.	38-73	37-73
Nellore Samba (Coarse) and Vasaramundan.	39-02	38-02
Kattai Samba, Arai Samba, Co. 25, Kodivellai, Rubber Samba, Cross Sirumani, Korangu Samba, Moongil Samba, Vellakattai.	39-50	38-50
Other local medium varieties	38-73	37-73
Coarse.		
Red Kar or short duration Red Kar varieties, Madu Muzangi, Sembalai, Kulan Samba, Kallimatter, Puzhuthiperatti, Mosanam, Manavari, Pisani, Manakkathi, Red Varlan Samba, Kolavazhi, Kuruvikalayam, Mottakurivai, Naiknruvai, Mozhi-karappa.	37-40	36-40
Svarnavari, Adt. 3 (Karuvai), Sarpelli, Poonkar, Arupathankodai, Chitrakali, Valan, Ponnuruvi.	38-23	37-23
Other Local coarse varieties	37-40	36-40

Worms in POULTRY



Dr. F. SELVANAYAGAM,
Veterinary Assistant Surgeon, Kattupakkam.

If poultry parasites are to be controlled successfully it is necessary to have at least a slight knowledge of the life history of the parasites. When the life history of the parasite is known, there is usually some stage of its development when it can be brought under control. It is generally agreed that most poultry parasites multiply within the bird, but that they will spend a part of their life outside the body of the bird either in some host or simply found in the soil or refuse where they develop to a certain stage after which they may be taken by the bird.

Large Round Worms

These worms have received most attention on the part of the Poultry owners as they are commonly found in poultry and create trouble in farms. Large round worms are one or two inches in length, in the adult stage and are white in colour. They are found in the small intestines of birds.

The round worm multiplies by laying eggs. The female may live several years during which period several hundred thousand eggs are laid by it in the digestive tract of the bird which passes them out in its droppings.

Under satisfactory conditions a worm may develop inside the egg. During this stage of development eggs containing tiny worms may be eaten by the bird along with feed or drinking water. Later these tiny worms inside the egg breaks out of their shell and become adult worms inside the digestive system of the bird.

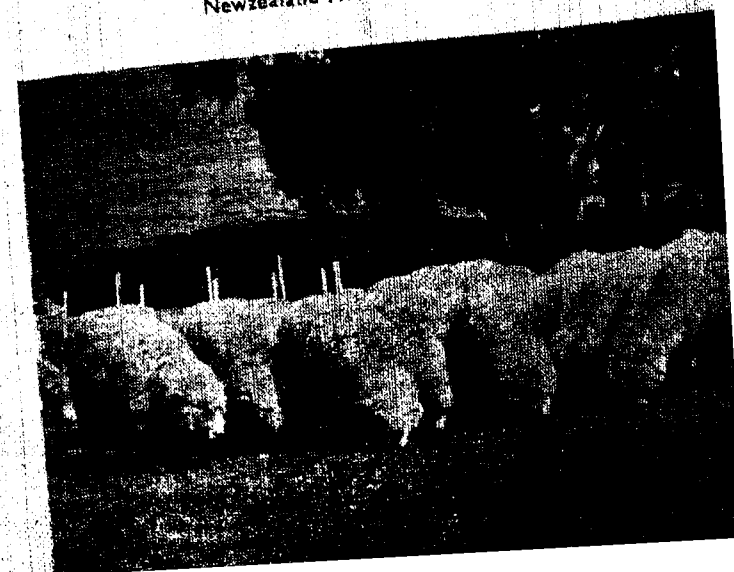
Tape Worms

It is said that more than thirty different kinds of tape worms infest poultry. But for all practical purpose there are only two different kind that cause serious infestation.

One of these is small, sometimes microscopic in size and produce a condition known as "Knotty Guts". The other is a large sized worm often several inches in length.

Tape worms require insects as their intermediate host such as flies or slugs. The most common host is the house fly. As young chicks are very active in catching flies they are often infested with tape worms if no effective fly control is adopted. Tape worm injure Poultry by robbing the bird of the nutrients that are required for its nourishment and they also give off a poison that interferes with digestion. Tape worms pass segments of their body with its eggs along with the droppings. These are taken up by the flies or slugs. The small tape worm will hatch inside the body of the fly or the slug and a part of its development takes place inside the host itself. Chicks eating the flies or slugs containing the tape worm become infested with it.

New Zealand Flock of Ewes.



As long as chicks can be kept from eating hosts in which the young tape worm are found there will be no tape worm infestation.

Cecal Worms

These are found on the ceca or blind pouches, opening of the intestinal tract at the junction of the small and long intestine. The main importance of these worms is that they frequently carry an organism which causes a disease called "Black Head".

Any worm in large number will reduce production, weaken a bird to such an extent that it becomes an easy prey to other diseases like C.R.D.

Worm Control

The following are some of the steps that should be taken for a sound worm control programme:

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(a) Rear chicks in a clean brooder house or place away from old hens. Old birds act as spreaders of all parasites and hence they should be kept away from the growing flock as far as possible.

(b) If layers cannot be confined, provide clean well drained range which can be ploughed after use.

(c) Clean all poultry houses regularly.

(d) Practice a sound fly control programme.

When prevention fails, it is necessary to resort to treatment. There are many good worm expellers on the market. Get a worm remedy from a well known company and use it according to the direction. Worm expellants containing piperazine have proved very successful in controlling worms. Always deworm in such a way that there is no chance for the birds to pick up the worms expelled by it again.

Romney Marsh Sheep from New Zealand



New Zealand R. M. Ram.

An appeal on behalf of the Freedom from Hunger Campaign for supply of exotic rams of various breeds evoked a timely response from the farmers of New Zealand. A free offer of 450 Romney Marsh sheep was made by the people of New Zealand to the Government of India. All sheep were shipped to India. Out of the 450 sheep imported 30 ewes and 3 rams of this breed were allotted to Madras State and are now located at Sheep Breeding Research Station, Ootacamund.

This breed of sheep is originally from the Marshy areas of Kent and has been developed to a greater extent in New Zealand. Much of sheep development activities in New Zealand are being done with this breed. It is hardy and is reported to possess resistance to various diseases and vigorous to withstand the Nilgiri area which has wool ranging about 5 to 7 kgm.

climatic conditions of hilly areas and these sheep has better hooves to withstand the wet and slushy during most of the year. It yields a medium quantity of wool ranging about 5 to 7 kgm. per annum. It is used for cross breeding work in Australia and New Zealand for producing large number of lambs for mutton.

A few animals of this breed had already been imported at State cost during the year 1955 and again in 1960. Cross breeding of the Nilgiri sheep with this breed is being carried out at the sheep Breeding Research Station, Ootacamund under Indian Council of Agricultural Research Scheme. Good results have been obtained and at present this farm has got third generation of cross breed animals.

The recent gift of Romney Marsh sheep from the Farmers of New Zealand will help to intensify the cross breeding work in this farm. The future progenies of these animals will be issued to local breeders and Panchayat Unions. Since these progenies yield more wool with greater carcass weight there is a great demand from the ryots for these animals. It is also proposed to bring the cross breed animals to the plains to find out whether they can thrive under plain conditions.

The State Government on behalf of the people extends their thanks to the farmers of New Zealand for their priceless gift and they can be best assured that proper utilisation of this breed would be made in this State.

DR. I. D. MANTRAMURTI, C.M.V.O.B.V.Sc.
Director of Animal Husbandry, Madras

Most Graduates Prefer Public Sector Jobs

The Directorate-General of Employment and Training conducted a survey of employment position among University graduates in 1960. The survey covered all types of graduates with a minimum of Bachelor's degree. The questionnaires were answered by 6,814 persons who graduated from 29 Indian Universities in 1954 and 633 from three specific Universities in 1960. The main findings of the survey are given below.

Most of the graduates belonged to families of the lower or middle income groups—74.8 per cent came from families with monthly income of less than Rs. 500. The families to which the women graduates belonged had comparatively higher income.

Of the total of graduates, 28 per cent came from the agriculturist class, 20 per cent from the class of government servants, 24 per cent from families engaged in other services and business, and 0.0 per cent from artisan class.

Some 79.7 per cent of the graduates were full-time students while 15.5 per cent studied only part-time. About 70 per cent students depended on parents, and 20.2 per cent earned through full-time or part-time jobs to finance their education.

Choice of subjects

Of the graduates, 63.3 per cent had taken subjects of their choice, while 24.7 per cent had to take subjects which they did not like. Financial difficulty was the reason in 50 per cent cases of not being able to take subjects of one's choice. Inability to secure admission (30 per cent cases), lack of teaching facilities in the college (12 per cent cases) and compulsion by parents (8 per cent cases) were the other causes of not being able to offer the desired subjects for degree examinations.

Most of the graduates (86.9 per cent) had been employed at the time of the survey. Only 9.8 per cent were unemployed. One-fourth of the employed secured their first employment before taking their examination in 1954. Another one-fourth got jobs in 1954, 18.2 per cent in 1955, 12 per cent in 1956 and the rest later. Those who passed in first class and those who were graduates in engineering and technology got jobs easily.

Among the employed, 57.3 per cent were accounted for by professional, administrative and technical lines. They were graduates in teaching, engineering, medicine and veterinary science as well as M.Sc.s and Ph.D.s.

More than half of them were teachers. About one-fifth took to clerical jobs and they were mostly art science and law graduates.

Of the graduates in law and medicine, a majority preferred salaried employment, although a good number set up their private practice.

Among the employed graduates, a fourth changed their employer once, 12 per cent changed twice and 7 per cent changed three or more times up to 1960. Such mobility was high among professional degree holders and low among graduates in arts, commerce, law and veterinary science.

Attraction to Public Sector

Most of the graduates were employed in the public sector. Many of those who took private jobs initially later changed over to the public sector.

About 60 per cent of the employed got jobs by direct applications. As many as 16 per cent had secured jobs through the Public Service Commissions. Only 6 to 7 per cent were placed through the Employment Exchanges. About half of the employed considered their present jobs suited to their qualifications and liking.

The following table will give a broad idea of the rate of improvement in earnings of the employed graduates (whose percentage is stated against their income groups).

Income group	Percentage on first employment	Percentage in 1960.
Less than Rs. 200	74.5	49.8
Rs. 200—499	11.6	32.8
Rs. 500 and above	0.6	3.0

The Secretariat officers gave a party to Sri S. K. Chettur, Chief Secretary to Government on 30th November 1964.



Earnings increased with the length of service. They improved conspicuously in the case of professional and technical degree holders such as doctors and engineers, whereas the improvement was almost marginal in the case of graduates in arts and teaching. About 75 per cent of the employed were dissatisfied with their present income whereas 20 per cent were satisfied.

Among the unemployed graduates (about 10 per cent of the total), arts graduates formed a majority followed by those in science, commerce and law. About 22 per

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cent of the unemployed were registered with the employment exchange.

As for women graduates, nine among every ten were either in employment or seeking jobs. Two-thirds of the employed women graduates were teachers; about a tenth were physicians and social scientists and another tenth were clerks. Three-fourths of the employed women earned less than Rs. 300 per month.

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National Award for Teachers

Ninety-one teachers from all over the country received National Awards from President Dr. S. Radhakrishnan at a ceremony held recently at New Delhi. They included 47 teachers of Primary and 44 of Higher Secondary schools.

Congratulating the recipients of the award, Union Minister of Education, Sri M. C. Chagla told that the Central Government had interests of the teachers at its heart and close to its mind. The Minister maintained that he was aware that the teachers had not had a fair deal so far. Their salaries were low and they did not enjoy the dignity and status in the society to which they were entitled. The Minister assured the teachers that Union Ministry of Education was doing its best to improve upon the situation. He referred to the triple benefit scheme and told that the proposal of free education to the teachers' children was before the State Governments. He also expressed his strong desire to see the disparity between salaries of the Government and the private school teachers removed. Pension scheme for teachers of private schools had already been introduced in Delhi, he said. Sri Chagla pointed out that one out of two thousand secondary teachers and one out of eight thousand primary teachers had received the National Award. It was good that they received the Awards from the President himself a great teacher, educator and a guru.

After the distribution of the Awards, the President congratulated the recipients and said that they should themselves try to set an example before their students, the example of character and integrity. He told that we were passing through a troublesome situation in which character and courage were most needed and for which the teachers had a tremendous role to play. The teachers, he pointed out, could preach true patriotism and give away the knowledge of basic outlook for which the country stood.

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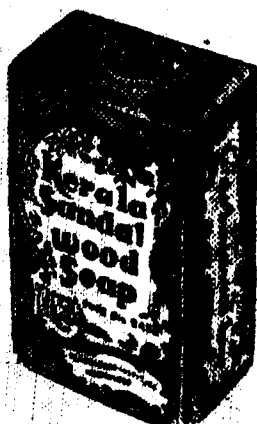


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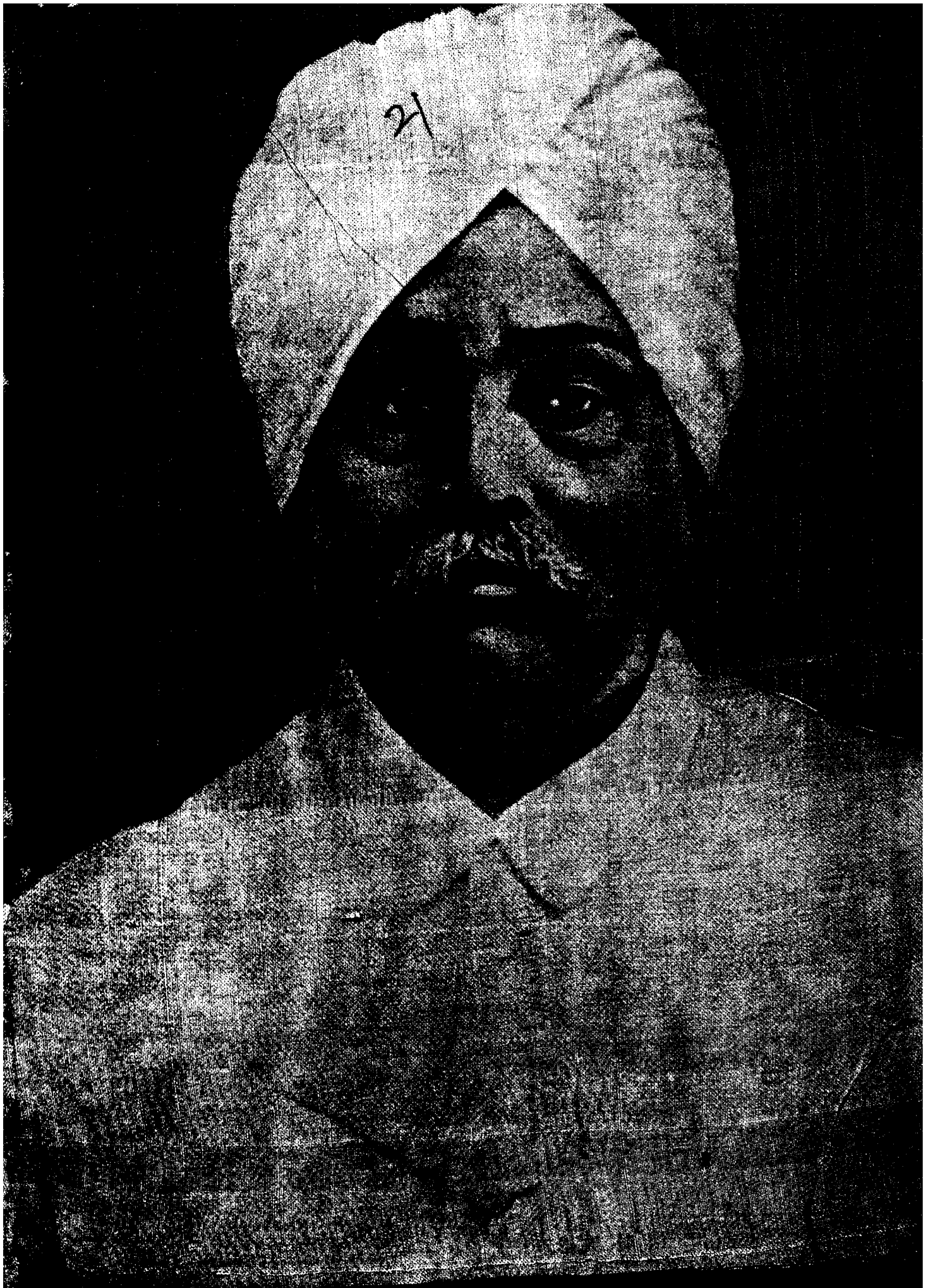
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can have it



KERALA SOAP INSTITUTE DIVISION, CALCUT-1.
(A Kerala Government Undertaking)

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GOVERNMENT OF MADRAS.





Sri S. M. A. Majid, Minister for Local Administration inaugurated the 42nd Annual General Meeting of the Institution of Engineers (India), Madras Centre recently at Madras.



Dr. A. Lakshmanaswamy Mudaliar, Vice-Chancellor, University of Madras inaugurated the 25th All India Ophthalmological Conference on 6th January 1965, at the Senate Hall of the University.

CONFERENCES IN THE CITY



Sri Raguramiah, Union Minister for Supply and Technical Development inaugurated the Plenary Session of the 5th Madras State Small Scale Industrialists Conference at Rajaji Hall on 27th December 1964.



Acting Governor of Madras Sri P. Chandra Reddy who inaugurated the 38th Session of Indian Philosophical Congress, is seen with the delegates. Minister for Industries Sri R. Venkataraman is also seen in the picture.

MADRAS INFORMATION

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No. 2

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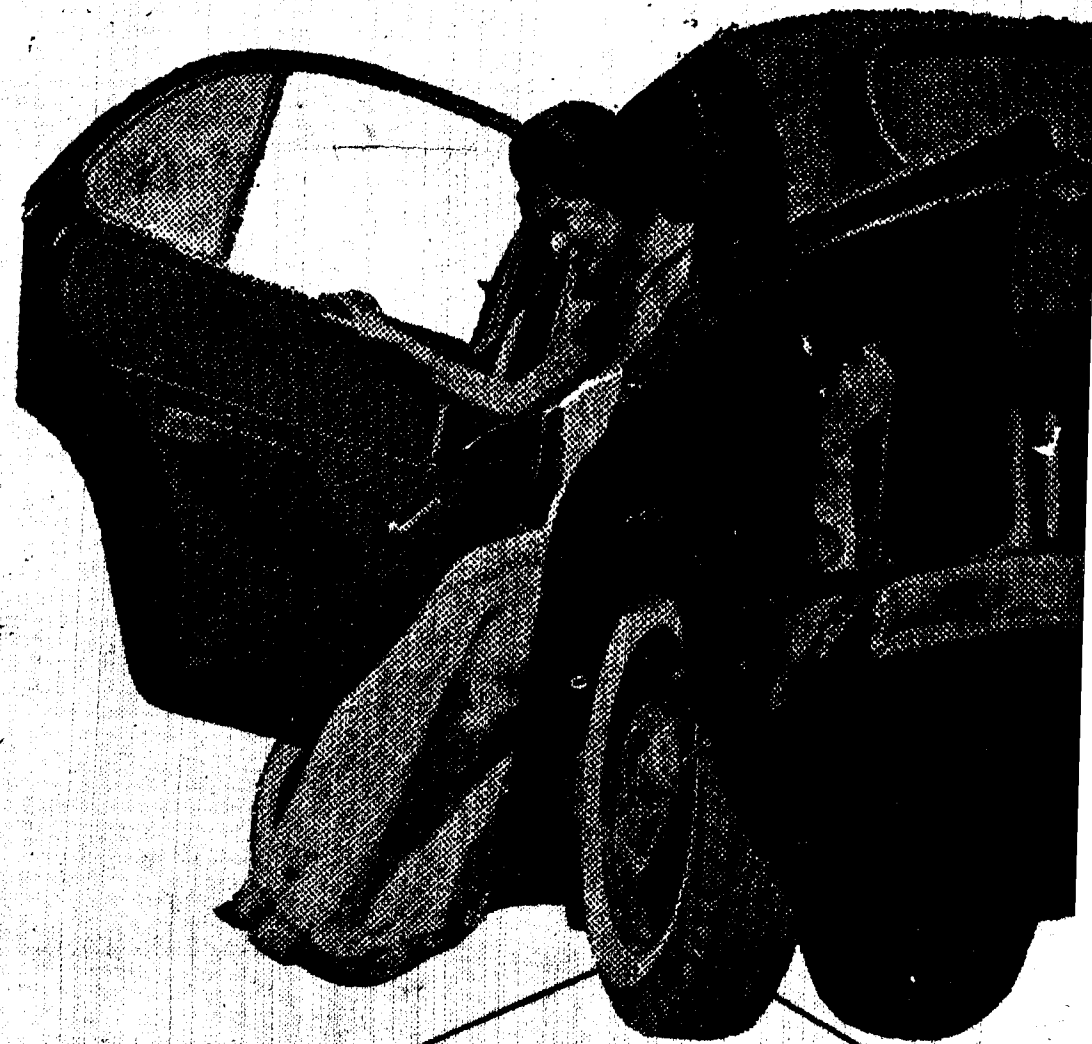
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THIS MONTH'S COVER

Lala Lajpatrai, the Centenary of whose birth was celebrated all over India, was one of our pioneer fighters for freedom. A lion-hearted patriot who, while working for the liberation of India from foreign thralldom, envisioned the pattern of social, political and economic development of the country and surprisingly enough the country has accepted his framework and has broadly followed the line of development charted out by him. We pay our homage to this great patriot.

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Handloom Industry in Madras state

SRI K. V. SIVASANKARAN, M.A.,
Deputy Registrar of Co-operative Societies (Retired).

Our handloom industry had a glorious past. References to cloth in the Ramayana, Maha Bharatha, Vedas, Manusmriti, Artha Sastra, Amrakosa, etc., show the antiquity of the industry. Our ancients had reached a high degree of perfection in the weaving of cotton cloth as revealed by the Mohanjodaro and Harappa excavations.

For 30 centuries prior to the first quarter of 19th century, India exported woollen, cotton and silk goods to the other parts of the world; China, Japan, Arabia, Persia, parts of Africa, England and other countries in Europe were importing our handloom cloth. At the beginning of the 12th century, there were not less than 15 lakhs of looms in the country and the estimated production of cloth was not less than 1,500 million yards. The share of Madras was 300 to 350 million yards which were produced on about 3 lakhs of handlooms.

Though the East India Company encouraged hand weaving during their early days, as it brought them handsome profits, there was a reversal of their attitude after the Industrial Revolution in England. Between 1763 and 1814, the fly-shuttle the spinning jenny, the power frame, the steam-engine and powerloom were invented. Textile mills were set up in Paisely and Manchester and British cotton goods came into the market. In order that the British Textile Industry might thrive, Britain used its political power to destroy the Indian cotton industry. India which was till the beginning of the 19th century an exporter of cotton goods began to import cotton cloth and cotton yarn thereafter. The exports of cotton cloth which were Rs. 166 lakhs in 1816-17 fell to Rs. 8 lakhs in 1831-32. Simultaneously the imports went up by leaps and bounds, and English yarn found its way into India from 1826-27. The following figures are relevant in this connection:

Year	Export of cloth from India	Import of cloth into India	Import of yarn into India
	(RUPEES IN LAKHS.)		
1816-17	165.94	3.18	..
1826-27	29.48	43.46	75.276
1831-32	8.23	42.65	4,285.517

The cost of handspun yarn from which Indian weavers produced cloth was 300-400 per cent of the cost of the imported British Yarn; handspinning declined gradually from 1862 onwards. Indian handlooms began to use imported English and Japanese yarns.

Industries Minister Sri R. Venkataraman declared open the Silver Jubilee Hall and godown of the Madras State Handloom Weavers Co-operative Society on 27th December 1964. Minister for Co-operation presided over the function.





Mr. Parker, Police Chief of Los Angeles who paid a visit to Madras recently called on the Home Minister Sri P. Kakkana at this chambers.

The first Indian Cotton Textile Mill was established in Calcutta in 1818. In 1854, the Bombay Spinning and Weaving Mills was started for the production of cotton yarn and piece goods. There were only nine mills in the whole of South India excluding Bombay, in 1925 of which 4 were in Coimbatore. These mills produced cotton yarn which was stronger, more even and cheaper than hand spun yarn with the result that the handlooms adjusted their production and took to mill yarn. The old throw shuttle handloom using handspun yarn was driven out of existence yielding place to the new fly shuttle handlooms using mill yarn, imported as well as indigenous. Though the handlooms and mills could co-exist in the initial stages, the dependance of handloom on mill yarn and the conversion and spinning mills into composite spinning and weaving mills, led to competition between the mill sector and the handloom sector.

The All-India Handloom Board

During the Second World War, however, on account of shortage of cloth the handlooms had a temporary boom but after the war the handloom industry experienced one of the worst slumps, in the history of Indian Textile trade. The Government of India constituted the All-India Handloom Board in October 1952 and levied an excise duty on mill cloth for the development of handloom and khadi industries. The amount so collected is known as the cess fund. The policy of the Government was to organise Co-operative Societies for weavers and to give assistance to the Societies out of Cess Fund. Such assistance is :—

1. A loan repayable in two years towards share capital to encourage weavers to join societies.
2. Loans to Co-operatives towards working capital (This is now undertaken by the Reserve Bank of India).
3. Supply of improved appliances at subsidised rates.
4. Grants to Societies to meet the cost of staff in the initial stages.

5. A rebate on sales of handloom cloth by Co-operatives. The present rebate is 5 paise per rupee on retail sale and 3 paise per rupee on wholesale sales.

Handloom in Madras State

The number of handloom in Madras State at the end of the Second Five-Year Plan was 6,99,585 [as shown below :—

Cotton looms (including mixed fabrics and Khadi).	5,89,925
Pure Silk looms	20,650
Pure Art Silk looms	88,784
Woollen looms	236

The estimated production of handloom cloth in Madras at the end of the Second Plan period was 612.04 million yards, of which 45.36 million yards were mixed fabrics with an admixture of mill yarn and art silk yarn, and 2.50 million yards were spurious khadi where the warp is mill yarn and weft handspun yarn. The production of pure cotton fabrics was 464.18 million yards. The output of the co-operative sector was 97.89 million yards. The assistance from Cess Fund covers, therefore, only 21.2 per cent of the production of handloom cloth in the State. Nearly four-fifths of handloom cloth is contributed by looms outside the co-operative sector and proposals are afoot to start a Handloom Finance Corporation to extend assistance to looms outside the Co-operative fold.

Variety-wise production of handloom cloth has been estimated as follows :—

	Million yards
Sarees	191.65
Dhoties, towels, uppers, shirtings, etc.	234.23
Export varieties	84.16
Total	512.04

(Export varieties include lungis and Madras handkerchiefs).

Of the above production, about only 50 per cent is consumed within the State and the rest exported. Out of such exports less than one-fifth is exported to the countries outside India and four-fifths or about 200 million yards are sent to other areas within the Indian Union.

The Future

The future of handloom industry depends in a large measure on our ability to satisfy the needs of consumers (1) within the State, (ii) outside the State but within

India and (iii) outside India. In view of the preference of our women for handloom sarees a good market for this variety is assured. Men in rural areas prefer handloom dhoties and towels. All Hindus use unbleached handloom goods for ceremonial occasions and weddings. With the reservation of certain varieties of cloth for handlooms there may be no falling off in the internal demand.

As for other areas in the Indian Union our handloom cloth is in demand practically in all the States. - But the tests and requirements vary from State to State. These should be under constant study and we should produce quality goods at competitive rates to satisfy, their requirements. If for any reason there is a reduction in the off-take of our handloom cloth by other States, it will have far reaching repercussions on our industry since 20.12 lakhs or 6 per cent of our population is directly dependant on it. The exports of handloom cloth to territories outside the Indian Union are less than 10 per cent of our estimated production.

Exports

In 1951 the exports of handloom cloth to areas outside India stood at 43.699 million yards. In 1963 the total exports from Madras were 33.56 million yards of which Bleeding Madras constituted 12.66 million yards. If this is excluded, exports of conventional varieties are 20.90 million yards.

The following figures of exports in 1961-62 and 1962-63 are relevant in this connection :—

	Value of exports. (IN LAKHS OF RUPEES)	
	1961-62.	1962-63.
Cotton fabrics (Standard type blankets, curtains, carpets, etc.)	613.18	754.35
Silk, synthetic fibres	253.63	266.66
Total	866.81	1,021.01

Destination-wise exports :—

Country	1961-62	1962-63
Ceylon	154.73	114.43
Singapore	86.24	108.78
Malaya	114.35	95.04
Aden	67.59	40.87
Kuwait	8.72	13.37
Saudi Arabia	21.55	19.86
Kenya	9.19	12.08
Nigeria	121.43	100.39
Sudan	18.97	8.83

24

Value of exports. (IN LAKHS OF RUPEES)

Country	1961-62	1962-63
Sierroleone	31.85	21.87
Ethiopia	9.96	7.89
United Kingdom	21.80	20.87
United States of America	128.45	377.66
Hong Kong	7.16	21.02
Others	64.83	57.15

Excluding U.S.A. which takes only Bleeding Madras, our export performance regarding conventional varieties is as follows :—

	(RS. IN LAKHS.)
1961-62	738.37
1962-63	643.35

Nigeria which takes our Madras Handkerchiefs recorded a peak figure of 15.7 million yards in 1953. In the years 1958-60 the off take was only 3.50 million yards (Rs. 5.3 million). There has since been an improvement in our performance, in 1961-62 and 1962-63, the exports to Nigeria were Rs. 12.14 millions and Rs. 10.04 millions respectively. There is still a long way ahead of us to reach the 1953 peak figure.

During the years 1957-1960, the average value of export to markets other than U.S.A. was of the order of Rs. 516 lakhs. Compared with this, there has been an improvement in 1961-62 and 1962-63 as shown above, though the exports in 1962-63 are lower than in 1961-62.

The above figures show :—

- (1) That West Africa is no longer dependant solely on us for our Real Madras handkerchiefs ;
- (2) That re-capture of traditional markets requires great efforts ; and
- (3) That there is a real need to explore new markets.

Sri T. S. Narayanswamy (extreme left) was sworn in recently as Sheriff of Madras.



It is a truism that a product can be sold in a foreign market if it is cheaper or of a better quality or exclusive. Of these, quality is the most essential factor. The All-India Handloom Fabric Marketing Co-operative Society, Limited, which has opened sales emporia at Aden, Bangkok, Colombo, Kaulalumpur and Singapore is handling only 5 per cent of the exports. The whole export trade is therefore practically in the hands of private trade. The complaints against us are :

(a) Our price is much higher than similar goods in the market.

(b) That there is no guarantee regarding the quality of materials, measurements of fabrics, fastness of colour or of the time delivery of the goods.

(c) Supplies do not conform to samples. If goods conform to standard specifications and are not similar to indigenous handloom production, there will be no difficulty to expand our export trade. The Indian Standards Institution has prescribed Standard specifications for handloom clothes. Under the I.S.I. certification Act of 1952, manufacturers of handloom cloth can get their goods certified. Proposals to enact a law for pre-shipment inspection are under consideration. When the Act is put on the statute book and is extended to handloom cloth, exporters cannot ship their goods before pre-inspection.

Quality Control Essential

Such pre-inspection is not, however, a novel feature for handloom goods. Even now pre-inspection is insisted

upon for Bleeding Madras. During the Second World War, there was a complaint from the Ceylon Government that exporters of handloom cloth were sending inferior goods at high rates. With the concurrence of the Government of India, the Madras Government made arrangements to pre-inspect and stamp the goods before export to Ceylon. The varieties, specifications and price of cloth that can be sent to Ceylon were specified under a Control Order and stamping inspectors were appointed at Madras, Nagapatnam, and other important handloom centres for pre-inspection and stamping. Unless the goods were stamped and accompanied by a certificate from the Textile Control Department that they have been pre-inspected and conform to specifications they were not accepted for shipment by the Customs authorities. The scheme worked well. The exporters should therefore welcome pre-shipment inspection as it would prevent complaints from the consuming end regarding the quality.

The Handloom Industry and Trade Association with its Statewide membership can be an effective organisation to promote export trade within and outside India. It can undertake a scheme of quality control and arrange for pre-inspection and stamping before the cloth is sent out of Madras State. If properly worked, the Association's stamp will come to be recognised as a hall-mark of quality in the consuming centres.

(From the Madras State Handloom Industry and Trades Association, Souvenir, 1964.)

Bleeding Madras

The Union Ministry of Commerce has, in a Press Note explained the Government's policy regarding the export of "Bleeding Madras", a handloom fabric. Referring to reports appearing in certain newspapers about difficulties experienced by some exporters of "Bleeding Madras" to U.S.A. and other countries, the Press Note says the Government's policy has been a long-term one and has been in operation for the last few years. The exports of this fabric are under compulsory pre-shipment inspection and quality control; and in order to avoid speculative fluctuations in prices and to ensure stability to the producers and to the importers, Government have regulated the exports by prescribing floor and ceiling prices for export. This has completely established the export of "Bleeding Madras".

The export of this fabric has been increasing rapidly and from Rs. 1.3 crores in 1959 it is running at the rate of Rs. 4 crores in the current year. The production has been going up by 25 per cent each year and now about 17,000 handlooms are producing this fabric in Madras and Andhra Pradesh.

GEOLOGICAL SURVEY OF INDIA — A PERSPECTIVE

G. N. DUTT
Geological Survey of India.

The Twenty-second International Geological Congress was held last December in New Delhi. This was the largest scientific conference ever held in the country and it was the first conference of the Congress held in an Asian Country in which about 1,500 delegates from 100 nations participated.

The Geological Survey of India is one of the biggest department of its kind in the world. The department was first established in the country ostensibly to explore coal deposits. To-day in the context of the country's development plans its important and functions have increased manifold.

Geological survey in India started early in the 19th Century, but it was only in 1851 the Geological Survey was set up in an organised manner.

The zeal to explore the country geologically had attracted many noted British scientists, but their enthusiasm was considerably dampened when, on account of "unhealthy climate and epidemics" in India, the British companies refused to insure their lives.

A hazardous work

The hazards of life in India, which the geologists had to face can be judged from the fact that a number of them died not very long after they had joined, of sunstroke, cholera, dysentery, heart failure, etc., and as a result of being mangled by wild animals.

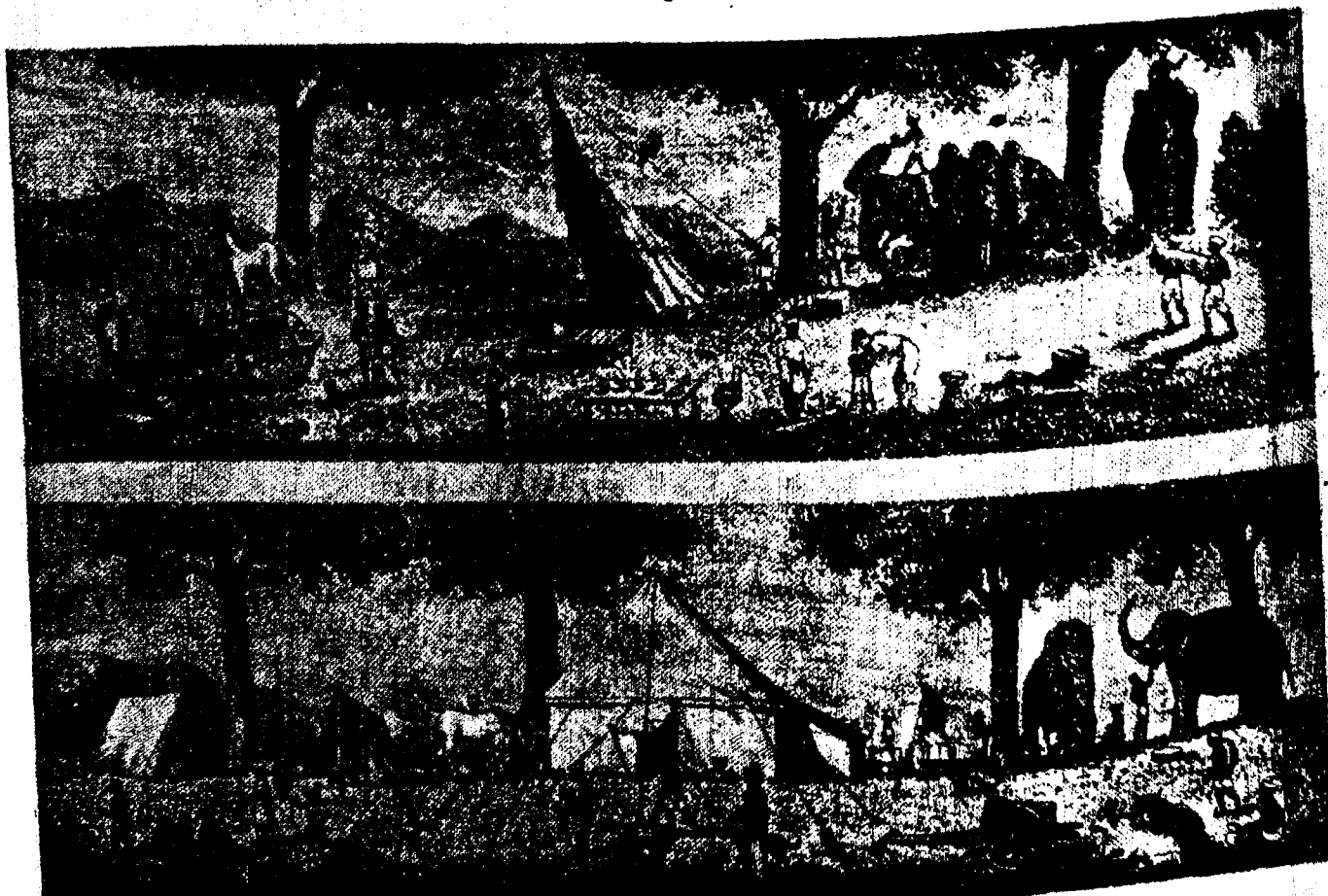
Besides the hazards, the inconvenience a geologist was put to, can be imagined from the fact that the country had not then developed its railways and the journey from Calcutta to Punjab by elephant took nearly three months.

In spite these difficulties, the undaunted pioneers, numbering only a handful, traversed the length and breadth of the country and rendered yeomen service to the Indian Geology. Their pioneering work yet remains to be surpassed by any other country in the world.

These pioneers were also sent beyond the bounds of the country. Burma and Pakistan were then parts of India.



The Prime Minister, Shri Lal Bahadur Shastri visited his home town Ram Nagar on December 27, 1964, for the first time after he took over as Prime Minister. Ram Nagar is near Benaras in U.P. This photo shows the Prime Minister entering his ancestral house in Ram Nagar where he spent his early life.



A camp of the Geological Survey officers in the middle of the 19th century.

and almost all the basic work for geological survey in these countries has been done by the Geological Survey of India. Their activities spread far and wide and included investigations in Ceylon, the Strait Settlements, Sarawak (now Malaysia), Yarkhand, Kashgarh and Lhasa areas. These also included detailed geological explorations and mineral investigation in Afghanistan, Iran, Middle East and Arabian States, including Aden. The activities also extended to the Turkistan region and Nepal.

The geologists who came to this country did valuable work in other fields too. For instance, the research work on the composition of the deposits in steam engine boilers by Mr. T. Oldham; on the Antiquity of Human Race in India by Mr. W. Theobald; Geological Nomenclature and Cartography by Mr. H. B. Medlicott, Indian Image Stones by Lt. Gen. McMahon; and Blown Sand Rock Sculpture by Dr. R. D. Oldham.

Mr. J. Coggin Brown wrote an extensive memoir on the Anthropology of the Abor Tribes of the North-East Frontier Agency, which has been published as a voluminous memoir of the Asiatic Society of Bengal.

In the field of mountaineering may be mentioned the name of Mr. A. M. Heron, now leading a retired life.

Facts about the Geological Survey of India

- * India has one of the oldest Geological Surveys with a record of 114 years of systematic Geological Survey of this sub-continent.
- * It is the third largest Survey Department in the world.
- * The Geological Survey of India has a library with two-lakh volumes which is perhaps the biggest of its kind in this continent.
- * The Department has 1,000 technical experts working in different parts of the country.

the Nilgiris Hills, who joined the British Everest Expeditions in 1921 and 1924.

Participation in Mountaineering expeditions

After Independence, participation by the Geological Survey of India in the mountaineering expeditions has become a regular feature. Sri G. N. Dutt accompanied the British Everest Expedition in 1951 and Sri C. P. Vohra went with the Indian Everest Expedition in 1960 and 1962. Sri B. N. Raina joined the Japanese expedition to Mansalu (1956), while Sri V. K. Raina climbed the summit of Saser Kangri in the Karakoram in 1956.

The Geological Survey of India was set up to explore ostensibly the coal deposits of the country. With a handful of officers, the edifice of the survey was built up, and after 113 years of its existence, this has become the third largest Survey Department in the World. Its technical staff now has reached the strength of 1,000 while the total employees number 6,000.

The headquarters of the Geological Survey of India are situated in Calcutta, but it has now offices in every State to attend to the local problems quickly. Besides these, it has also set up three principal or regional offices in the East, North and South.

The work of the Geological Survey of India include systematic geological mapping, mineral assessment and exploration, engineering geology and assessment of groundwater. Its laboratories cater to the examination of rocks and minerals, using, if necessary, X-ray and spectroscopic methods, and determinations of fossils. To facilitate quick analysis, the chemical laboratories carry out quantitative estimation of ores, trace elements and of water by geochemical methods. Analysis of coal and gas are also undertaken.

For the successful exploration of minerals and water and to assist in engineering geology and groundwater



Ex-No. 6558446 Sri Uthiravel of South Arcot District who lost both legs in the recent Chinese aggression was awarded a hand propelled tricycle by the Citizens' Central Council, New Delhi on the recommendation of the District Soldiers' Sailors and Airmen's Board, South Arcot at Cuddalore N.T. The tricycle was presented to the disabled ex-serviceman by the Chief Minister Sri M. Bhaktavatsalam.

problems, a very large number of geophysicists are employed here. Some of the instruments, including the electronic equipments, are fabricated here.

Important Units

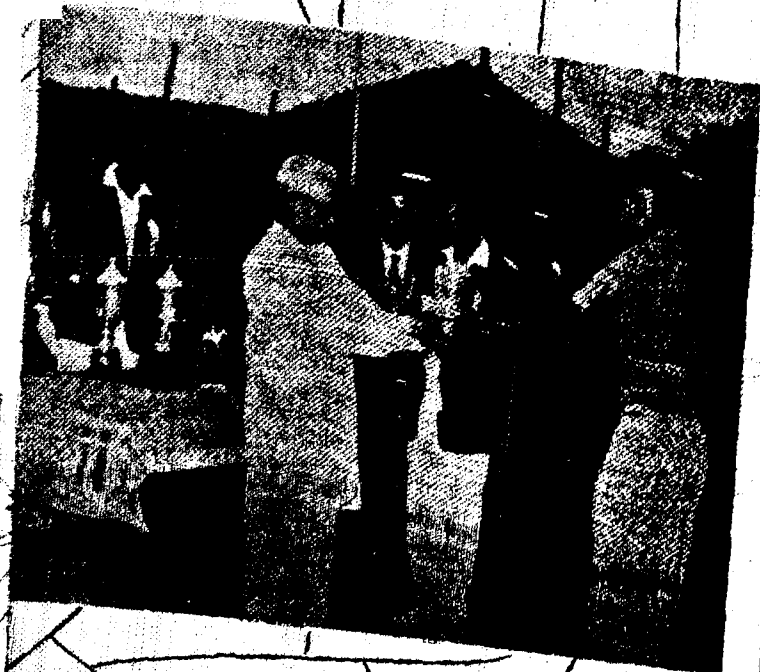
Coal exploration and drilling form important units in this department. There are separate divisions for Production of maps, diagrams, photographs and for publications. This department has currently in its lists some 300 institutions abroad with whom it exchanges its publications. Its library, consisting of over 200,000 volumes is perhaps the biggest of its kind in this continent. This is equipped with modern reprographic equipments for quick and inexpensive copying and microfilming.

For some time past, the department has been imparting geological knowledge to the lay-men through pamphlets which have been brought out in English and in regional language. The Geologists also deliver lectures with the help of lantern slides in far away towns and villages.

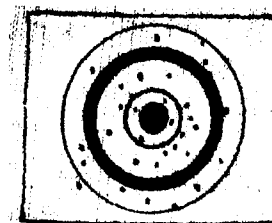
Madras Plant Extension IV Stage

The erection of an additional 150,000 lb./hr. boiler for the Madras Power Station to augment the station capacity was under progress. This has been supplied by Yugoslavians under rupee payment. About 94.75 per cent of work in erection of boiler was completed.

SAINIK SCHOOL ACTIVITIES



1. Sri M. Bhaktavatsalam taking the Salute at the march past of the athletes on the School Day.
2. The Chief Minister is presenting to Sri Bhaskaran the General Choudhury's Trophy for Inter-House Athletics Championship.
3. Lt. Col. K. R. Venkatraman, Principal, presenting the School Report at the School Day Celebrations.
4. The School Band in attendance on the School Day.
5. The Chief Minister is addressing the gathering on the School Day.



Education AT THE SAINIK SCHOOL

The future of India is dear to all of us. Our cherished ambition is to see that the work of such men as Gandhiji and Nehruji, who gave their lives so that this nation might live, is continued. It is our sacred duty to train the youth to assume leadership of the nation in the years to come to carry on the great tasks remaining before us. One aim of the Sainik Schools is to provide such leaders from children of merit from all sections of the people.

The Sainik School (Madras State) is located at Amaravathinagar, about 60 miles south east of Coimbatore. The staff and students of the school at this picturesque little place at the foot of the Anamalai Hills are all working hard with a sense of duty. The very basic object of the school is to infuse among the young generation of the country a confidence, an indomitable spirit—~~to~~ strive to achieve and not to yield—true to its motto "Can Do It". The majestic Amaravathi Dam with a beautiful park and the green hills around the place lend added charm to the place. This school is one of the 15 Schools established in the country to provide public school education with a military bias. There are two Sainik Schools in Punjab and one in each of the following States: Rajasthan, Gujarat, Maharashtra, Andhrapradesh, Orissa, West Bengal, Kerala, Madhyapredesh, Mysore and Bihar. The Sainik School of this State in common with the other Sainik Schools, has an all India curriculum, system of selection and examination.

The Aim

These schools are mainly intended to be feeder institutions to prepare boys academically, physically and psychologically for entry into the National Defence Academy where India's youths are trained for officer cadre of the Army/Navy/Air force. Character, team spirit, dedication to purpose, a patriotic outlook and a desire to serve the country with zeal and efficiency are the qualities sought to be promoted by the training at these schools.

The administration of Sainik Schools is vested in an autonomous Board of Governors under the Chairmanship of the Union Minister of Defence. The Chief Ministers or the Education Ministers of the States in which the schools are established are also members of the Board of Governors.

The Principal, Headmaster and Registrar are Defence Service Officers. In addition, there is the teaching staff consisting of highly qualified team of well paid Masters/Teachers at the head of whom is the Headmaster. The teaching staff work under the direct and active supervision of the Principal.

Sri Balakrishna Joshi, Headmaster, the Hindu Theological High School was felicitated at a special function in recognition of his 35 years of service. Chief Minister participated in the function.



Scholarships to Students

The Madras Government have instituted a liberal Scholarship Scheme for the award of scholarships to deserving students of Madras State domicile and to those students belonging to other States whose parents have been employed continuously in the Madras State for a minimum period of three years as on 1st January of the year of admission. The scholarships are awarded on the following basis.—

Joint monthly income of parents. Rate of scholarships.

(1)	(2)
Up to Rs. 300 p.m. . .	Rs. 1,900 per annum plus Rs. 300 clothing and equipment allowance in the first year and Rs. 150 in subsequent years.
Up to Rs. 500 p.m. . .	Rs. 1,425 per annum plus Rs. 300 equipment allowance in the first year and Rs. 150 in subsequent years.
Up to Rs. 700 p.m. . .	Rs. 950 per annum.
Up to Rs. 1,000 p.m. . .	Rs. 475 per annum.

Students of Madras domicile or those whose parents have been employed continuously in the Madras State referred to above, who obtain the first rank in their respective standards in the All-India Entrance Examination for admission to the Sainik School (Madras State) will be awarded full fee scholarship as an incentive irrespective of the income of the parents. In addition, clothing allowances based on income group of the parents will also be allowed.

The State Government Scholarship will be granted on production of adequate proof of domicile of Madras State (or employment in case of those belonging to other States) in respect of father legal guardian of the student and on declaration of the combined monthly income of the parents/guardians on a non-judicial stamp paper.

The scholarships will be available to students from standards V to XI. The total number of scholarships to be awarded will be limited to 62 per cent of the total strength of students on rolls of the Sainik School at Amaravathinagar. This maximum limit will be inclusive of the scholarships awarded to students of Madras State studying in Sainik School of other States, and also those awarded scholarships on the basis of merit.

The sanctioning authority for these scholarships will be the Government of Madras.

Applications for scholarships should be made to the Principal, Sainik School (Madras State) by the candidates concerned in the prescribed form obtainable from the said Principal, immediately after the selection for admission to the School, i.e., within a week from the date of announcement of results.

Ministry of Defence Scholarships

These scholarships will be granted by the Central Government only to sons of serving ex-service Junior Commissioned Officers and other Ranks of the Army and equivalent ranks of the other two services, to fill up a fixed quota based on the results of the entrance examination. The rates of scholarships are as follows :—

Income group.	Amount of scholarship.
(1)	(2)
(a) Rs. 1,200 p.m. or over.	No scholarship.
(b) Rs. 800 p.m. to Rs. 1,199 p.m.	Exemption from half school fees.
(c) Rs. 251 to Rs. 599 p.m.	Full exemption from school fees.
(d) Rs. 101 to Rs. 250 p.m.	Full exemption from school fees. The holder will also be given a clothing allowance of Rs. 300 in the first year and Rs. 150 in subsequent years.
(e) Rs. 75 to Rs. 100 p.m.	Full exemption from school fees and clothing allowance as at (d) above. Traveling allowance will also be admissible according to existing rules.
(f) Less than Rs. 75 p.m.	As in (e) above plus pocket money for essential toilet requisites.

Scholarships will be granted for one year in the first instance and renewed every year subject to the student's good conduct and satisfactory progress.

The Central Government have also instituted a separate liberal scholarship scheme for boys belonging to the Union territories/Centrally administered areas. The rates of the scholarships are similar to those for the Ministry of Defence scholarships.

ROAD Development in MADRAS - State

The proper development of the infra-structure of the economy is the precursor of industrial development. If to-day Madras is among the leading States in industrial development it is not a little due to the degree of road development in the State.

The State now has roads to a total mileage of 26,682 of which 18,000 miles are fit for modern buses and a large proportion is fit for goods transport. The intensity of road mileage of the State has increased from 0.48 mile per 100 square miles at the end of the First Plan to 0.50 at the end of the Second Plan as against the All India average of 0.26. This State is spending nearly Rs. 3 crores per annum for maintaining the roads in good condition.

The history of Madras reveals that road building was given importance during the period of Cholas, Pandiyar and later by the Naiks. Significant progress has been made during the reign of Rani Mangamma. The benign Rani built roads, planted shady trees and also constructed many rest-houses. Most of the important roads today date back to the Mangamma era. They were called *Rajabattas*. Though a net work of roads was not there, due attention was, however, bestowed in that century itself to the laying of new roads.

Before 1947

During the British rule there was no appreciable progress in road-building. In pursuance of the recommendations of the Nagpur Plan of 1943, a post war Road Development Plan was prepared for Madras State at a cost of Rs. 6.32 crores and it was launched on 1st April 1947. With advent of the First Five-Year Plan this scheme was merged with the Plan. In 1947 there were only 11,420 miles of motorable road in the State. The following comparative figures of different roads will give an idea of the development that has taken place since 1947.



Smt. J. Venkateswari, Minister of Public Health, is distributing prizes to nurses and nurse-pupils.

At present the Sainik School at Amaravathi caters for 300 boys and has standards V to XI. It will eventually have places for 525 students divided into 21 sections of 25 boys each. Admission is open to boys between the age group 9—13 in classes V to VIII according to the age groups mentioned below:—

Age on 2nd January 2nd July depending on term in which admitted.	Standard to which eligible for admission.
(1)	(2)
Below 10 years	V
Below 11 years	VI
Below 12 years	VII
Below 13 years	VIII

Sixty Seven per cent of the seats in the School are reserved for boys belonging to the Madras State. A certain number of seats are reserved for sons of serving or ex-service personnel. Boys from outside the State will also be admitted.

The School fees are as follows:—

- (a) School fees .. Rs. 1,000 per annum payable in advance in January or Rs. 200 per month for ten months in a year.
- (b) Outfit charges. Rs. 300 for clothing and equipment in the first year and Rs. 150 in subsequent years.

Liberal scholarship schemes based on merit and income have been provided both by the State Governments and Central Government.

Subjects taught

The medium of instruction in this School is English with Hindi as a compulsory subject. Other major subjects taught are English Language, English Literature, Mathematics, Physics, Chemistry, General Science and Social Studies. The option for the third language has been restricted to Tamil/Sanskrit at this school. Tutorial classes for the students work in English, Mathematics and Hindi and special coaching classes for the Defence Academy entrance examination is provided in the school.

The academic year consists of two terms—the first from January to May and the second from July to December. There are two mid-term breaks which normally coincide with popular festivals in the months of March and October when the students are taken round places of historical interest and educational value.

SCALES OF RATIONS FOR SAINIK SCHOOL

Serial number and articles.

(1)

- 1 Atta/Rice/Bread/Flour ..
- 2 Dhallia (crushed wheat)
- 3 Cornflakes (indigenous manufao-
ture only).
- 4 Semolina ..
- 5 Cornflour/custard powder or other
cereals for pudding.
- 6 Milk standard fresh/blended
- 7 Butter fresh
- 8 Eggs or Cheese tinned
- 9 Meat fresh (with bone)
or
Fish fresh
or
chicken dressed/fowl
dressed.
- 10 Oil Hydrogenated
- 11 Dal ..
- 12 Potatoes fresh
- 13 Onions fresh ..
or
Garlic (Laxson)
- 14 Vegetables fresh ..
- 15 Fruits fresh citrus
or
non-citrus
- 16 Cheese tinned ..
or
Cream fresh
- 17 Sugar
- 18 Tea ..
or
Coffee ..
- 19 Salt rock evaporated
- 20 Condiments and spices or pickles
chutney/vinegar.
- 21 Jam/marmalade ..

The school prepares boys for the following nations:—

- (a) Union Public School Certificate Examination for admission to the National Defence Academy.
- (b) Indian School Certificate Examination conducted by the University of Cambridge Local Examinations Syndicate.

Note—The Indian School Certificate Examination is recognised as equivalent to the entrance examination by the Madras Government.

Out of 17 boys who appeared for the National Defence Academy Entrance Examination in May 1964, 12 have passed.

A full time librarian is in-charge of the School library and reading room; with Indian and foreign magazines and periodicals. Books covering various subjects are available to the students except from the "Reference Section" which is intended for "on the spot use" only.

Physical training and other activities

National Cadet Corps training, sports including horse riding and swimming, games, hobbies, fine arts, crafts and cultural activities are compulsory features of the comprehensive training which the boys of the School receive. Co-curricular activities such as angling, debate, drama, excursion—cum—educational tour, mountaineering, etc., are also provided. These activities are designed to stimulate the interest of the student's in hobbies and provide opportunities for self-expression thereby ensuring the formation of a balanced and integrated personality. The scheme also provides ample scope for development of student's creative faculties and skill in Fine Arts and Crafts.

Great stress is laid on physical education in the school. This is designed to provide not only healthy recreation but also to ensure proper physical development and the fostering of the qualities of leadership, team spirit and esprit-de-corps.

By special permission of the Government, all students irrespective of age are enrolled into the N.C.C. Junior Division, Army Wing. The syllabus followed, however, is a combined syllabus of the three Services, viz., Army, Navy and Air Force. Training is conducted by N.C.C. Officers assisted by Instructors from N.C.C.

The daily training programme is designed among other things to cultivate good habits in the students, to develop in them the capacity for self-education, to progressively develop their mental and physical capabilities and to provide time for recreation. Based on this, the daily routine consists of P.T., Drill and seven instructional periods in the forenoon, and games and extra-curricular activities in the afternoon and supervised study periods in the evening. Sundays, holidays and the afternoons of Saturdays are utilized for taking students on hikes, educational tours and other outdoor activities.

Boys are accommodated in dormitories grouped into houses. There are five Houses at present, namely, Chera, Chola, Pandya, Pallava and Bharathi. Each House has a House Master and two House Tutors. Matrons look after junior boys and supervise their general health and personal hygiene.



Rifle Training to the N.C.C. Cadets of the Senior Division at a Camp held at Model High School, Saidapet.

There exists a healthy competitive spirit among the Houses to excel in studies, games, athletics and other co-curricular activities. Each House has its own Captain, Vice-Captain and Prefects who help in the maintenance of discipline and cleanliness in the House.

The School has a well equipped dining hall where all the students eat together. The cooking arrangements are supervised by a well qualified Mess Manager. There is a Mess Committee consisting of the School Registrar as Chairman and representatives of the staff and students as members. It meets once a month to suggest menus and discuss other catering matters. Both vegetarian and non-vegetarian meals are provided.

A well equipped canteen with goods from the Canteen Stores Department (India) is run by the School. It is proposed to open a School tuckshop to enable the students to purchase simple snacks and soft drinks.

Medical attention

The School has a part-time Medical Officer and a full time qualified Nursing Assistant. The Medical Officer, visits the School daily and a high standard of hygiene sanitation is maintained throughout the School Estate.

Each boy is subjected to a medical examination and the Medical Officer's report is forwarded to parents for necessary action, if any. A Medical History Sheet is maintained in respect of each student.

The School colours are steel (grey) and blood (red). Steel stands for strength and blood for extreme devotion to duty and comradeship. In the School Crest, the sword represents valour and the lamp stands for knowledge and wisdom. The Gopuram symbolises the culture and genius of the Madras State. The School Motto is "CAN DO IT" signifying and indomitable spirit determined to strive, to achieve and not to yield.

The Cyclone and After

1 Nation
2 State
3 Major
4 Other

1 Black
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T
in the

1. The debris of a house after the cyclone.
2 & 3. Badly damaged Rail Track at Channarayana and the remains of the Bamban Bridge which was washed away by the cyclone.
3, 4 & 5. The Chief Minister, Sri G. Shanmugasundaram, Sri. V. Ramaswami and other officials who visited the cyclone-affected areas. They are seen talking with the evacuees.
7. Sri T. T. Krishnamachari, Union Finance Minister who visited the cyclone-affected area is seen talking with the Madras Ministers and officials over the relief work.
8 & 9. Mr. Joseph Shiffrin of New York, U.S.A. and Mr. Edgar H. Reichel, Consul-General of the Federal Republic of Germany are handing over cheques to the Chief Minister for Rs. 2,110 and Rs. 18,000 respectively for the relief work.



Sri R. Venkataraman, Industries Minister is visiting the "Mobile Courts".

MILEAGE OF ROADS AS PER CLASSIFICATIONS

Classification of Roads	At the beginning of First Plan as on 1st April 1951	At the beginning of Second Plan as on 1st April 1956	At the beginning of Third Plan as on 1st April 1961	At the end of 1st and 2nd years of Third Plan (i.e. as on 1st April 1963)
	MILES	MILES	MILES	MILES
1 National Highways	1,050	1,085	1,090	1,090
2 State Highways	1,089	1,089	1,092	1,092
3 Major District Road	8,191	8,340	8,648	8,648
4 Other District Roads and Village Roads	10,864	13,531	15,037	15,852
Total	21,203	24,045	25,867	26,682

MILEAGE OF ROADS BY TYPE OF SURFACE

Category (type of surface)	At the beginning of First Plan as on 1st April 1951	At the beginning of Second Plan as on 1st April 1956	At the beginning of Third Plan as on 1st April 1961	At the end of 1st and 2nd years of Third Plan (i.e. as on 1st April 1963)
	MILES	MILES	MILES	MILES
1 Cement Concrete Roads	168	276	319	330
2 Blacktopped roads	926	4,616	7,175	7,269
3 Metalled roads	12,953	10,818	11,140	11,297
4 Unmetalled roads	7,137	8,335	7,403	7,786
Total	21,203	24,045	25,867	26,682

The net sown area in Madras State is 14,817,740 acres and not given in the January issue of Madras Information.

The salient achievement during the First Plan period is that the entire stretch of the national highway in the State was blacktopped. The Second Plan was framed with a view to increase the road mileage, so that the needs of rapidly developing transport may be fully met. The target proposed upto 1960-61 was an increase of 7 per cent in national highway and 17 per cent in surface improvement compared to the figures of 1955-56.

Third Five-Year Plan

The outlay fixed for Third Five-Year Plan of this State is Rs. 11 crores out of which an amount of Rs. 2 crores has been set apart for the formation of link roads under Village Works Grant Programme of Panchayat Unions. The remaining Rs. 9 crores will get distributed among the following seven schemes brought under the purview of the State Plan.

Scheme	Amount (RUPEES IN LAKHS)
1 State Highways (Government Roads)	400
2 Other roads (Ex-District Board roads, Npw Panchayat Union roads and Panchayat roads)	180
3 Security Measure Road Works (in Ramanathapuram district)	50
4 Central Road Fund Scheme (Allocations)	125
5 Economic and Inter-State Importance Scheme (State share of expenditure)	30
6 Construction of over/under bridges in lieu of level crossings	75
7 Tools and Plant	60
Total	900

The Approach

The main objective of the Road Plan of the State is to develop roads where the need is the greatest. The Salem-Neyveli belt where a number of new industries are likely to spring up, the hinterland of the new Tuticorin harbour, the industrial complex developing in and around Madras and the Mettur-Coimbatore industrial belt will receive special attention since the traffic in these areas is likely to increase much more than elsewhere during the coming years. The roads in these areas have to be improved, bridges strengthened where necessary and in general the load-carrying capacity increased.

The roads programme of the State is to ensure, within a period of twenty years, that no village should remain more than four miles away from the metalled road and 1½ miles from a village road.

The State Government has stressed that the following roads be taken up under the National Highways Programme:—

Scheme	Remarks
(a) Salem-Cuddalore (via Vriddhachalam)	In view of the expansion of Neyveli Project.
(b) Tuticorin-Koilpatti	In view of the development of Tuticorin harbour.
(c) Bangalore-Madras Express Way	.....
(d) East Coast Road	.....

The permissible laden weight of 9 tons for vehicles has been raised to 12 tons now, so as to facilitate quick movement of materials and finished products. Weak bridges and culverts on Government roads (Non-National Highways) costing Rs. 38 lakhs have been taken up for reconstruction so as to avoid load restrictions. As only a provision of Rs. 45 lakhs could be accommodated for this in the Third Plan ceiling, structures on all State Highways and important Major District Roads only are being upgraded now, leaving the rest to Fourth Plan.

The important cases of bridge redecking and repairs done are:—

1. Widening of the bridge across Vellar in mile 3/5 of Adambaram Bhuvanagiri Road (South Arcot district); and

Mrs. Kamalabai Lokanathan, Vice-President of Madras Social and Cultural Academy, is seen handing over to Sri G. Bhuvaneswari Minister for Information, a sum of Rs. 1,001 and sarees as donation to the Cyclone Relief Fund on behalf of the Academy.



32



Sri C. Subramaniam, Union Food Minister, discussing the food situation with the Ministers and officials of Madras State.

2. Strengthening of the old arch bridge in mile 168/4-5 of Lower Anicut Thanjavur Road.

In view of the proposed development of Tuticorin as a major port and as the State's Third Five-Year Plan for roads does not permit execution of further major schemes, the State Government have sanctioned the following works as non-plan works under separate allotment and all the works have been taken up and are in good progress—

Scheme—	(RUPEES IN LAKHS)
1 Forming a road (for 4 lane traffic) from mile 28/1 of Palayamkottai-Tuticorin road to Harbour (outside the Port Limits).	29
2 Forming a service road from mile 4/6 of Tuticorin-Tiruchendur Road to the Harbour (outside the Port Limits).	5
3 Upgrading Tuticorin-Tiruchendur Road mile 1/4-4/6.	4.65

The portions of works coming within the Port Limits at a cost of Rs. 16.50 lakhs are being taken up with full central grant and all the road works both within and outside the Port Limits are being executed by the Highways and Rural Works Department.

Regarding construction of over bridges, the following major works in the Madras City are taken up for construction during Third Plan period—

	(RUPEES IN LAKHS)
1 Construction of an overbridge on Thiruvethiyur High Road.	48
2 Construction of a subway on the Springhaven Road near the Light House.	45

The First work is being executed by the Corporation and the Second work by the Highways and Rural Works Department. Both the works are expected to be completed during this Plan period. Another scheme of construction of an overbridge in Kodambakkam High Road within the Madras City has also been taken up at a cost of Rs. 39 lakhs with 50 per cent contribution from the State Housing Board. The work is also in good progress.

Under the scheme "Other roads" only the spill over works of Second Plan on Ex-District Board Roads (Now under Panchayat Union and Panchayat) are being carried on to completion. Similarly in the case of Central Road Fund (Allocation) and Economic and Inter-State importance scheme, only the spill over works of Second Plan are carried on to completion as no new works have so far been sanctioned in the Third

IN AND ABOUT CHINGLEPUT DISTRICT

Unique Tourist attractions.—Chingleput district boasts of rare world renowned monolithic Archaeological stone engravings at Mahabalipuram.

The Bird Sanctuary at Vedanthangal in the district is one of the best sanctuaries of India and is a unique tourist attraction Centre.

Chingleput district is equally unique in the matter of Temples. Conjeevaram, Siperumbathing and Tiruttani shrines are of great attraction. The "Wonder" of twin eagles appearing punctually everyday at the top of Tirukkalikudram hillock is another pride of the district.

Again the sea-like lagoons at Polkott and Emar cannot be seen in other districts.

In Industries also the district is leading. Women vie with each other to put on latest Conjeevaram "sholis" and the world famous Conjeevaram "Sarees". "Ashok Leyland Automobiles", "Good Year Tyres", "T.I. Cycles", "Ensus Products", "Wimco Match Factory", "Royal Enfield" "Ensus Products" are a few of the many industries which throng the district.

The district is having excellent Tuberculosis and Leprosy Sanatoria.

Agriculture.—Though, there is no huge river or reservoir as seen elsewhere, green crops feast the eye of everyone along trunk roads, railways. The Chembarambakkam "Eri" Kaluvay lake and Madurantagam "Kammoi" are "miniature seas" irrigating vast acreage of wetland.

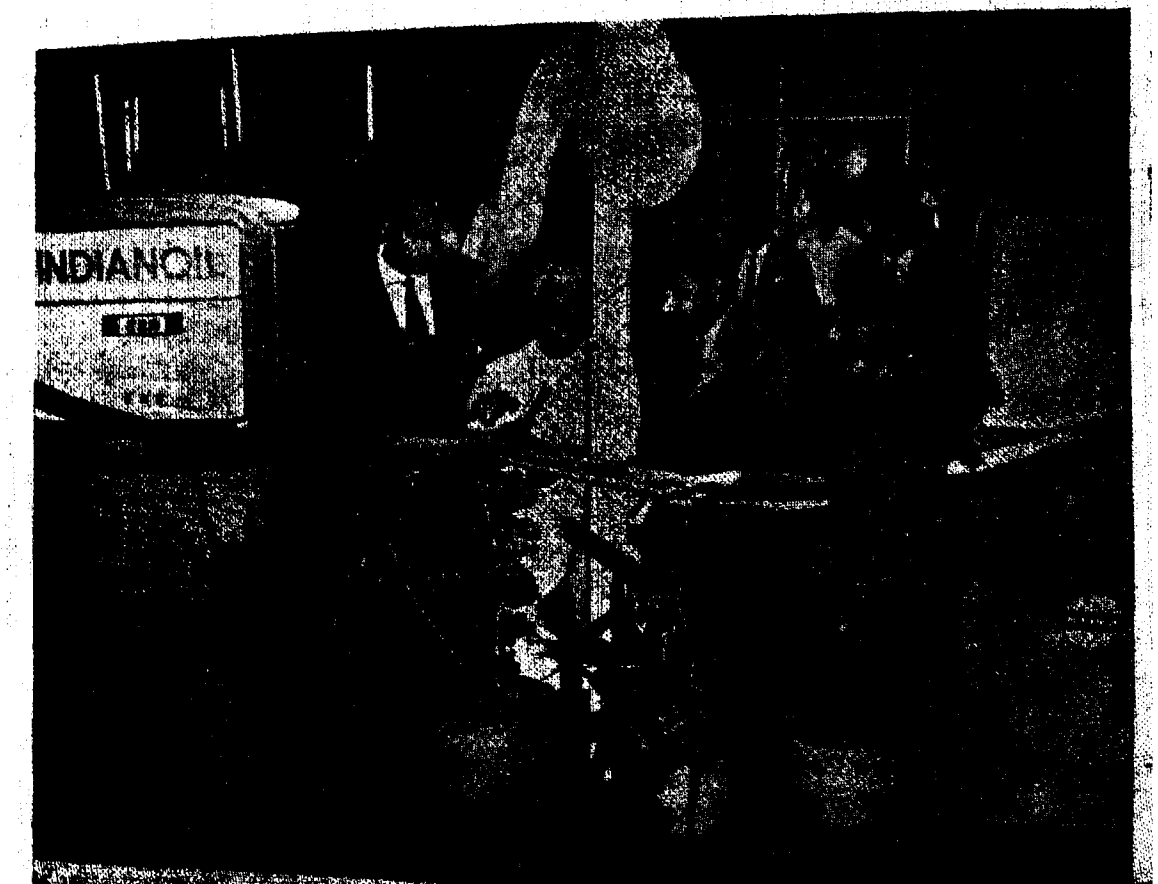
Plan. A ghat road for a length of nine miles in Yelagiri Hills in North Arcot District costing Rs. 18 lakhs is in progress under this scheme with a central assistance of Rs. 1 lakh. In the case of security measure works in Ramanathapuram, the provision is for completing incomplete works already sanctioned and these works are all practically completed by the end of 1963-64. No further works are taken up under Security Measure Scheme.

Highways Research Station

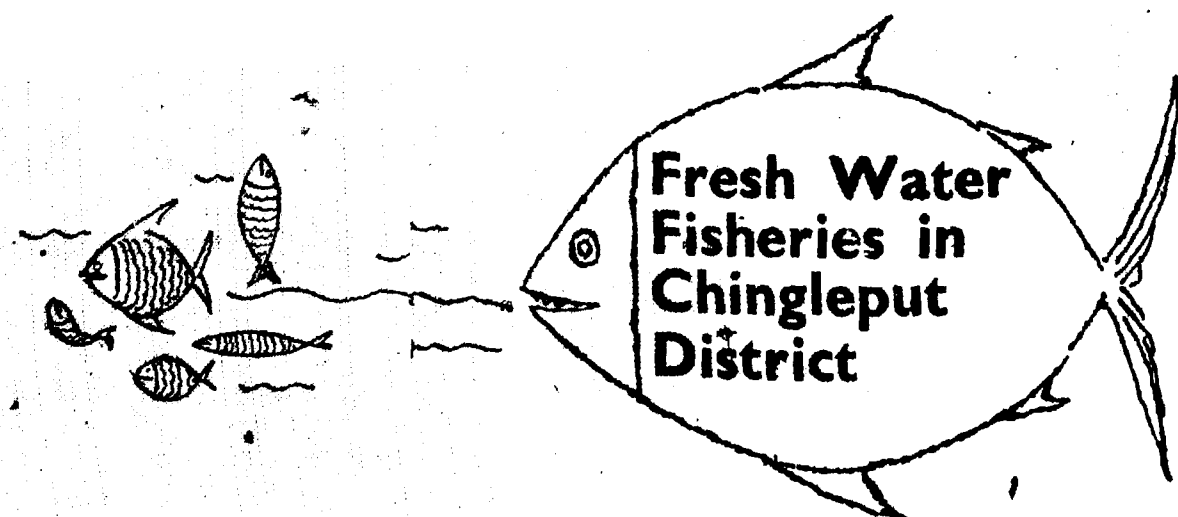
The Highways and Rural Works Department is incharge of the Road system of this State. The major works of this Department are executed economically and scientifically with the assistance of the Highways Research Station with its bitumen, soils, concrete and structure and traffic laboratories. Soil tests are conducted and pavements designed for roads in black cotton soil and sandy areas to suit the intensity of traffic. After tests, sea sand is being utilised economically for road works of the Corporation of Madras and the Highways and Rural Works Department. The bitumen works in the Corporation are controlled by tests in the Research Station and dense mixes have been evolved. The traffic roundabout at important junctions in the mufassal are designed by the Traffic Laboratory.

The traffic patterns in Mount Road, Poonaallee High Road and other main roads and roundabouts and automatic signals in road junction in the Madras City were investigated and designed by the Traffic Engineering division of this Department in collaboration with the Police and Corporation authorities.

In all it may be said that the Madras State has a well knit system of roads. Wherever necessary the roads are being improved and widened for a four-lane traffic and two-lane traffic depending on the intensity of traffic. By-passes too are under development to avoid congestion and trafficking in important cities and industrial belts. During the last decade the State has witnessed a phenomenal increase in total mileage of roads. This to a large extent is the result of the Government's fundamental policy of providing better transport facilities to the tiller of the soil thus bringing the towns and business centres within the easy reach of the rural economy. With the increase in the laden weight bridges over important routes such as Neyveli-Salem have also been taken for reconstruction. It should be noted that some expenditure on road development is being incurred outside the Third Plan allocation as "Non-Plan expenditure". The present road intensity of 0.5 per 100 square miles will be increased to 0.55 by the end of the Third Plan.



Sri M. Bhaktavatsalam, Chief Minister inaugurates the filling station of Indian Oil Corporation at Wall-tix Road.



SRI V. D. SPURGEON,
Assistant Director of Fisheries (Information), Madras.

One is pleasantly surprised to see a tank at every corner and a "kanmoi" at every mile along the roads, that criss-cross the entire length and breadth of the Chingleput district. The Author travelled to Pulicat, Ponneri, Minjur, Gummudipoondi, Ennur, Trivellore, Poondi, Tambaram, Chingleput, Madurantakam, Tirukalikundram, Singaperumalkoil, Mahabalipuram, Kancheepuram, Sriperumbuthur, Kattankolathur, Vedanthangal, Karunguzhi, Mogalvadi, Chunampet, Covelong, Walajapet and Tiruthani, and saw everywhere beautifully stone built square perennial temple and village spreads comes to 200,000 acres. If only every piece of water, small and big is stocked with just $\frac{1}{2}$ a dozen of fish (Tilapia) it will spread like "wild fire" and Madras City Markets will be flooded with fish besides providing to the villagers enough of this cheap but protective protein food.

Therefore, the Fisheries Department has initiated a comprehensive programme for maximising pisciculture in Chingleput district. Broadly speaking they are as follows :-

	ACRES
I. Rural Fishery Demonstration Scheme.	16,446 (perennial)
II. Provincialised Waters Scheme ..	32,000
III. Intensive Seed Collection Scheme.	..
IV. Block Development Scheme ..	145,375 (short seasonal)

Demonstration of fish farming

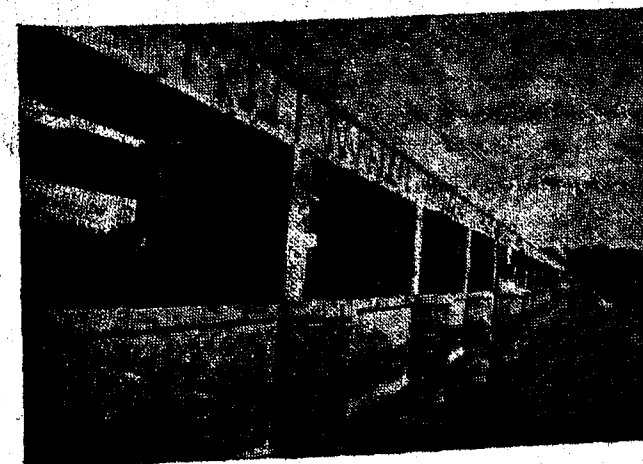
Under this scheme the department demonstrates practically as how profitably grow fish in tanks and ponds. The Demonstration Units function in different taluks at Chingleput, Kancheepuram, Sriperumbuthur, Karunguzhi (Madurantagam) and Ponneri. At Chingleput the



Kiloliar in Chingleput district.



Departmental Fishing in Buderi (near Poondi).



Poondi Dam.

Fort Moat, Karuppuchettikulam, Thimmarajakulam, Kaluvoy and Veepankulam are producing succulent fish and these are sold in fresh condition daily at the office of the Local Inspector of Fisheries near the Bus stand.

The main objects of this scheme are :-

- To demonstrate practically fish culture.
- To sell good fish, at fair price.
- To supply seeds of food fishes and mosquitocidal varieties.
- To educate masses and the lay by propaganda, lectures and exhibitions and the like.

The Kaluvoy lake meets the eye of every rail passenger who passes through and looks like "sea" and covers an area of 1,776 acres and produces tons of fish. The lake is licensed for fishing. Karuppchettikulam teems with Tilapia.

At Ponneri there is one Fishery Demonstration tank, at Kancheepuram there are four at Sri perumbudur there are four and at Karunguzhi there are three model fish ponds.

Provincialised tanks

In this scheme there are 39 tanks in Chingleput district. These are huge irrigation "Kanmois", whose fisheries are wild but scientifically tamed and developed by the department.

From 1960 the provincialised tanks are being fished by the department itself to correctly assess their fisheries pattern and also for more revenue and show how fishing has to be done on proper lines.

Under the scheme *chanos* fish seeds are collected from the factory estuaries at Chunampet during June and July every year. *Chanos* is a marine fish but

acclimatisable to fresh water and they thrive remarkably in tanks with "green water".

Osphronemus gourami.—Introduced in the Fort Moat are breeding and fingerlings have been collected and supplied to other States.

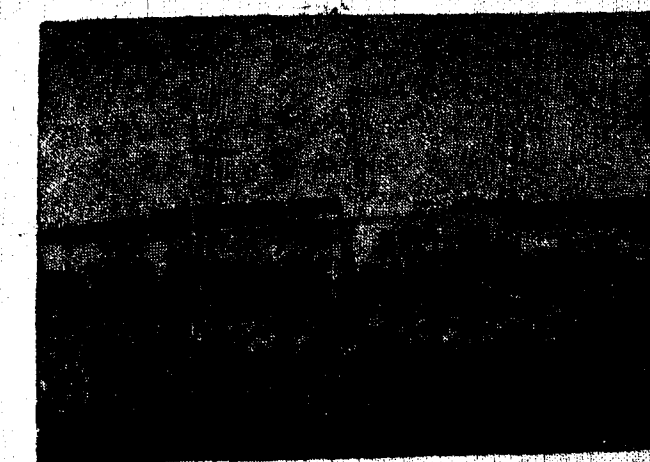
In Chingleput district 10 "Blocks" are working in the following places :-

- Thirukalikundram,
- Uthukottai.
- Sriperumbuthur,
- Madurantagam,
- St. Thomas Mount,
- Minjur,
- Kattankolathur,
- Kancheepuram,
- Poondi and
- Gummudipoondi.

A separate fishery scheme has been sanctioned for intensive stocking in rural "Blocks". Under this scheme the fishery work is entrusted to the Panchayat Unions and executed by the "Blocks" with the active collaboration of the Fisheries Department. Ten Nurseries are being constructed in these "Blocks". By the new hormone injection method, breeders will be artificially induced to spawn. The hatchlings will be reared in nurseries and distributed throughout the "Blocks". The present production of piscine protein from fresh waters is 17,895 M. tons yearly.

There are two fish Farms in Chingleput district. One is at Chingleput and another at Poondi. The only Marine Biological Specimen Supply Station in the whole of India is in Chingleput district and is run by the department. Excursion parties from schools and colleges and visitors from abroad visit this enjoyable Fisheries Station all the year round.

Thus Chingleput district has earned for herself a prideful place in piscicultural programme of the State.



Fish is being transported by cycles from Poondi Reservoir.

MANUFACTURE OF CEMENT BY SHAFT KILN PROCESS

The methods of manufacturing Portland cement may be divided broadly into two processes: the wet and the dry processes. In the dry process, calcareous and clayed materials are separately crushed and dried, compounded in suitable proportions, pulverised and then heated to incipient fusion in a kiln. The resulting clinker together with gypsum is finely ground into a fine powder viz., Portland cement. In the wet process no drying is effected at the raw material stage and the materials are pulverised and fed into a kiln in the form of a slurry containing up to 40 per cent water. In other respects, the wet process is the same as the dry process.

Shaft Kiln Process

Though the cement industry in India employs both the processes, the wet process is pre-dominant. Under special circumstances cement is also manufactured by the semi-dry and the shaft kiln processes. In the semi-dry process raw materials, as used in the dry process are sprayed with water (approximately 10 per cent) and granulated at the kiln inlet and fed into the kiln. The Leopl system in which besides a drum type granulator, an endless travelling grate is used for feeding the granules into the kiln. In other respects however it does not differ from the dry process. The granulate raw materials are fed to the kiln and fired in the vertical kilns. As the kiln performs also the work of cooling, a separate cooler is not required.

State Level Committee for the Rural Industries Project recently meet at Secretariat. Sri M. Bhaktavatsalam presided.



The first kiln for the manufacture of cement was built by Joseph Esplan a little more than a hundred years ago. The Kiln resembled the conventional lime kiln. Modern methods of cement manufacture have been introduced since the last fifty years when the importance of correct chemical composition of the raw mix, the high temperature of burning and of fineness of cement were duly recognised. There has therefore been a continuous improvement of manufacturing techniques and in consequence, the quality of cement and economy of operation of cement plants have steadily improved. The early modified kilns used in the cement manufacture were shaft kilns. In the operation of these kilns a large manual labour was employed and the quality of cement was inferior. Later the shaft kilns were, therefore, discarded by the cement industry as obsolete and replaced by rotary kilns. The rotary kiln plant represented a great improvement as it permitted the blending of raw mix in the form of slurry, which, in turn made it possible to achieve the required chemical composition in efficient and cheap operation. Thus with the introduction of rotary kilns manufacturing operations in cement plants have become mechanised.

The raw material charged in the old shaft kilns was in the form of lumps of ordinary size which were made from raw materials and were fed into the kiln by manual labour. The bricks required a comparatively long time for proper burning and even so the core of the bricks often remained soft and inadequately burnt, thus affecting the quality of cement.

Rotary Kiln Plant

The rotary kilns when first introduced were about 100 ft. long and were fired by pulverised coal flame. The daily output varied from 10 to 100 tons. The fuel consumption was rather high using up to 80 per cent of high grade bituminous coal but this additional expense of coal was regarded as worthwhile in consideration of saving in labour, and improved facilities of



Sri P. Chandra Reddy, Acting Governor of Madras, is seen addressing the Joint Session of the Madras Legislature on 18th January 1965.

operation. But in rotary kilns heat transfer from the flame to the rolling material is not very efficient and besides the slurry is to be evaporated. The disadvantages were however more than out-weighted by the ease of handling and blending of the slurry by centralised kiln control and by the subsequent saving of labour. These advantages became more pronounced by further development of the rotary kilns which led to longer kiln. However, large rotary kilns necessitated heavier steel structures, heavy foundation and larger buildings for their installation and called for a large capital outlay.

Shaft Kiln improved

Side by side not withstanding the disadvantage of the early shaft kilns, a considerable amount of work has been done towards their improvement, for, the heat transfer in shaft kilns was always more efficient than the rotary kilns. In the shaft kiln, heat is transferred from the gases to the materials mainly by convection and the material surface is relatively large while in the rotary kiln, heat is mainly transferred by radiation to the relatively small surface as presented by the forward rolling material. In due course, it became evident that if the shaft kilns were to become successful,

a centralised kiln control similar to that found in rotary kiln had to be accomplished, the size of the feed reduced and discharge from the kiln improved. A better way of burning cement would thus be achieved which would have several advantages over the rotary kiln burning method.

In the shaft kiln process the granulated raw materials are fed to the kiln through the upper revolving feeder chute. After burning they are taken out through the rotary grate and discharging device. The work of the past fifty years has resulted in special firebricks and high pressure ventilation system. Subsequently, the following improvements and changes have been made in the shaft kilns.

- (i) Sintering zone is kept very high compared with that of the conventional shaft kiln.
- (ii) Before reaching the rotary grate the temperature of treated clinker comes down to as low as 200° C. and can be taken out without causing damages to the rotary grate.
- (iii) As the fire bricks are of special type, they will not melt even when the temperature of the sintering zone rises.



Sri C. Subramaniam, Union Minister for Food, has visited the All India Khadi, Swadeshi and Industrial Exhibition at Madras on 15th January 1965. Sri Appadurai, Chairman, State Electricity Board, is seen explaining a model project to the Union Minister.

(iv) Superior uniform clinker can be produced as the supplied materials are hard and uniform in size being granulated by the excellent granulator as above said.

(v) Fuel consumption per ton of clinker is 950,000 to 1,000,000 Kcal.

(vi) Coke dusts (Anthracite) with the heat value over 5700 Kcal/Kg. may be used for the manufacture of cement.

(vii) Power consumption is cut down to 35 KWH per ton of cement as coal is not required to be pulverised so finely as in the case of a rotary kiln.

(viii) Being lined with special type firebrick this shaft kiln stand much longer than the horizontal type.

Advantages of Shaft Kiln

While the earlier shaft kilns were quickly replaced by the rotary kilns on account of many advantages offered by them there is again in evidence a shift in favour of the shaft kilns as a result of the improvements effected therein mainly by the introduction of the modulator and also by a series of other developments. It is now claimed that the vertical kilns can produce cement of the highest quality and uniformity very much similar to that produced from rotary kiln. The most important advantage of the vertical kiln plant is its comparatively low cost of installation.

While the establishment of the rotary kiln plant in India estimated to cost approximately Rs. 120 per ton annual capacity the cost of a vertical kiln plant is only Rs. 80 per ton annual capacity or even less depending upon local factors such as cost of raw materials, labour, etc. Moreover it is possible to make the operation of small shaft kiln cement plant of 50,000 to 80,000 ton capacity per annum nearly as economical as that of

a larger rotary kiln plant. Smaller shaft kiln plants have another advantage over rotary kilns plants. In areas where either the demand is restricted or raw material (mainly limestone) availability is limited a shaft kiln plant would be the obvious choice. In India where the transport facilities are yet to be developed to cope with the demand and where the need to conserve foreign exchange is likely to persist for many years to come, the shaft kiln cement factories appear to offer immense possibilities of quick development which would also be seen from the following comparative study.

	Rotary Kiln Plant	Vertical Kiln Plant
1 Cost of plant ton annual capacity.	Rs. 120-125	Rs. 80-70
2 Time of delivery of the main plant and equipment.	24-20 months	8-12 months
3 Time of erection	30 months	12 months
4 Fuel	High grade bituminous coal or fuel oil.	Local grade slack anthracite or semi bituminous coal coke breeze or fuel oil.
5 Amount of fuel used per ton of cement.	2700-4000 BTU	1800-3000 BTU
6 Number of men employed per ton of cement per year.	1000	800
7 Power consumption in KWH per ton of cement.	105	110
8 Amount of water needed in percentage of cement produced.	65 per cent	25 per cent.

Economic factors

Although it has been claimed that the working of a vertical kiln plant in its present modified form can be as efficient as that of a rotary kiln plant it is not without certain reservations. The local conditions such as quality and total availability of limestone or other cement making materials such as labour and transport charges, etc., would ultimately determine as to which of the two processes should be adopted. It is recommended, therefore, that the following factors should be taken into consideration before selecting either of the two methods.

- The proposed plant site indicating the type of soil and depth of water level.
- Location of the quarry in relation to the proposed plant site.
- The type of limestone and clay or shale available, their chemical composition, variation of mechanical properties like hardness, grindability, etc. and topographical information of the deposits.

- Availability and cost of power and water.
- Type of coal available indicating its BTU ash content, ash analysis, volatile matter, ignition point or moisture variation.
- Chemical composition of the gypsum and its physical characteristics.
- Availability of labour and prevalent wages for skilled and unskilled workers.
- Climatic conditions, average rainfall, maximum and minimum wind and dust storms and barometric height.
- Existing road, rail and other transport communications.

It is only after the above factors are known and are properly assessed that the economics of productions by either of the two methods can be worked out. In general for large production of 2 to 3 lakh tonnes per year a rotary kiln plant would be decidedly advantageous as the rotary kiln plants are built up to 750 to 800 tons daily capacity while the highest output from a vertical kiln plant is only 175 to 200 tons per day. It is, however, claimed that the cost of production of cement in the vertical kiln plant would be

nearly Rs. 55 to 60 per ton of naked cement. A rough assessment of cost of production is given below:-

Item	Cost per ton of cement.
(1) Raw materials i.e., limestone and clay	8
(2) Gypsum	4
Coal	12
Powder and water	6
Spare parts, lubricants and maintenance	6
Labour wages	6
Staff salaries and overhead charges	4
Depreciation	6
Other items including interest on capital, etc.	2
Total	60

The plant and machinery for a 175-200 ton daily capacity unit would cost approximately Rs. 45 lakhs.

Brazilian Parliamentary delegation has recently visited the Assembly and Council Halls of the State Legislature.



PROBLEM of WILD LIFE CONSERVATION



SRI T. JAYADEV,
Chief Conservator of Forests, Madras.

The conservation of the magnificent animals of the forests and the wide variety of birds is beset with peculiar problems. But the need to protect the valuable fauna, some on the verge of extinction, is so urgent that the problems will have to be faced squarely and determined action taken for the sake of preservation of incalculable wealth of the nation.

The area under the control of Madras Forest Department is about one sixth the area of Madras State. This area of about 21,000 square km. is the main abode for all species of wild animals indigenous to this region. Besides the area under forests, some non-forest areas comprised of stoney plains, waste lands, and lakes also shelter wildlife like small mammals, upland game birds and waterfowl, both resident and migratory.

Sri P. Chandra Reddy, Acting Governor of Madras, visited the All India Khadi, Swadeshi and Industrial Exhibition at Teynampet on 15th January 1965. The Governor is seeing some of the exhibits.

The wild animals in the Reserved Forests are protected under the Madras Forest Act of 1982. The wildlife in the area outside the Reserved Forests are protected under the Wild Birds and Animals Protection Act of 1912 wherever such protection is needed. This Act has been invoked in respect of 14 waterfowl refuges notified in the various districts.

Under the Forest Act even simple trespass into the Reserved Forest constitutes an offence. Shooting is totally prohibited except under a licence governed by close conditions. Protection of the forests and its denizens is a duty of the forest staff. Though the forest staff is there to protect the fauna, their task is wholly devoted to wildlife protection. Compared to the magnitude of the problem of conservation of wildlife the task assigned to them is limited. While there can be no chance of 21,000 square km. of Reserved Forests being appreciably reduced there is a danger of some small areas supporting certain species of rare animals being alienated. To guard against this, a second line of defence has been devised. Such areas are called wildlife sanctuaries or parks where the rare species are allowed to breed in peace and maturity. To intensify protection in such areas a separate organisation styled as the State Wildlife Organisation has been created. The whole area of the reserved forest is as dense as the above.

Sri K. Kamaraj, Congress President, who inaugurated the All India Khadi and Village Industries Exhibition at Teynampet is seen in the picture witnessing the replica of bust size police constables.



of game and other animals but certain species of animals concentrate in areas ecologically suitable for their living and therefore special steps have been taken to protect such areas as public property.

Peoples' responsibility

In the district of Nilgiris, Coimbatore, North Arcot, Salem, Madurai, Tirunelveli and Kanyakumari, there are some naturally protected areas; steep hills, precipitous slopes, deep valleys and gorges not accessible to man. So far man has not been able to easily reach these regions on account of the difficult nature of terrain. Glimpses in the valleys of Manjampatti (Coimbatore district) and Muthukulivoyal (Kanyakumari district) have revealed some rare species of animals like the ash coloured bison and the lion tailed macaque. At the very sight of man these animals disappear. It is hoped that these impregnable fortresses of nature will ever remain as reservoirs of our wildlife. I shall not be surprised if some of the rarer species which have retreated to these pockets due to relentless persecution in the past emerge from these areas, when things have settled down and a cordial relationship between man and beast is established.

There is no need to fear that the fauna of Madras State is diminishing though it will be idle to pretend that there are no forces at work which should be guarded against. There are many problems confronting conservation of wildlife. It shall not be possible to solve these problems without the co-operation of the public. The area is so extensive and the problem so varied and complicated that however earnest the Government machinery may be, it will not be easy to solve these problems without public support and backing. The greatest handicap is that there is no strong public opinion on the subject of wildlife conservation in the country and until this is created, little will be accom-

plished. Unless every citizen thinks that he is a member of the watch and ward for protection of nature our wildlife has no bright future.

Danger from many sides

The greatest menace to wildlife are the crop protection guns. Damage done to crop by wild beasts is very much exaggerated. There seems to be no justification for the continuance of issue of such licences now. These guns have caused considerable damage to wildlife, damage that could be mitigated if these guns are deposited with the police when the crop is over.

Many others residing in remoter areas in close proximity to forests possess unlicensed weapons which are carefully concealed and constantly used. Recently one such weapon was discovered but the owner could not be traced. The weapon was found buried in the ground.

The enormous increase in the issue of gun licences present a constant threat to our fauna. 28,039 gun licences were issued as on 1st January, 1965, when the total land area of Madras State is 50,000 square miles and the vulnerable area is about only one-sixth of the total area.

Lucrative foreign market for our wildlife and wildlife products is another potential danger to our wildlife which should be guarded against. There is a great demand for reptile skins, feathers of grey jungle fowl, peacock, king fisher and other brilliant plumaged birds. Legislation declaring wildlife as the property of the State to control marketing of all wild animals and its products throughout the State will go a long way in saving our fauna.

Another danger to wildlife is the nomadic tribe of professional bird trappers going by the name of

"Narikoravans". Great number of partridges, peafowls, jungle fowl, quails and water fowl are snared by the members of this tribes and sold in markets and streets throughout the year. If the members of the public express their strong disapproval of such injurious practices by refusing to purchase these birds, this practice will cease. Here is a chance for the members of the public to strengthen the hands of the Government in their efforts to save wildlife.

Chiefly Human Problem

Thus you will see that the problem of wildlife conservation is chiefly a human problem. If we do not interfere with nature and allow nature to manage her own affairs, there will be no problem at all. More and more animals will be able to survive if man does not kill them. Until it is widely recognized that wildlife is our valuable natural resource from which many benefits accrue to mankind, destruction will continue until the resource is exhausted and the benefits disappear with harmful repercussions to human existence on this earth.

The celebration of wildlife week has really awakened public consciousness in recent years as evidenced from the gradual change in man's outlook upon the domain of nature. It has created the more humane conception that it is the duty of the man to ensure that wild resources

are not annihilated. To day there is no educated person who does not realize that the kingdom of nature provides science with a vast and productive field for research.

Apart from humanity which in itself should compel man to grant the lesser creatures, the right of existence, there are other considerations which must influence him. There are numerous investigations, anatomical, physiological, ecological, geographic and evolutionary which can only be made by the study of animal life.

It is now admitted all over the world that the natural beauties of a country, its varied fauna and flora are the most important asset to its people; an asset to be protected and preserved to their own advantage and to the advantage of future generation.

I have placed before you some of the problems confronting wildlife conservation in Madras State to-day seeking your help, guidance and co-operation in solving them to put our fauna on a stable and secure footing. It is my firm conviction that no scheme of this magnitude can ever be successful without the public support. The scheme of nature conservation can be ensured only with the goodwill of the people. We must try to preserve with all our effort the wildlife that inhabits our forests and their surrounds.

**DON'T
PUNISH
YOURSELF**

It is illegal to use old weights and measures for buying or selling; even quoting prices in terms of old units is punishable.

Besides, you punish yourself every time you indulge in transactions based on Seer or Maund; you get less than your money's worth!

It is not enough for the trader to use metric weights.

buy in KILOS only



Jammu and Kashmir Cultural Troup which paid a visit to the City recently.



Sri G. Bhuvarahan, Information Minister, presided over the Family Planning Day Celebrations at the General Hospital.



Smt. Sarojini Varadappan, Chairman, State Social Welfare Board, inaugurated the Family Planning Day at Children Theatre on 18th December 1964.

PREPARATION OF Syrups and Rose water



The following is a short note on the manufacture of Syrups, Rose water, etc., through distillation process. The note is based on the distillation centre at Chellampatti, working under the control of the Visvaswarayya Committee.

There exists a large scale demand for Nannari Syrup, Lime Syrup and Orange Syrup. These are very healthy drinks. Besides this rose water, omam water and distilled water for industrial use are also in great demand. These can be produced by distillation process very profitably. By establishing a small distillery unit a family of 5 members can very easily earn Rs. 300 to Rs. 500 a month.

Process of manufacture

For distillation of Nannari Syrup, the Nannari roots should be cut into smaller bits of 2 to 3 inches and finally jammed and soaked in cold water for about 24 hours in a mud pot. And this is put into distillation plant in the proportion of 5 measures of water to $\frac{1}{2}$ kg. of

Sri C. Subramaniam, Union Food Minister inaugurated the Food Corporation of India on 14th January 1965 at Madras.

Picture shows (from left to right) Sri Bhaktavatsalam, Chief Minister of Madras, Sri T. A. Pal, Chairman of the Corporation, Sri Krishnappa, Minister of Mysore State, Sri C. Subramaniam and Sri Ramiah, Food Minister of Madras.



Nannari roots, and the essence is extracted. One kilogram of sugar is added to 2 bottles of 24 ounces each of Nannari liquid essence and boiled in a boiling plant till the sugar is saturated. Then this is transferred to a vessel and kept over another vessel containing cold water. The syrup now gets cooled down and it is put in bottles, sealed and labelled. Similarly for the preparation of lime and orange syrups, the lime or orange is cut into bits and put into distillation plants and the liquid essence is extracted.

For the extraction of omam water, pepper, omam, raw ginger, Arisi tippili and jaggery is mixed together ground and put into distillation plant and the essence of liquid omam water is extracted.

In the case of preparation of rose water, rose flower and pannir flower is put into the distillation plant and the rose water essence is extracted.

For preparation of distilled water, water is kept for 2 days and then put into distillation pot and distilled. This is highly useful for industrial purposes and for charging batteries.

The capital investment required for the plant will be as follows:—

Non-recurring expenditure

A store room of 16' x 12' and a distillation room of 10' x 8' is required. This can easily be secured on a monthly rent of Rs. 20 in rural areas.

A simple cottage type distillation plant is required. For this we can easily use ordinary copper boiler with another covering vessel for distillation. This may cost about Rs. 250.

	RS.	RS.
Two drums made of galvanized sheets—each.	25	222
A.S.S. steel jug or kettle	50	
Twelve mud pots	12	
Iron	25	
Boiling plant	15	
One weighing balance weights	25	
Two funnel	2	
One set of sieve	3	
Half a dozen S.S. steel spoons	5	
Big glass jars	60	

Store room and Office Equipment

	RS.	RS.
Two glass Almyrahs	600	870
Two racks	70	
One table	120	
Two chairs	80	
Total		1,342

Recurring expenditure

	RS.	RS.
One Distillery Expert	10	17.5
One Assistant	7.5	
Rent for the buildings	20	2.5
Total		19.5



Lt. Col. S. S. Choudhri is handing over a cheque for Rs. 1,045 for flood relief to Chief Minister on behalf of the 7th Madras Battalion, N.C.C., Madurai.

Cost of Production and Profit

	Cost.	Selling price.	Profit.
(1)	(2)	(3)	(4)
	RS.	RS.	RS.
Two dozens of omam water	6	12	6
Two dozens of rose water	6	12	6
Two dozens of distilled water	6	9	3
Two dozens of nannari syrups	15	25	9
Two dozens of lime syrup	15	25	9
Two dozens of orange syrup	15	24	9
			Value.
			RS.

Manufacture of 12 dozens of bottles per day for 25 days (approximately). 1,575
Sale of 12 dozens of bottles per day for 25 days (approximately). 2,625
Profit 1,050

Further details, if any, needed may be had from the Rural Industrialization Officer, Chepauk, Madras-5.

Madras helps Maharashtra in Livestock Development

Twelve pedigreed bulls six of Sindhi and six of Gir, have been sold to Maharashtra Government from the Livestock Research Station, Hosur Cattle Farm. The day's milk yield of the pedigree Sindhi bulls supplied varies from 2,000 kg. to 2,800 kg., while that of Gir bulls, varies from 2,134 kg. to 3,700 kg. The Hosur Cattle Farm maintains 1,045 head of cattle consisting of 894 head of pure bred Sindhies, Girs and Hulukars besides a small herd of cross bred dairy cattle. On an average 100 bulls are being released from this farm for breeding purpose both in our State and in the adjacent States.

Intensive Egg and Poultry Production-cum-Marketing Scheme

Dr. I. D. MANTRAMURTI, G.M.V.C., B.V. Sc.,
Director of Animal Husbandry, Madras.

The inauguration of the Intensive Egg and Poultry Production-cum-Marketing Scheme, Kattupakkam, early in 1964, by Sri M. Bhaktavatsalam, Chief Minister, marks a mile stone in the Poultry development activities in the State.

Poultry in our State is of poor quality with low yield of eggs and mutton—the yield of indigenous poultry being about 50 eggs per annum when compared to the yield of 120 eggs per annum by the exotic birds. Ever since the dawn of freedom and the coming into power of National Government, Poultry development work has been receiving sufficient attention in consonance with the declared objectives of the State, to improve the supply of milk, meat and eggs the greater consumption of which is essential to balance the present customary diet.

Poultry is a rich source of nutrition that can easily be produced at comparatively low cost. Poultry can be produced and multiplied to order with the aid of mechanical means of incubation and rearing. Realising the importance of poultry production the Government of Madras in addition to establishment of Poultry Farms,

Chief Minister, who inaugurated the National Art Gallery and Five-Year Plan Stalls at the All India Khadi and Village Industries Exhibition, is witnessing an exhibit in the former stall.

Poultry Extension Centres, etc., have introduced various schemes to enthruse private Poultry breeders by imparting scientific training of short duration with stipend and aiding them to take to poultry by assisting them to purchase chicks, poultry houses, incubators, etc., at subsidised rates. These schemes have definitely laid the Poultry development on strong foundations. With the intensification of development programmes, it becomes necessary to offer price protection to the Producer and provide ready markets. Under the intensive Egg and Poultry Production-cum-Marketing Scheme, introduced early in 1964 which was inaugurated by Sri M. Bhaktavatsalam, Chief Minister, both production and marketing aspects have been combined. The area of operation of the scheme lies within a radius of 25 miles around Kattupakkam. The scheme envisages the production and supply of 10,000 eggs and 200 table birds to the city population. This scheme will attempt to supply at least one egg per capita per day for atleast 10% of the city's potential consumers of egg and poultry. On this basis 70,000 eggs would be needed daily by the City of Madras. The schemes mainly supplement the present sources of supply for the consumers and help stabilisation of prices.

Three hundred breeders from the area of operation of the scheme will be admitted to the scheme and extended loan assistance of Rs. 1,000 each, in the form of birds, equipments, etc., and the loan will be interest free. Each breeder should maintain a part of specified layers and market their products, i.e., eggs and poultry through the marketing organisation of the scheme. Each breeder is expected to sell at the minimum

with 25 eggs per day and 300 table birds per annum. The birds and eggs collected will be sold to consumers through three sales depots established in convenient localities in the City. The loan amount is recoverable in 50 equal instalments within a period of 18 months, the recovery of loan being adjusted towards the cost of eggs and birds supplied by the breeders at the rates prescribed by Government.

The Chief Minister of Madras inaugurating the scheme emphasised on the need to develop appreciation of the nutritive values of eggs and poultry meat in human diet and requested the people to take advantage of the scheme not only to derive economic benefits but also to contribute towards increased production to meet consumer demand for eggs and Poultry meat in urban areas as a measure of food production.



Chief Minister receiving the first copy of the Tamil book "Sekkizhar Pillai Tamil" from Dr. A. L. Mudalliar who released the book recently.

Installed Power Plant Capacity in Madras Grid

The total Installed Generating Plant Capacity in Madras State, including Neyveli Thermal Station, was 885,200 M.W. The Hydro-Power Plant form 60 per cent of the total (534,200 M.W.) and the Steam Power Plants form 40 per cent (351,000 M.W.). The Power Plant Capacity of the Madras State forms 11.9 per cent of the total capacity in India. The following table gives the installed Power Capacity of various stations.

Power Stations		Installed Power Plant capacity as on 1st August 1964
		M.W.
Hydro-Stations—		
1 Pykara	.. .. .	70,200
2 Moyar	.. .. .	36,000
3 Kundah I.	.. .. .	60,000
4 Mettur	.. .. .	40,000
5 Kundah II	.. .. .	195,000*
6 Periyar	.. .. .	105,000
7 Papanasam	.. .. .	28,000
Total Hydro		534,200
Thermal Stations—		
1 M.E.S. (A)	.. .. .	27,000
2 M.E.S. (B)	.. .. .	30,000
3 M.E.S. (C)	.. .. .	30,000
4 Samayanallur	.. .. .	14,000
5 Neyveli†	.. .. .	250,000
Total Thermal		351,000
Madras Grid		885,200

* Includes 20 M.W. of Kundah P.H.V. Commissioned on 31st October 1964.
† Centrally sponsored Neyveli Thermal Station feeding Madras Grid.

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GALLANTRY AWARDS FOR MADRAS POLICE

The Bombay Humanitarian League has notified the award of the Kendal Humanity Medal to Sri A. Rajagopalan, Sub-Inspector of Police, now officiating Inspector of Police, Crime Branch, C.I.D., Madras, Sri Shanmugam, Police Constable, now in the Directorate of Vigilance and Anti-Corruption and Sri V. Kanniah, Police Constable, Madras City Police in recognition of their meritorious services. Following is a brief of the nature of service rendered by each one of them.



Sri A. Rajagopalan.

the Sub-Inspector rushed to the spot, along with P.C. 519, Shanmugam. They saw the victim exhausted and sinking. Though they knew that the area was infected by sharks, they plunged into the sea to save the



Sri Shanmugam.

Royapettah. He regained consciousness after necessary treatment by the Duty Medical Officer.

When several persons in the sea-shore did not have the courage to save the man from drowning, the Sub-

On 25th April 1963 at about 4.15 p.m. when Sri A. Rajagopalan, Sub-Inspector of Police (now officiating Inspector of Police) was working in the Crime Branch Office, a P.W.D. employee named Rodricks informed him that a man was struggling for life in the sea, opposite to the Gandhi's statue and that there was no one to save him, himself being unequal to the task. Unhesitatingly after calling for the Ambulance by telephone

Inspector, who was working in the Crime Branch Office rushed to the spot with the Police Constable immediately on hearing the news. Both of them exhibited courage of an unusual order and saved a life from a watery grave at personal risk under hazardous circumstances.

On 11th June 1963, the Inspector of Police, Investigation, proceeded to Government Royapettah Hospital to meet Residential Medical Officer in pick up van. MSW 5235 driven by P.C. 1150 V. Kanniah, attached to M.T. Shed, Madras City Police. The van was parked near the out-patient department while the Inspector was discussing about a road accident case with Residential Medical Officer. At about 10.45 hrs., a girl, aged 10 years (Kasthuri, daughter of Kantha of No. 10, Nallanna Mudali street, Royapettah) who stepped on the inspection cover of a well (wherein the Corporation water stored for pumping into the overhead tank) slipped into the well accidentally.



Sri V. Kanniah.

On hearing the hue and cry from the womenfolk, who had come to the out-patient department, P.C. 1150 Kanniah rushed to the place and found the girl struggling in water 8' in depth. Unmindful of the personal risk involved, P.C. 1150 without hesitating for a moment jumped inside the well and saved the girl from drowning and brought her up and removed her to the children's ward where first-aid was rendered and the girl completely recovered from the shock. But for the timely and courageous action and gallantry displayed by P.C. 1150 the accident would have proved fatal.

U.S.S.R Cultural Troupe In The City



The cultural delegation from the U.S.S.R. staged a performance at the S.I.E.T. College Auditorium on 20th December 1964

1. A Russian Ballet
2. The Troupe at Kalakshatra, Adyar
3. One of the delegates performing a magic feat
4. The Troupe at Mahabalipuram
5. Governor presided over the performance





Visitors from ABROAD

1. Dr. S. Ramgoolam, Premier of Mauritius (second from left) who paid a visit to Madras recently is talking with the Chief Minister and the Governor of Madras. 2. Mrs. Ramgoolam (second from right) also accompanied him. 3. His Excellency the Honourable Mr. C. J. Obwanger, Minister of Justice, Uganda and his party called on the Chief Minister. Mr. C. J. Obwanger also met the Industries Minister. 4. The Chief Minister with the delegates from Czechoslovakia. 5. Sri R. Venkataraman, Industries Minister is seen in the picture. 6. His Excellency Mr. Kirti Nidhi Bist, Foreign Minister of Nepal talking with the Chief Minister.



MADRAS Information

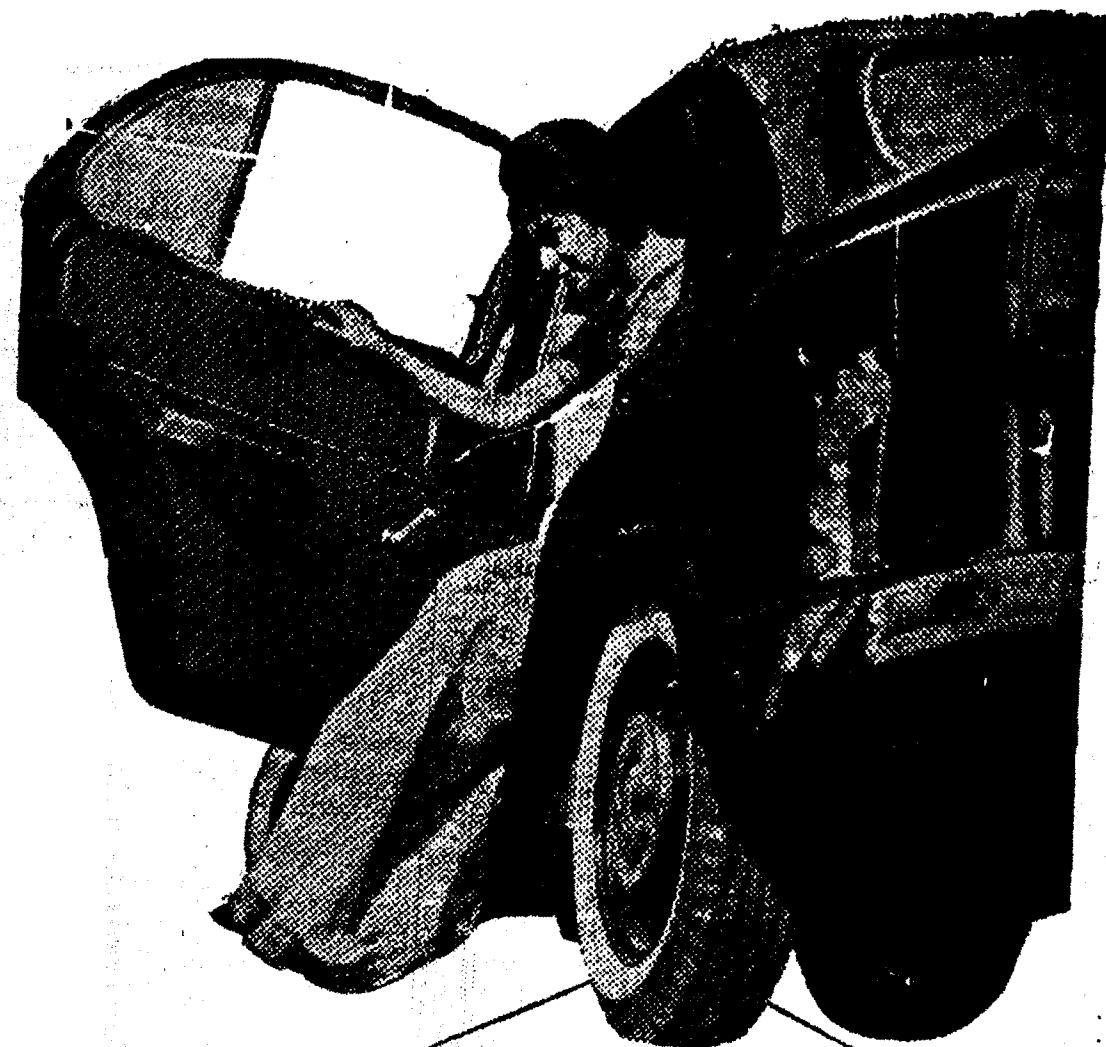
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Republic Day Message

Impressive Progress of Madras

-Governor's Tribute

The Governor of Madras in his Republic day Message broadcast over the All-India Radio paid glowing tributes to the impressive progress of Madras.

As we celebrate the Republic Day, year after year, we are sometimes apt to take it in a mechanical way. Let it not be forgotten that it is a day of national pride and national honour and it is our sacred duty to observe the Day in a spirit of utter dedication to the service of our Motherland and her people. We may or may not be attracted by outward celebrations, but it must be remembered that it is a day on which the heart of every Indian should attune itself with the pulsating heart of India.

Turning to our own State, it would not be out of place if I dwell a little on its affairs so that we may know where we stand in regard to our nation-building activities. Like the rest of India, we have also been working hard to implement our planned programmes for creating better living conditions for our people.

In the forefront

Madras has always been in the forefront in Plan fulfilment. The Third Plan visualises more intensified efforts in all directions, with an outlay of Rs. 291 crores. It is likely that the actual performance may exceed the outlay by about Rs. 50 crores.

Agricultural production is the sheet anchor of all our Plans, having regard to the fact that the majority of our people live by agriculture and any significant improvement in their living standards will be possible only with increased agricultural production. We have been facing a difficult food situation and all efforts are made to tackle the problem. We are not yet out of wood completely and events have shown that our efforts should be redoubled in order to obviate any recurrence of the difficult situation.

Our State has registered an impressive industrial progress. The industries are both diversified and dispersed and special steps have been taken to start industries in undeveloped areas. The Centrally-sponsored projects located in the State like the Neyveli Integrated Project, the Surgical Instruments Project and the Avadi Tank Project have recorded good progress during 1964.

The deep sea harbour project at Tuticorin which was recently inaugurated by the Prime Minister, will, when completed handle about 2 million tons of cargo. Being nearest to the Indian Ocean, it is expected that trade will develop considerably at this harbour and a new era of industrial and commercial prosperity will be ushered in in this part of the State.

The Enquiry Committee on Small News Papers visited Madras in January. Sri M. Bhaktavatsalam, Chief Minister, is seen with the Members of the Committee. Information and Publicity, Industries and Public Health Ministers are also in the picture. Sri R. R. Diwakar, Chairman of the Committee is seen at the extreme right.





Members of the German Business and Banker's Delegation with Sri R. Venkataraman, Industries Minister at his Chambers.

The bulk of the Third Plan outlay has been earmarked for power projects and we have made significant progress therein. In rural electrification, Madras maintains its lead. The number of villages electrified up to 1st December last was more than eighteen thousand, leaving only about a thousand to be electrified, and more than two lakhs of pumpsets have been connected to power.

Education

So far as education is concerned, the achievements of the State in sending children of 6-11 age group to school, its lead in the field of providing text-books and its triple benefit scheme for teachers have won appreciation in higher quarters and have been commended to other States.

We have a sound structure of co-operative credit. The Third Plan aims at increasing the coverage to 85 per cent and the credit supply to 50 crores. The results so far achieved under different schemes in the co-operative sector also have been quite satisfactory in

terms of both financial outlays and physical targets. The year 1964 saw the birth of a number of co-operative spinning mills and co-operative sugar factories.

The entire State has been covered by the Community Development programmes. Within the framework of the Panchayat Development schematic budget, each Panchayat Union has now a large measure of freedom in planning with reference to local needs and circumstances, and it may now be said that in spheres such as rural water-supply, communications and elementary education, local planning plays a significant role. The Panchayat Unions, besides executing works entrusted to them, also act as agencies in implementing schemes of certain departments of Government. Of the programmes executed by the panchayats, great importance is attached to the implementation of the agricultural programme.

In a rapid survey, I have so far referred only to a few matters. While our full-time attention is needed for our developmental activities, the restoration of Dharmashakodi to its position as an important pilgrim centre and the rehabilitation of the people who had to face a terrible misfortune, are problems thrust on us suddenly by Nature. Our thanks are due to individuals and institutions who have come forward to help us spontaneously with their generous donations. It should give satisfaction to all concerned that the Government of the State and the Centre are anxious to do everything possible expeditiously in order to restore normal life and communication in the Rameswaram island.

May we all untiringly work for the further progress of Madras State so that it may contribute along with others, to the progress of India as a whole and may we all strive incessantly for the future of India and for the fulfilment of her destiny in terms of securing to all the citizens economic and social justice and establishing a Welfare State.

Sanctuaries

With a view to prevent the killing of tigers by folkidol and other persons by the ryots residing in the vicinity of sanctuaries, the Chief Conservator of Forests has sent a scheme for payment of compensation to ryots when their cattle are killed by tigers.

The Government have approved the Scheme. The quantum of the compensation shall be 50 per cent of the value of the animal killed or Rs. 300 whichever is less.

More Eggs for Pregnant Mothers

The Applied Nutrition Programme which is being implemented in this State with the assistance of UNICEF is steadily gaining momentum. The main object of the programme is the production and distribution of nutritionally valuable food by providing adequate training to the villagers in the field of pisciculture, growing vegetables, poultry development, etc.

So far under this Programme, 519,636 eggs have been distributed to pregnant mothers by 249 poultry units.

The Applied Nutrition Programme has been steadily gaining momentum in Madras State. The main objects of this programme are encouraging villagers in the production and distribution of nutritionally valuable food, providing adequate training to Village Level Workers and arrangement of Training Programme for village leaders. The Programme aims at the development of poultry, pisciculture, production of vegetables and nutrition education and training.

This programme is being implemented with the assistance of UNICEF in the seven Rural Extension Training Centres, three Home Science Wings and in the seven Blocks attached to the Training Centres, viz., Arni, Krishnagiri, Bhavanisagar, Pattukottai, Tiruvadamur, T. Kallupatti and Koilpatti. It has since been decided to extend the scheme to two more institutions and the Blocks attached to them.

Eggs for Pregnant Mothers

Large Poultry Units have been established in each of the seven Rural Extension Training Centres. These units are supplying birds to the Village Poultry Units, started in Applied Nutrition Programme Blocks. The State Government meet 75 per cent of the cost of construction of Poultry houses, the remaining 25 per cent being met by the Panchayats. The equipments and free balanced ration to feed the birds were supplied by the State Government for one year in the first instance and extended for another year subsequently. The question of extending the assistance for one more year, is under consideration. After the Government assistance is withdrawn, the Panchayats are expected to maintain the units with their own resources. The Panchayats in turn are expected to supply 5,000 eggs to all pregnant and nursing mothers and pre-school children in every 2,000 population, for the 'project period' of 3 years. The total number of eggs so far freely distributed to the beneficiaries is 519,636. These eggs have been supplied by 249 Poultry units.

Under 'Pisciculture' all available ponds are stocked with fingerlings. Fingerlings are supplied by the Fisheries Department free of cost to the Panchayats for three years. In turn, the Panchayats are required to supply 1,000 pounds of fish every year, to 50 pregnant and nursing mothers and 100 pre-school children in each 1,000 population. So far 200,578 lb. of fish have been supplied to pregnant and nursing mothers.

Under 'Horticulture', Village gardens up to 5 acres each, have been started by the Panchayats. So far, 103 gardens have been started. Besides, gardens are started in schools. The vegetables produced in these gardens are used for the feeding of beneficiaries under Applied Nutrition Programme.

Milk powder is supplied by UNICEF for this programme. This is distributed to pregnant and nursing mothers and pre-school children in all the villages covered by this programme. The total number of beneficiaries is 8,488,014.

Special Training

The best method of improving nutrition is, both to teach and help the family to grow more food and use it

Eggs being distributed to pregnant and nursing mothers





More milk for children

better. Hence, special training is necessary for the people in Poultry, Pisciculture, Horticulture, etc. About 2,380 persons, i.e., prominent non-officials such as Chairman of Panchayat Unions, Panchayat Presidents, village level workers, women workers, teachers, etc.,

The Chief Minister, Minister for Information and Publicity and Minister for Public Works amidst the tribal students from Madhya Pradesh with their traditional costumes, who came to Madras recently



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have been given this training. The responsibility of implementing the programme at Block level, lies on the Chairmen and the Commissioners of Panchayat Unions, as well as the Principals of Training Centres. In order to co-ordinate the activities of different agencies, a Co-ordination Committee has been constituted at the Block level, with the Panchayat Union Chairman, Panchayat Union Commissioner and the Principal of the Rural Extension Training Centre concerned. The Joint Development Commissioner is administratively responsible, for the co-ordination of the programme at State Level.

All round progress has been observed in Krishnagiri, T. Kallupatti, Tiruvudamarudur and Bhavanisagar Blocks. Malnutrition can be prevented, if mothers learn to give their children suitable combinations of food, which are already part of family diet or which can be obtained without difficulty.

SO FAR

- ◆ 519,636 eggs have been freely distributed by 249 poultry units to the pregnant mothers.
- ◆ 290,578 lb. of fish have been supplied to pregnant and nursing mothers.
- ◆ Milk powder has been supplied to pregnant and nursing mothers and pre-school children in all the villages covered by this programme. The total number of beneficiaries is 8,488,014.

Role of films

Recently the Third International Film Festival of India was organised in important cities of the country. Some forty countries had participated in the festival. The first and the second such festivals were held in 1952 and 1961.

Addressing the concluding session of the Third International Film Festival of India, Dr. Zakir Hussain, Vice-President of India, observed that the artistic and educational aspects of the film should be continually emphasised.

Since the Lumiere expedition gave public showings of their Kinematograph in 1896, the film in India has become the major and, in some places, the only source of entertainment. As Bharata says of the drama, "There is no wise maxim, no art or craft, no device, no action that is not found in it". But cinema has never been merely an art form, it is also an industry. The two aspects not infrequently clash. The pioneer of Indian cinema, Dhundiraj Govind Phalke, who laid the cornerstone of this industry in India, is reported, on his retirement, to have stated, "I have retired, being disgusted with it. I do not care so much for money, I care more for technical perfection and first class production. I could not succeed, so I left it off".

Artistic aspect

In view of the size of the investment involved in and the organisation required for the making of a film the profit motive is not easy to exclude. This in turn leads to considerable, sometimes exclusive, stress being laid on box-office success, tends to cater to the lowest common level of taste, it is imperative that the artistic and educational aspects of the film should be continually emphasized; and this is in the ultimate analysis possible only by educating the film-going public in matters of artistic appreciation. Only by seeing good artistic production, which can also entertain and enthuse and edify can we educate the taste of the film-going public. The profit motive known for its adaptability, will then cater to the higher demand.

2A

Let us realise that we have not been doing enough of it, and let us see how the standards of Indian films have been determined. In European countries the cinema appeared on the scene at a time when realism was the reigning style in the theatre and the film offered an escape from its confining conventions. In India the film replaced a theatre which amalgamated the traditional elements of song, dance and mime with the theatrical trappings of Victorian touring companies. In spite of the many technical developments in the cinema the majority of our films appear still to be bound by the convention imposed on them by the popular theatre of another century. Yet it was an industry

Sri M. Bhaktavatsalam, Chief Minister and others with the delegates to the Third International Film Festival of India, held in January in Madras.



which, like commercial cinema anywhere, was always ready to graft new ideas and techniques on to its basic structure.

Impact of Foreign Films

The main sources of this new experience were the foreign films which after the first World War, were distributed in ever-increasing numbers until by 1926 some 85 per cent of the films released were American and only 15 per cent Indian. Very few films from outside the Anglo-Saxon countries found their way to India. So after more than 35 years of viewing foreign films, the Indian public is schooled to understand many of the nuances of British social comedy or applaud the exploits of fast-riding cowboys and yet finds the behaviour of characters in films from some Asian countries which are culturally much nearer to us, highly mystifying or immeasurably comic. Meanwhile, Indian films became increasingly popular from Athens to Singapore and the songs of these films were adapted in many ways.

It was only after the attainment of independence that there grew the awareness of the cinema as more than just an entertainment industry and the desire to see the classics of the world cinema at its best. A number of film appreciation societies were formed in cities like Calcutta and Bombay. Attempts were also made by Indian film creators to make films of high artistic merit. Their efforts such as in "Munna",

"Dharti Ke Lal", "Do Bigha Zamin" achieved international recognition. And after seeing Satyajit Ray's "Pather Panchali" serious students of the cinema in many countries became aware of a creative personality of the first rank. I do feel that these productions were the result of the awareness of the great works of cinema produced in other lands.

Film Festivals

Contributing materially to this awareness was the first International Film Festival held in 1952 when a few films were screened in the major cities of India. Among them may be mentioned the "Bicycle Thief", "Roshomon", "Miracle of Milan" which, I guess directly inspired our film-makers. By the time the second International Film Festival was held in 1961 the number of people interested in cinema as an art had increased considerably. Earlier in 1955 the Government of India had organized a Seminar on the films when Pandit Nehru described the film as "a tremendous thing which in India exercised an influence greater than that of newspapers and books combined". But he significantly added, "I am not at the moment talking of the quality of that influence".

In recent years, along with the desire to promote films of high artistic, cultural and technical standards, there has been a growing feeling that the cinema was one of the very effective instruments of promoting mutual understanding amongst people of different

cultures and traditions. It is in this context that the tremendous influence of the film as a social force and as a reflection of national life assumes great importance. A heavy responsibility rests on the cinema industry to ensure that films do not, even obliquely, purvey violence and anti-social behaviour to an inexcusable vicious degree.

Educational Films

The film has another vast field of service before it in the sphere of education. The film can bring into each class-room the knowledge and experience of the best teachers anywhere. As one who has spent most of his active life in education, I would take the opportunity of appealing to all persons engaged in the film industry to give serious thought to the production of good educational films, not merely for teaching purpose, but also for creating among the younger generation the urge to see and appreciate excellence—excellence in life, excellence in art, excellence also in the film.

All in all this has been a marvellous Festival. It has provided film enthusiasts the opportunity to sample some of the newest artistic trends in the international cinema. It has given our film-makers and critics and



"CYCLONE" entered by Cuba won the Golden Peacock for the best short film at the Third International Film Festival of India. The Vice-President, Dr. Zakir Hussain is presenting the award to a Cuban diplomat who received it on behalf of his country.

students of the cinema an opportunity of discovering the problems and techniques of the film with some of the leading international personalities in the field. I sincerely hope this festival will prove of great benefit to our own film industry and film art. For as a leading film journal has said in an editorial "The more Indian thought on the cinema is carefully exposed to the best from all over the world, the more will its norms change from within itself and under pressure from the advanced section of its public".



"GAMPERALIYA" Ceylon's entry won the Golden Peacock Award for Feature Films at the Third International Film Festival of India.

The Vice-President, Dr. Zakir Hussain is presenting the Award to Mr. Anton Wickremasinghe, Producer of the film.



Interline tour group with the Minister for Information and Publicity Sri G. Bhuvār

Pal formed the energetic younger group, popularly known as Lal-Bal-Pal, with its slogan "Militancy—Not Mendicancy". The arrival of Mahatma Gandhi on the active political scene, gave a new turn to the movement which, under his inspiring leadership, gathered further momentum and which culminated in the attainment of our freedom.

Though stalwarts like Pandit Motilal Nehru and Lala Lajpat Rai and their differences with Mahatma Gandhi, all of them had only one common goal in mind and that was Freedom for India. When the Civil Disobedience Movement of 1928 took a violent turn at Chauri Chaura, Mahatmaji felt sad and suspended the movement. This upset other leaders so much that Lala Lajpat Rai had the courage to tell Mahatmaji: "The whole of the country has been punished. Is it proper to inflict punishment on the people living on the Himalayan border for the misdeeds of the people of Kanyakumari?" This indicates Lalaji's fearless expressions of his views, on the one hand, and his patriotic fervour to win Swaraj as quickly as possible, on the other. At the same time, Lalaji had the highest regard and the greatest respect for Gandhiji and immense faith in his leadership. He once spoke of Gandhiji in these terms: "Where in the world shall we find another man equal in spirit, self-sacrifice and righteousness equal to Mahatma Gandhi?"

Great leader

In 1928, Lajpat Rai died a martyr's death leaving the nation sad for his loss. On hearing of his death, Mahatmaji said of him: "Men like Lalaji can't die so long as the sun shines in the Indian sky. His life of service was insatiable. He founded educational institutions; he befriended the suppressed classes poverty wherever found claimed his attention.... In political field, he was indispensable. He was fearless in the expression of his views. He suffered for it when suffering had not become customary or fashionable. His life was an open book." Lalaji was not a mere visionary either. He was anxious that our country should have a rapid economic development and his approach to this problem was a pragmatic one. He once wrote: "I want a better understanding of the economic needs and requirements of our country and a practical programme of industrial development based on scientific calculation."

In this background of selfless sacrifices and services of eminent leaders like Lala Lajpat Rai, the battle of our Freedom was fought; and to-day, as we enjoy the fruits of their labours, we must make a careful study of such personalities and follow the great example set by them.

Certain personal qualities and characteristics of Lala Lajpat Rai are bound to be a source of great inspiration to men and women of all generations. His intense devotion to his parents, his passion for disinterested service, his abiding interest in education, his strong faith in the higher values of life, and particularly, his fearlessness in any undertaking, are worthy of emulation. He loved his country and her people intensely and his life was one single incessant struggle for the freedom of the country.

A spirit of self-denial and self-sacrifice in action is the hall-mark of the great men like Lajpat Rai, and it is this ennobling quality that transforms all trials into triumphs. Lala Lajpat Rai very rightly observed on one occasion: "our success will be determined by the extent of our earnestness, the spirit of self-sacrifice, the spirit of self-denial and the power to lead righteously."

No wonder he was true to his own definition of a leader who, according to him, "is one whose leadership satisfies and is effective and who is ahead of those whom he seeks to lead, who is fearless and courageous, and above all, whose disinterestedness is above suspicion."

One important lesson

The one important lesson that we of the post-Independence era have to learn from the lives of such leaders like Lala Lajpat Rai, is that our Freedom was won because of our concerted efforts and united zeal and that without unity, nothing can be achieved. Fissiparous considerations like region, language, religion, caste or creed should not lead to disunity in our ranks. National interest must come first and the unity and the security of the nation must be overriding. It is the duty of every Indian to maintain and strengthen our freedom by cementing the forces of unity and eliminating the forces of disruption.

To-day there is need for us to imbibe that spirit with which Lala Lajpat Rai had worked then. If we, in every walk of life discharge our duties in the spheres of our activities with intense love for our country, if we rise above narrow considerations, and feel a glow of pride that it is for India and all that India stands for, that we live and work, we shall always have amongst ourselves all over the land, not one Lala Lajpat Rai but many. We will then be able to establish a society which will be free from hunger, ignorance and disease. The political freedom which we have won will then become meaningful to the vast millions of our people and the ideal of social and economic justice realised.

We pray that India will always be blessed with such outstanding leaders and spirit of leadership to guide us in our onward march as a free nation, with unity and discipline as our watch-words.

Distinction in Engineering Research

Sri Jesudasan David Walter, Superintending Engineer (Designs), Public Works Department, Government of Madras had been awarded a certificate of Merit by the Central Board of Irrigation and Power. The Board adjudged his paper "Downpull and Vibration Studies on High Head Gates" presented at the 33rd Annual Research Committee Meeting as a distinctly original paper and awarded the certificate of merit.



Left.—Sri J. Walter B.A. B.E., M. Irrn. Eng. (Colorado), M.I.E., (India), Superintending Engineer Designs Public Works Department, Government of Madras, is receiving the award from the Vice-President of India, Dr. Zakir Hussain. Right.—A Photostat of the Certificate of Merit.

CENTRAL BOARD OF IRRIGATION & POWER

DISTINCTION IN ENGINEERING RESEARCH

This certificate of merit is awarded

to Sri J. Walter

for the paper "Downpull and Vibration Studies on High Head Gates"

presented at the 33rd annual meeting of Research Committee of Central Board of Irrigation & Power held in 1963

[Signature]
General Board of Irrigation & Power

THE CITATION

"Sri Jesudasan David Walter graduated from the College of Engineering, Guindy and joined the Madras P.W.D. in 1942. From 1949 to 1951 he specialised on Irrigation and Flood Control Works in U.S.A. and obtained his Master's Degree in Irrigation Engineering from Colorado. He was posted as a Senior Designs Engineer in the Bhakra Dam Designs Directorate for four years. On return to Madras in 1958 he took charge of the Soil Mechanics and Concrete Research Division. He was promoted as Superintending Engineer, Designs in 1961 in which capacity he is now in charge of Design of River Valley Projects, in Madras and supervises the work of the research wings of the P.W.D. The Board adjudges his paper 'Downpull and Vibration Studies on High Head Gates' presented at the 33rd Annual Research Committee Meeting as a distinctly original paper and awards a certificate of merit for the same to Sri J. D. Walter."

Lalaji's ^{BIRTH} Centenary



1. The Governor of Madras addressing the gathering at the Lalaji's Birth Centenary Celebrations. 2. In connection with the celebrations awards of honour were presented to the wives of martyrs in the freedom struggle. Smt. Nallammal, sister of Tiruppur Kumaran is receiving the award from the Chief Minister on behalf of Smt. Ramayammal Tiruppur Kumaran. 3. On the occasion prizes were also distributed to the winners in the inter-School Oratorical Contests on the role of "Small Savings in the National Development." A girl is receiving the prize. 5 & 6. Scenes from the dramas staged by Seva Sangam and Punjab Association in connection with the Centenary Celebrations.



LALA LAJPAT RAI

The Lion hearted Patriot

The lion-hearted patriot of India, Lala Lajpat Rai's Centenary was recently celebrated in a fitting manner all over India. He was one of our foremost leaders in the struggle for our emancipation from alien rule. In Madras his birth Centenary was celebrated in an impressive manner on 28th January.

The following is the speech of Sri P. Chandra Reddy, Governor of Madras, on the occasion of the Lala Lajpat Rai Birth Centenary Celebrations in Madras.

Great movements throw up great men of action on the scene, and history of every nation which has won its freedom from its alien rulers has a chapter written in letters of gold on its patriots, heroes and martyrs. Our own struggle for Independence is eventful, and its History is verily the biographies of our freedom-fighters. Lala Lajpat Rai occupies a prominent place in the ranks of the builders of modern India. The value of his contribution to the foundation of our Swaraj has to be assessed in the context of the turbulent times in which his life and activities were cast. His active life as a public worker, an ardent educationist, a born politician and devoted reformer, demonstrates what a high degree of patriotism combined with will and courage could do. Every part of India produced such heroes and patriots

in those times, and it is our sacred duty to recall their services and to pay our humble tribute of reverence and gratitude to them.

Lal-Bal-Pal

The passage of a hundred years since Lalaji's birth has witnessed the great struggle for our Freedom, the martyrdom of Lalaji himself and the attainment of Swaraj. The trials faced by men like Lalaji were formidable. In those days, the nation was swinging between hope and anguish. In the earlier years of our freedom struggle, Lala Lajpat Rai appeared as one of the foremost leaders. The voice of this Lion of the Punjab was heard not only in India but also abroad. Lajpat Rai, along with Bal Gangadhar Tilak and Bipin Chandra

Fishermen Co-operatives in Madras State



Though Catching fish has been one of man's oldest occupation it has acquired importance only recently as an industry. The development of this industry depends on the welfare of the Fishermen Community as a whole. The Fishermen Co-operative Societies in Madras State have been established with the aim of rendering all possible help to them such as finance, modern equipments, cold storage facilities for their catches, etc., thus paving the way for a better price for their catches and welfare of the Community.

Although catching fish has been one of the man's oldest occupations, it was all along considered more as a mode of living than as an industry. Only recently it acquired importance as an important industry which can be exploited very profitably. Any improvement or expansion of the industry, however, depends on the improvement of the fishermen community as a whole.

Objectives of Fishermen Co-operatives

The fishermen are generally poor and most of them are indebted to money-lenders, net owners, merchants, middle men, etc., either within or outside their community. Many fishermen are therefore unable even to own a country craft or tackle, not to speak of any modern equipment for fishing. Unless these people are released from the hold of money-lenders and middlemen, provided adequate finances to enable them to purchase modern fishing equipment and ensured transport facilities and cold storage plants, it is not possible for them to get a fair price for their catch and to improve their own economic condition and improve the industry also. The establishment of the Fishermen

Co-operative Societies with limited liability, in Madras State, on the model of the Rural Credit Co-operative Societies for agriculturists, are aimed at improving the lot of fishermen.

The objectives of the Fishermen Co-operative Societies are, therefore, to raise funds for helping its members to acquire and own water courses, such as rivers and tanks by purchase or lease for catching fish to purchase or hire modern craft and tackles for increasing the catches by deep-sea fishing, for purchase or hire vans for quick transportation, thus providing better marketing facilities and to procure and supply the established needs of the members.

The coast line of Madras State runs over a distance of 997.47 Kms. (620 miles) and the inland waters cover an area of about 9,01,080 acres. There are about 2,53,209 marine fishermen in this State. The marine fishermen live in nearly 308 marine Kuppams, the inland fishermen live in nearly 463 inland Kuppams. Almost all the marine Kuppams have been covered by the Co-operatives. But there are some difficulties in covering the inland Kuppams since they are scattered

throughout the State and the number of fishermen in each Kuppam is very low; in some cases it is such a low figure of 5 to 10.

Under the Plans

In 1918 there were only 9 Societies in the State. It rose to 49 at the beginning of the First Five-Year Plan, 138 at the beginning of the Second Five-Year Plan, and 329 at the beginning of the Third Five-Year Plan. Now as on date, there are 385 societies of which 165 are for inland fishermen and the rest for marine fishermen.

The total number of members in all the societies is 47,765 and the paid-up share capital is Rs. 5,61,000. The total reserve and other funds of the societies amounts to Rs. 1,88,000. Two hundred and fifty-one societies worked on profit and 134 societies on loss. The cost of management of societies by way of salaries and wages amounts to Rs. 6,22,000 and by way of other expenditure Rs. 40,00,000.

There are 7 Fishermen Co-operative Federations, 7 Fishermen Co-operative Marketing Unions, 371 Primary Fishermen Co-operative Societies in the State.

The Fishermen Co-operative Federations are the Central Institutions. All the societies in the region are affiliated to them.

They obtain the fishing requisites of their affiliated societies and distribute them to their member societies. They also undertake the marketing of fish, building of mechanised boats, etc.

Seven Marketing Unions have been registered with the express object of purchasing and arranging for the sale of the catches of their member societies.

The Inland Fishermen Co-operative Societies take on lease the inland waters for being sub-leased to their members; some of them have also undertaken the lease of fish markets. In a few places the Fishermen Co-operative Societies run fair price shops. The rest of the societies of the credit type obtain loan from the Government and other agencies and distribute them among its members.

Financial Assistance

Long term loans amounting to a maximum of Rs. 400 per member are given to marine fishermen and medium term loans amounting to a maximum of Rs. 200 per member are given to inland fishermen. The long term loan is recoverable in 10 years and medium terms is recoverable in five years. Interest on the loans at the rate of



Sri Manubhai Shah, Union Minister for Commerce and Sri R. Venkataraman, Minister for Industries are witnessing some of the exhibits at the Indian Leather Fair 1965.

4½ per cent was charged up to 31st March 1963 and the present rate of interest is 4½ per cent (i.e., from 1963-64). Up to the year 1963-64, an amount of Rs. 40,15,631 has been advanced as loan to the fishermen. Out of this a sum of Rs. 13,12,503 has been collected leaving an outstanding sum of Rs. 27,03,128 to be collected.

The overdue amount is Rs. 3,17,568 which works out to 11 per cent. Considering the poverty of the Fishermen and the security on which the loans are advanced, the overdue position can be said to be satisfactory.

The maximum loan of Rs. 2,000 and a subsidy of Rs. 2,000 is being given for the construction of godown. The interest charged is 4½ per cent and the loan portion is recoverable within a period of 10 years in annual instalment. So far 40 godowns have been constructed by 39 societies.

A maximum amount of Rs. 850 is being given for the construction of houses. Out of this a sum of Rs. 300 is given as loan and Rs. 550 as subsidy. This is an interest free loan and it is recoverable within a period of 5 years. The construction of houses should be done through the agency of a Fishermen Co-operative Society. Loan and subsidy have been sanctioned for the construction of 220 houses in the State so far.

A maximum of Rs. 2,000 is given to each Co-operative Marketing Union, as share capital participations and this sum is recoverable after 10 years and the repayment

of the first is completely repaid before the 15th year. A sum of Rs. 22,000 has been given up to 30th June 1964 under share capital participation scheme.

A maximum amount of Rs. 20,000 is being given towards working capital loan for marketing unions. The amount is recoverable within a period of 10 years at Rs. 2,000 per year with interest calculated at $4\frac{1}{2}$ per cent. A sum of Rs. 1,05,000 has been issued so far.

Other Assistance

One motor vehicle and Lambretta are given to Fishermen Co-operative Societies on hire purchase system for transport of fish.

Under hire purchase system the entire cost of Lambretta is recoverable within a period of 5 years. The Madras Fishermen Federation and the Idinthakarai Fishermen Co-operative Society were given Lambrettas on hire purchase. The motor vehicles which were formerly given on hire purchase system are not being given now due to shortage of vehicles. But the vans are given on hire and mileage charges are collected once in three days. There are two types of vehicles. The medium size vans and bigger vehicles and the mileage charged according to size.

The Marketing Unions at Cuddalore, Ennore, Pulicat, Tiruchendur and the Kanyakumari Fishermen Co-operative Society have been given motor vehicles on hire basis. The Ennore Fishermen Co-operative Society, Neelangarai Marketing Union and the Mettur Dam Fishermen Co-operative Marketing Society have been given motor vehicles on hire purchase system. The Madras District Fishermen Co-operative Federation has been given a try-wheeler tempo van free of cost.

The fishing boats, known as Pablo boats are departmentally constructed and distributed among the members of Fishermen Co-operative Societies and groups of fishermen on hire purchase system at subsidised cost. The mechanised boats enable fishermen to go to sea without much labour and in a shorter time than will be possible with a country craft. A subsidy of 50 per cent on engine and 25 per cent on hull of the boat is being given. The cost is recoverable in 60 instalments within a period of 7 years. A security deposit of Rs. 1,500 is also being collected. Two hundred and seven boats have been given under this scheme.

Synthetic twine is used for making fishing nets. It lasts longer and is much stronger than cotton twine. The nylon yarn is given at subsidised cost. The subsidy allowed is 25 per cent. The cotton yarn is purchased and supplied to Fishermen Co-operative Societies for making of net at 25 per cent subsidised cost of payment of cash. The scheme is held in abeyance for the present. Two hundred and ninety seven societies have been benefited by the scheme.

Staff

To manage the affairs of the society, the departmental staff in the rank of Co-operative Sub-Registrar, Senior Inspector of Co-operative Societies and Junior Inspector of Co-operative Societies, are appointed and the average cost of the post ranging from 1/5th to full is recoverable from the Fishermen Co-operative Societies including pension and leave salary contribution. Twenty societies have taken the services of the departmental staff.

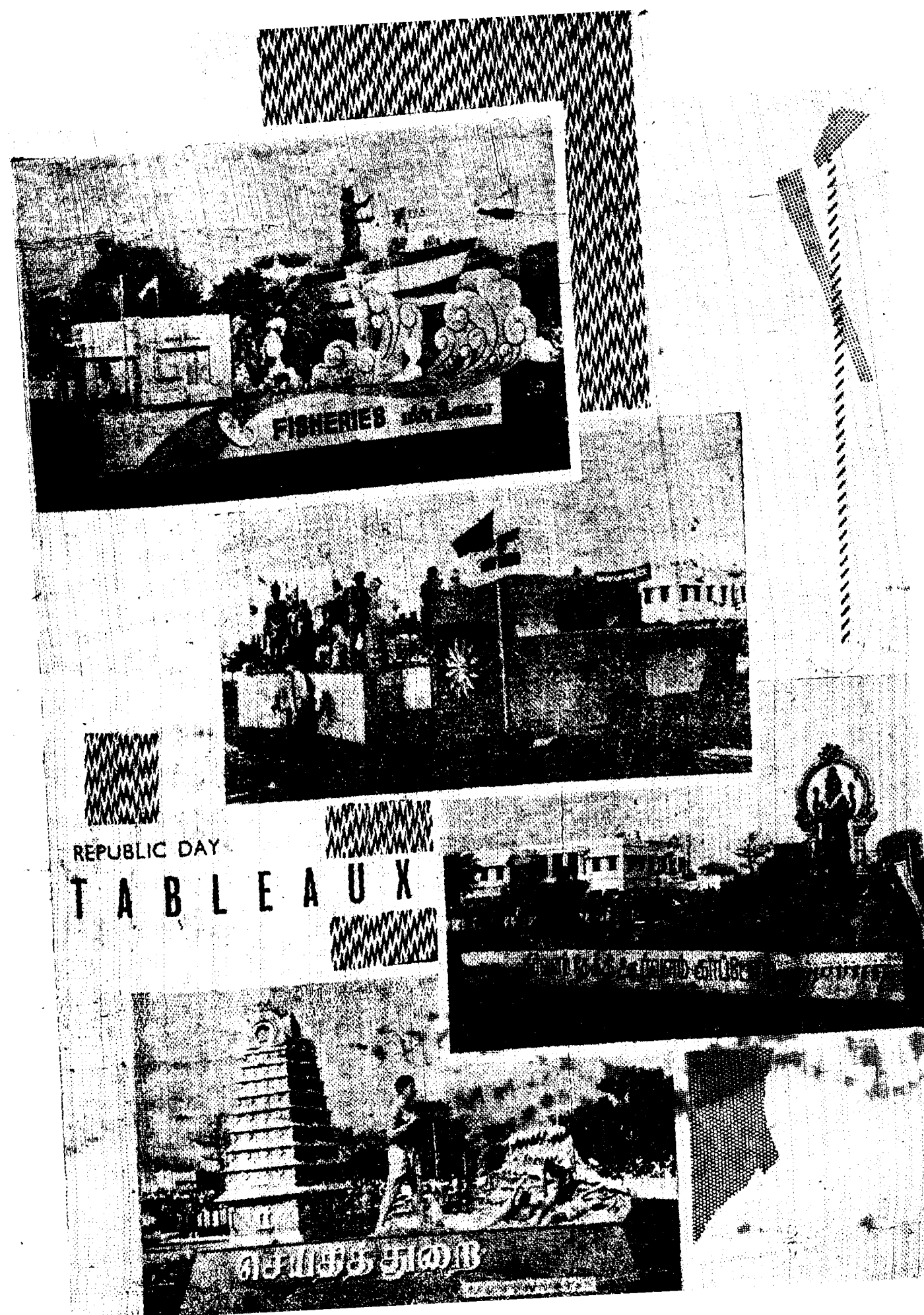
Fishermen Co-operative Societies are allowed to bid at the tenders for the supply of fish to hospitals, jails, etc., and have the tenders accepted by the authorities even though their tender amounts are higher than the lowest tender by $7\frac{1}{2}$ per cent.

There are one Deputy Registrar, eight Co-operative Sub-Registrars, 19 Senior Inspectors, and 19 Junior Inspectors and three Sub-Inspectors, working in the Fisheries Department for the supervision of the Fishermen Co-operative Societies. They also attend to the socio-economic work among the fishermen.

Initially the Officers of the Fisheries Department confined their attention to the supervision of the Fishermen Co-operative Societies while all the powers under the Co-operative Societies Act exercised by the Officers of the Co-operative Department. But in order to eliminate delays in dealing with matters connected with the administration of the Fishermen Co-operative Societies gradually several powers were delegated to the Officers of the Fisheries Department.

The Director of Fisheries has all the powers of the Registrar of Co-operative Societies under the Co-operative Societies Act in respect of Fishermen Co-operative Societies. The Deputy Registrar (Fisheries) has all the powers of the Circle Deputy Registrars of the Co-operative Department and the Assistant Directors some of the powers of the Registrar such as registration of Fishermen Co-operative Societies, conducting enquiries, inspection, etc.

Fish besides an important item of food, containing vitamin, is one of the delicious side dishes in any square meal. It is but proper that attention is paid to increase the production such an important article of food.

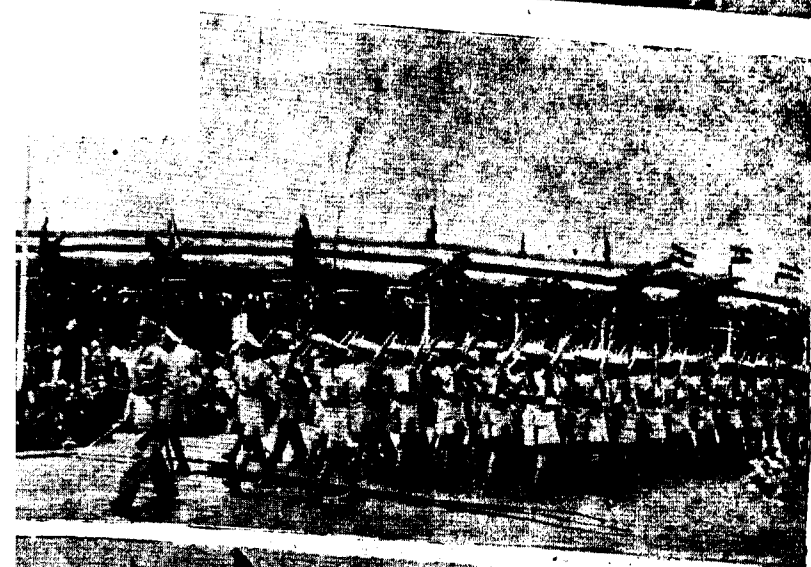
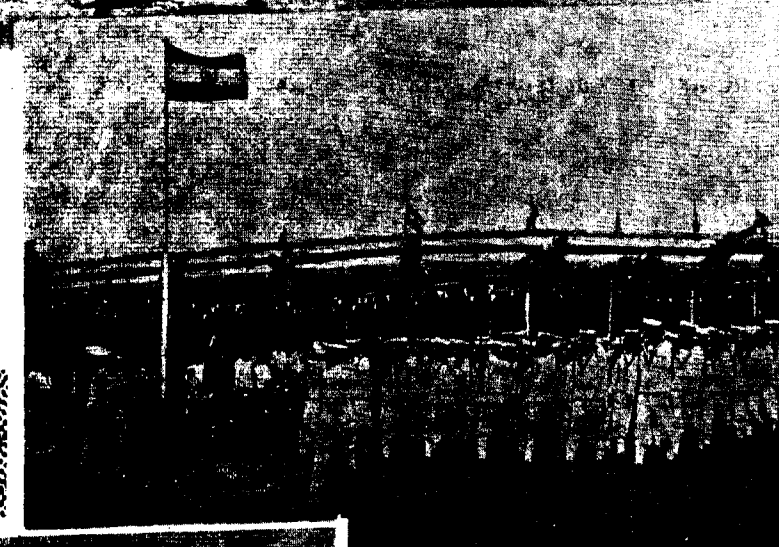
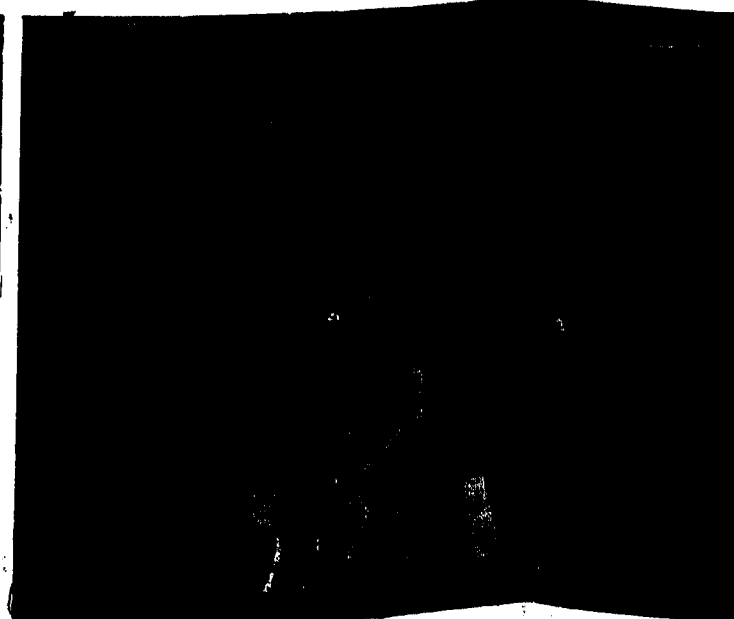


REPUBLIC DAY

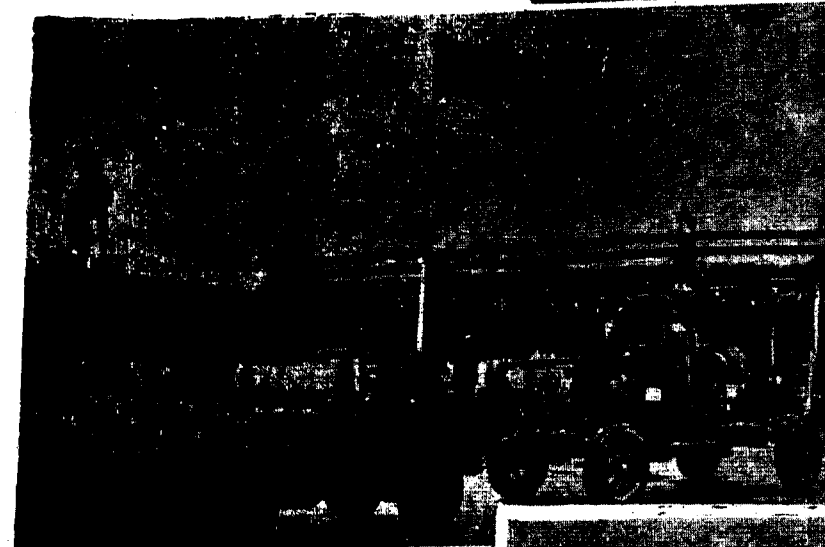
The Memorable

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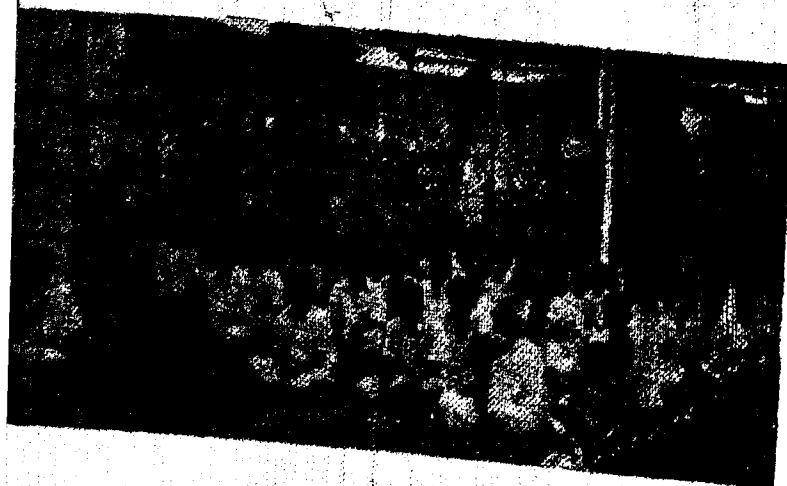


Above left: Chief Minister Sri M. Bhaktavatsalam and Chief Secretary Sri T. A. Varghese are receiving the Governor at the Republic Day celebrations.
Rest: Glimpses of the March Past held on the Republic Day. The Governor of Madras took the Salute.



MARTYR'S DAY

Sarvodaya Day



Large number of people took part in the Sarvodaya Day celebrations held at the Gandhi Statue, Marina, on January 30.



GOVERNMENT RUBBER PLANTATIONS

- A boon to Kanyakumari

K. VENKATAKRISHNAN, B.A., B.SC. (HONS.), B.SC. (EDIN.),
General Manager, Government Rubber Plantations, Nagercoil.

Madras State is not particularly well endowed by nature in respect of sites and climatic conditions favourable for the large scale cultivation of rubber. But the studies of the Rubber Board have shown that in Kanyakumari district conditions most favourable to rubber planting prevail. The Madras Government has not been slow to utilise this fact.

The Government started their first rubber plantation in the Keeriparai Reserve Forest area in Kanyakumari district in June 1960. More than 2,000 acres have been planted so far. Further extension is under way. There are already 16,000 acres of rubber plantations in Kanyakumari district under private management. Government have now sanctioned for the establishment of a rubber factory also in Kanyakumari district, the foundation stone of which was laid by Sri P. Chandra Reddi, Governor of Madras, on the 4th January 1965.

Rubber planting on a commercial scale began in India in 1902. By 1910, about 30,000 acres had been planted with rubber and today there are about 300,000 acres of rubber plantations in India mainly confined to Kerala and the Kanyakumari district of the Madras State.

In the early days of the industry raw rubber was exported but the rapid expansion of the rubber goods manufacturing industries in India not only led to all local production being utilized but has also necessitated substantial imports. Production of natural rubber has not kept pace with the increasing demand for it.

Increasing demand

Rubber manufacturers estimate the present annual consumption of raw rubber in India at 70,000 tons, out of which only less than 50 per cent is produced within the country and the rest has to be imported. The establishment of the synthetic rubber plant at Baireilly with an estimated maximum capacity of 30,000 tons

annual production has at present eased the position to a certain extent. It is anticipated that the annual demand for rubber is likely to increase to 100,000 tons by 1970. Unless steps are taken to increase production within the country, the gap between demand and supply is likely to persist necessitating further imports. That means a drain on our much needed foreign exchange. Synthetic rubber too has its limitations both with regard to quality and price. The production of natural rubber has, therefore, necessarily, to be stepped up.

Rubber is an indispensable raw material in peace time as well as in war time. The defence services require it in large quantities. Realizing the commercial and strategic importance of rubber and the necessity to bridge the gap between demand and internal production in the country, various steps such as bringing more acres under rubber cultivation, replanting the areas under low yielding rubber with newer and higher yielding varieties, controlling diseases affecting the rubber and encouraging better cultivation and processing methods have been taken up.



A view of the Government rubber plantations

The soil and climate conditions found to be most suitable for the rubber tree are—

- (1) Well-drained loams of good depth and moisture retaining capacity;
- (2) more or less uniform tropical temperatures around about 32° C. (90°F.);
- (3) humid environment;
- (4) annual rainfall of 1750 to 3000 m.m. (70" to 120") evenly distributed throughout the year; and
- (5) elevation from the sea level up to about 300 m. (900 ft.).

Conditions closely approximating to the above obtain in parts of Kanyakumari district.

A maiden venture

Four and half a years back it was on the 10th June 1960, the Madras Forest Department started its first rubber plantation as part of the programme of increasing rubber production in the country. The plantation was inaugurated by the then Minister for Forests. First, the plantation was started as a non-plan scheme, but later on it was included in the Third Five-Year Plan. The target fixed for the Third Plan period was 2,000 acres at the rate of 400 acres a year and the over-all target was 3,000 acres to be planted up in eight years. As the planting progressed additional areas suitable for rubber planting have been surveyed and the over-all target has been raised to 4,500 acres.

Large areas of rubber estates already in production in this district are expected to go under water when the recently started Chittar-Pattanamkal Irrigation Scheme is completed. To compensate this loss, proposals to bring another 4,500 acres of reserved forest areas under rubber plantation are under consideration. When these proposals are approved, the total extent of the Government rubber plantations will be about 9,000 acres. This will be in addition to the 16,000 acres of rubber plantations under private

management. The department can take legitimate pride of the fact that even one year ahead of the Third Plan period, the target of 2,000 acres has been exceeded and it is anticipated that the original over-all target of 3,000 acres will be achieved by the end of the Third Plan period itself, two years ahead of schedule.

Plantation techniques

The planting material used in the plantations are recognized as some of the best with regard to yield and other characters. Some of the latest varieties (or clones as they are called) developed in other leading rubber production countries such as Malaya and Indonesia have also been introduced.

Modern techniques in planting are also being employed in raising the plantations one of the most important technique being the green budding technique which has been successfully introduced on a large scale.

The Forest Department has worked in very close collaboration with the Rubber Board and the Rubber Research Institute of India at Kottayam right from the beginning. The Rubber Research Institute of India is using the plantations for some of its experiments and it has assisted the department in the establishment of a polyclonal seed garden for production of clonal seeds and also a clone trial plot to study the behaviour of clones developed in Malaya under Indian conditions.

Rubber factory

The first plantation raised in 1960 was expected to come into tapping in its eighth year. Thanks to the care with which the plantations have been looked after, it may now be possible to tap at least a part of the first plantations in the seventh year itself. By the time the trees begin to yield, arrangements for processing the rubber have to be completed. Keeping this important aspect in view, the foundation stone for a rubber factory was laid by Sri P. Chandra Reddi, Governor of Madras, on the 4th January 1965. This marks the beginning of the next step in the fulfilment of the objective of the scheme inaugurated in 1960.

It is proposed to process the latex obtained from the trees for the production of raw rubber in different forms. At present the department has plans to have a sheeting factory, creping mill and a latex concentrate plant. The sheeting factory will produce raw smoked rubber sheets from latex which will be the main product. There is a large demand for concentrated latex for the manufacture of foam rubber, rubberised fibres, dipped goods etc. To meet this demand there will be a concentrate factory. The creping mill will mostly be used to process

the scrap rubber into crepe which can be used for various purposes. It will also be used for the manufacture of sole crepe and other special forms of crepe whenever demand arises. It is also proposed to manufacture S.P. Rubbers to meet the demand for special uses like the manufacture of extruded goods like hose pipes and car headings.

For a plantation of this size methods of processing have to be mechanised to the maximum extent, right from the collection of the latex from the yield to the manufacture of the final product. For this purpose steps have been taken to import the required machinery from abroad. As far as possible, consistent with the requirements, indigenous machinery will also be used. It is also proposed to set up a small laboratory to test the rubber produced for effective quality control.

There will be a workshop to attend to the servicing of the machinery and equipment. Power is to be obtained by drawing a high tension electricity line from Ellamada. The Electricity Board is already taking steps to get this done. Arrangements are also being made to provide copious supply of good water which is most essential for the processing factory.

Fertiliser from bye-product

Researches in recent years show that there are possibilities of utilisation of the bye-products in the production of raw rubber for the manufacture of fertilisers cheaply, which are so essential for improving agricultural production. Though it is too early to predict the potentialities of the result of research it is proposed to try on an experimental scale, the utilisation of the bye-product for manufacture of fertilisers.

It was estimated that it would cost Rs. 43 lakhs to establish 3,000 acres of plantation and bring it into tapping. It can be said now that the cost will be within the estimate. It has also been estimated that when the 3,000 acres of plantations are in full production the annual revenue will be about Rs. 33 lakhs.

A boon to Kanyakumari

The successful establishment and working of these plantations, apart from yielding significant revenue to the State, is of special importance to Kanyakumari district in that it will provide scope for employment in this over-populated and under-employed district. Already over 1,000 persons are being employed daily on the plantations. There is scope for the establishment of rubber goods manufacturing industries in the district itself which will help in bringing down the cost of production as the transport and other costs of raw materials can be saved. Apart from providing direct employment, indirect employment could be provided to many in handling and marketing the rubber goods.

The Government rubber plantations come within the purview of the Plantations Labour Act. Arrangements are, therefore, being made to provide all amenities under the Act to the labourers and other employees. The construction of the first labour lines has commenced. It is proposed to provide accommodation for all the labourers in due course. Nineteen families of Indian nationality repatriated from Burma are now employed in the plantations and they have been accommodated in temporary huts. They will be moved to the labour lines when construction is completed. Staff quarters have already been constructed.



Left: Delegates to the 9th All India Leprosy Workers Conference held recently in Madras. Right: Smt. Jothi Venkatachallum, Minister for Public Health, addressing the Conference.

HOME FOR THE DESERTED

Immoral trafficking in women and girls is a great social menace. We should endeavour at all levels, be it Governmental or non-Governmental, to see that families live together in harmony and that young men and women are given help and advice to settle down in matrimony happily so that the unmarried, deviants, passionates and perverts who normally visit the brothels are either completely eliminated from the society or at least reduced to a negligible minimum in the Society.

In Madras State there are a number of institutions for the welfare of the deserted girls and women established under the Suppression of Immoral Traffic in Women and Girls Act, 1956. These institutions are run by the Vigilance Department. However no amount of Government efforts will fructify unless public co-operation is forthcoming in abundance.

Immoral trafficking in women and girls is a great social menace in any country. Social, economic, emotional and psychological factors and to some extent even certain religious practices of the past such as Devadasi system, etc., are attributed as some of the causes for this social vice. Prostitution is generally understood as commercialised sex activity and for ages, women and young girls have been exploited for this purpose. Factors like poverty, broken homes, emotional instability, and the operation of gangs of traffickers at the regional, national and international levels have encouraged and supported this vice.

A complicated problem

Though prostitution has vast social implications, by and large it is an individual problem and it has to be, tackled as such. Any mass approach to this vice is not likely to yield good results. The prostitute is a case of a disorganised individual who ekes out the

Education forms an important part of Vigilance Home's work.



livelihood by selling her body. Every prostitute in herself is a separate individual case and her reclamation, education, treatment, and rehabilitation, etc., are mainly restricted to her person only. Medical, psychological and social care work services are the most suitable ones in this respect and this important aspect of welfare services and rehabilitation of the victims of immoral traffic is being successfully implemented in all the Vigilance Institutions under the control of the Department of Approved Schools.

To enlist public co-operation in successfully enforcing the Suppression of Immoral Traffic in Women and Girls Act and thus eradicating this social vice, vast propaganda and social education are absolutely necessary. In addition, the parents and teachers also have a vital role to play in the prevention of immoral traffic in young and adolescent boys and girls by enthusing interest in religion in them and also emphasising the importance of moral values in their formative period of life so that they may grow up to be good, healthy and honourable citizens.

Welfare Agencies

The Government's Vigilance Service annexed to the Department of Approved Schools is entrusted with the custodian care, in reformation, correctional training and social and economic rehabilitation of the persons (girls and women) committed to the several Vigilance Institutions, Government or otherwise in the State under the provisions of the Suppression of Immoral Traffic in Women and Girls Act, 1956. While the Police Department is in charge of the enforcement of the Act, the State

Probation Department look after the after-care and rehabilitation of the inmates of these Correctional Institutions. The bulk of the work relating to propaganda, education and enlightening the public on the evils of commercialised vice is in the hands of the twin Social Welfare Agencies, viz., the Madras Vigilance Association and the Madras State Branch of the Association for Moral and Social Hygiene in India.

There are three types of Protective Homes, functioning under the Suppression of Immoral Traffic in Women and Girls Act, 1956, in the Madras State, viz., Vigilance Rescue Shelters (Non-Plan Institutions) or Vigilance Reception Centres (Established under the Second Five-Year Plan) which are short-stay institutions, Rescue Homes and Vigilance Homes which are long-stay institutions.

Vigilance and Rescue Homes

Eight short-stay institutions and five long-stay institutions are functioning in this State. Vigilance Rescue Shelters attached to the Stri Sadana Rescue Home, and the Government Vigilance Home, Stri Sadana After-care Hostel and Abaya Nilayam are the short-stay institutions functioning in the City. Government Vigilance Shelter at Madurai, Salem and Coimbatore and the Vigilance Shelter of the Thanjavur Vigilance Association, are the other short-stay institutions functioning in the mufassal.

Stri Sadana Rescue Home and Government Vigilance Home at Madras, Government Protective (Rescue) Home at Tiruchirappalli, the Meenakshi Sadanam Vigilance Home at Madurai, the St. Francis Xavier's Rescue Home at Adakalapuram are the 5 long-stay institutions.

Working of the Institutions

The After-care Home for Women dischargees of Correctional Institutions, viz., Vigilance Institutions, Approved Schools, Jails, etc., along with the Industrial Unit at Vellore, provide the absolute need of protection, care and training for the deserving destitute dischargees of the Correctional Institutions.

The Government Stri Sadana Rescue Home and Shelter function in the buildings "Rahmat Bagh" and "Tower House" in Sauthome High Road, Mylapore, Madras, and the Government Vigilance Home in "Everest", Kutchery Road, Mylapore, Madras. The building Everest was purchased by Government



Girls at work at a Vigilance Home

at a cost of Rs. 2.15 lakhs in September 1963. Thus the long felt need of having own buildings for the Government Vigilance Institution was fulfilled.

The inmates are supplied with a complete set of Khadi clothing and bedding. Besides they are also permitted to wear clothes of their own, brought to them by their relatives. The twin Government Vigilance Institutions in the City, viz., Government Vigilance Home and Government Stri Sadana, Madras, have got a well equipped Dispensary attached to them, which is rendering valuable medical service to the inmates of the institutions. Under the meticulous care of the Part-time Lady Doctor who is a specialist in venereal diseases, the Pharmacist and the two nursing orderlies, careful attention is being paid to maintain the inmates in good health. Besides, the routine detailed examination conducted at the time of admissions, periodical medical checkup is also being continued and such of the inmates who required special care are given extra nourishment and suitable medical treatment.

There is a special school (Government Stri Sadana Special School) recognised by the Education Department for the inmate of the Government Vigilance Home and Stri Sadana Rescue Home. It is a Higher Elementary School with eight standards. The medium of instruction is Tamil. During March 1963, twenty (20) girls were sent for E.S.L.C. examination out of which 13 girls came out successful.

Fifteen pupils of the VIII Standard of Stri Sadana Special School were presented for the Tamil competitive examination conducted by the Manavar Mandram in 1963, out of which 14 girls came out successful. Physical education under a Physical Training Instructor and Moral Instruction by the Honorary Moral and Religious Lecturers of the respective religions are also imparted. Besides general education, vocational training in Spinning, Weaving, Tailoring, Embroidery, Needlework and Fancy Hand-Work is given. A batch



The Republic Day Sports for boys and girls of Secondary Schools, Madras was presided over by the Chief Minister. The Chief Minister is presenting a cup to a girl.

of Vigilance Home inmates who are overaged for the literary classes are engaged in tag making and pasting of glass mosaic tiles.

The receipts derived from the various industries of the Government Vigilance Home and Stri Sadana, Madras, during the year 1963 amounted to Rs. 17,789-19.

Vigilance Home at Madurai.

The Meenakshi Sadanam Vigilance Home, Madurai is a private institution run with Government aid under the auspices of the Social Welfare Association, Madurai. The committals to this institution are made under section 10 (2) of the Suppression of Immoral Traffic in Women and Girls Act and it serves the Southern districts in Madras State. There is a recognised Special School with five classes attached to the Meenakshi Sadanam Vigilance Home. The recognition is on a temporary basis lasting till 1966. As the Home is run on the permanent footing steps will be taken to obtain permanent recognition for the special school from the Education Department after 1966. The School has two Secondary Grade Teachers and a Craft Instructor. The medium of instruction is Tamil.

Besides general education, the following subjects are also taught in the school, viz., of Kisan and Ambar Charkas, Tailoring, Embroidery and allied fancy hand work. They are also training in hand-pounding of paddy and domestic services. The inmates enact dramas with moral values as basis, dances and variety entertainment which activities helped to a great extent to change their own life.

The Medical care of the inmates is being looked after by the local Municipal Medical Officer.

Rescue Home at Adakalapuram

The St. Francis Xavier's Rescue Home, Adakalapuram, is a non-statutory institution not coming under the Suppression of Immoral Traffic in Women and Girls Act but doing yeoman services to the most distressed women and girls, viz., women with illegitimate pregnancy and unmarried mothers. The Home, however, comes under the Moral and Social Hygiene programme. The main feature of the institution's programme is to first afford shelter and protection to the persons who are completely neglected by their own kith and kin due to the social stigma attached to their immoral behaviour and the consequential results. The ante-natal and post-natal treatments are very carefully attended to by the institutional authorities thus saving situations which would have perhaps resulted in suicides and infanticides if no timely help was given to such women in distress.

While rehabilitation of this type of inmates is a very difficult problem, the authorities of the institution have to be congratulated for their efforts in having settled in life as many as 23 inmates on marriage in 1963.

More stress is laid on vocational training of the inmates of this Home than education. Tailoring, Embroidery, making palm leaf fancy articles, lace-work, needlework, gardening and domestic service form part of vocational training given in this Home. Thus this institution continued to render noble services to the socially discarded women and girls who came for shelter and protection to this home.

Government Protective (Rescue) Home, Tiruchirappalli function in rental buildings "Khalifullah Buildings" at Khaja Malai, Tiruchirappalli. The special school attached to the Home functioned with eight standards and it has two Secondary Grade Teachers and one Tailoring Instructor and one Spinning Instructress on its staff.

After-Care Home for Women at Vellore and no separate staff sanctioned for it.

Board of Visitors

A Board of Visitors, comprising officials and non-officials appointed by the Government for all the long-stay institutions, Government and aided in the City and State conduct quarterly meeting and pay individual visits to the institutions and take keen interest on the welfare of the inmates.

Finance

The entire expenditure of the Department of Vigilance Service during the year 1963 was Rs. 2,95,718-31 as against Rs. 3,33,976-78 in 1962. The amount includes a sum of Rs. 41,929-68 on account of the Government Protective Home, Tiruchirappalli, Rs. 5,087-01 on account of the Government Vigilance Reception Centres at Kancheepuram (now closed) and Vellore, which are Plan institutions, and Rs. 27,661-33 being grants to private Vigilance Institutions. A sum of Rs. 22,477-37 was derived as receipts from the industrial sections and other receipts in the Government Stri Sadana Special School and the Government Protective Home, Tiruchirappalli in 1963.

Vocational training is imparted to the inmates in spinning on Charkas and Thaklies, tailoring and grading. The inmates also maintain a Goat Farm and a Poultry Unit. It is hoped that their acquaintance and knowledge gained in maintaining these two small-scale cottage industries would help them immensely after their discharge from the Home since; most of the inmates come from villages where there are facilities to keep a poultry unit or to rear goats and sheep. The inmates stitch their own garments under the supervision and guidance of the Tailoring Instructress besides undertaking outside orders as well. The receipts derived from the industrial sections of the Home and other miscellaneous receipts amount to Rs. 2,612-51 during the year 1963 as against Rs. 2,237-66 in 1962. Thus the receipts showed a steady increase. A part-time visiting Lady Doctor attended to the medical care of the inmates in the Home.

The Government Vigilance Reception Centres set up during the Second Plan period are similar to the Government Vigilance Rescue Shelters (Non-Plan) Institutions. There is a centre at Vellore. There is no expenditure on account of this Centre because it is located in the



Two minutes silence was observed on Martyr's Day, 30th January, 1965, [at] the parade ground, Secretariat in memory of those who gave up their lives in the struggle for freedom. Governor of Madras, Chief Minister, Ministers and other officials participated

CONTROL CANNIBALISM

SRI F. B. SELVANAYAGAM,
Veterinary Assistant Surgeon.

Cannibalism is considered as a vice in Poultry. Feather pulling, toe, tail, wing and vent picking whether among baby chicks, growing pullets or mature hens are vices. This vice causes more loss in many flocks than any of the major poultry diseases. These losses are as damaging to the small flock owner as they are to the commercial poultry man. This bad habit may be encountered among birds of all ages under certain conditions.

Contributing factors for cannibalism

Faulty management accounts for much of the difficulty giving rise to such vices. Any thing that caters to the satisfaction, contentment, comfort and



The Madras City Khadi Development Co-operative Society presented dhochies to people affected by the recent cyclone. Sri P. Kakkan is receiving them.

general welfare of the birds is considered as "Good Management." Feed regularly, keep the house clean, furnish plenty of nests (one for every 4 or 6 hen) and avoid allowing feed hoppers to remain empty.

One of the most frequent mistakes of poultry men is to over crowd chicks. Allow a minimum of 3 to 4 square feet per adult bird and $\frac{1}{2}$ to 1 square foot for chicks depending on their age.

Cannibalism may be caused or encouraged by conditions other than over crowding. Too high temperature or too much light influences this vice. Artificial light especially when chicks are brooded with white heat lamps may also lead to cannibalism.

Many poultry raisers blame the ration when cannibalism starts. Ration may be a contributing factor although it is generally conceded that faulty management is a more frequent cause. Chicken on a faulty or deficient ration shows an inclination to be restless and develop a carving to keep themselves satisfied.

Housing birds of different ages or stages of maturity together may lead to cannibalism. Hens having Haemorrhage from egg laying or suffering from prolapse of oviduct also lead to this vice. Birds with heavy infestation of lice may also develop this vice.

Cannibalism is more often reported among white than among coloured chicks. It is also noticed more among light breeds than in heavy ones. This is probably from the fact that blood shows more plainly through the grills of white feathers. Chicks become ravenous when they see and get a taste of blood and will continue pecking the injured chick until it is removed or completely devoured.

Controlling an outbreak

The best way to control Cannibalism is to prevent its occurrence in the first place. But this, of course is not always possible.

Once an outbreak occurs, darkening the house which in turn may help the injured birds to hide and make it more difficult to the rest of the flock to see blood or do any pecking.

Sometimes cannibalism can be checked by keeping the chicks busy by providing plenty of greens. The use of red light in the brooder house or battery brooding room will control and prevent outbreak of cannibalism. In battery brooders the principal point in preventing cannibalism is to keep the interior part relatively dark, with sufficient light in the waterer and feed troughs. It is very important to remove injured chicks as soon as they are detected. In spite of all the steps taken if the vice still persists among the flock, the only sure way to control it is to debeak all the birds.

Although debeaking should be done as a preventive measure it is the only sure method of controlling an outbreak of cannibalism.

Debeaking is best accomplished by using an electrical debeaker. Poultry breeders with more than 500 birds



Sri P. Chandra Reddy visited the cyclone affected areas. He is seen in the Picture presenting clothes to a old woman affected by the cyclone

should consider buying a debeaking machine. A debeaking machine will have paid for itself if a poultry man can prevent 20 pullets from being killed or injured permanently due to cannibalism.

MADRAS INFORMATION

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I, R. Kulandaivelu, hereby declare that the particulars given above are to the best of my knowledge and belief.

R. KULANDAIVELU,
Editor and Publisher.

10th February 1965.

STATE AWARDS FOR TEACHERS

The State Level Committee for selecting candidates for the State Awards for Elementary School Teachers for 1963-64 consisting of Sri N. D. Sundaravadivelu, Director of Public Instruction (Chairman), Sri M. R. Perumal Mudaliar (Member) and Sri Chinnaswami Naidu (Member) has selected 62 candidates for the State Awards at the rate of 2 for each educational district.

Each Award Winner will get a cash prize of Rs. 200, a Certificate of Merit, and a silver medal worth about Rs. 30.

Following are the names of Award Winners:—

Sri D. Joseph, Headmaster, Corporation Higher Elementary School, Mylapore and Sri S. V. Lingathan, N. Sama Rao Elementary School, Triplicane of Madras South.

Sri M. R. Somasundaram, Teacher-Manager, K. Ramaraja Pillai Higher Elementary School, Royapuram and Mrs. M. Ratna Bai, Headmistress, K.T.C.T. Elementary School of Madras North.

Sri M. Ponnuswamy Mudaliar, Headmaster, Panchayat Union Elementary School, Valluvapakkam and Sri Gomathinayagam Pillai, Teacher, Panchayat Union Higher Elementary School, Kodungaiyur of Saidapet.

Mrs. C. Henry, Headmistress, C.S.I. Town Girls' Higher Elementary School, Madurantakam and Sri T. S. Raghavachari, Headmaster, Panchayat Union School, Chunampet of Chingleput.

Sri T. V. Sivanandam, Teacher, Panchayat Union School, Palayanur and Sri V. Srinivasan, Headmaster, Panchayat Union Senior Basic School, Narasingapuram of Trivellore.

Sri G. Chinnappan, Headmaster, Harijan Welfare Elementary School, Perunkanichi and Sri T. Munisami Iyer, Teacher-Manager, Sri Mangalambal Aided Higher Elementary School, Walajapet of Vellore.

Sri R. Ponnuswami, Assistant, Panchayat Union Elementary School, Sorakalathur and C. M. Khyrunissa Begum, Headmistress, Panchayat Union Muslim Girls School, Polur of Tiruvannamalai.

Sri P. Kanniappa Chettiar, Assistant, Panchayat Union Elementary School, Pudupet and Sri A. Muthukrishnan, Teacher, Panchayat Union Elementary School, Karapatti of Tirupattur.

Sri V. Arunachalam Pillai, Assistant Panchayat Union Senior Basic School, Thillaividangam P.O. and Sri N. Thangavelu Padayachi, Assistant, Panchayat Union Higher Elementary School, Tittagudi and Post of Cuddalore.

Sri A. Appasamy, Teacher-Manager, Sri Nagammal Senior Basic School, Tindivanam and Sri K. Ramachandran, Headmaster, Panchayat Union Higher Elementary School, Koliyanur of Villupuram.

Sri K. Ramanatha Pillai, Headmaster, Panchayat Union School, Manganampet and Mrs. M. Theodore, Teacher, C.S.I. Higher Elementary School, Alagar West Street of Thanjavur East at Nagappattinam.

Sri R. Balasubramanian, Headmaster, Konkneswara Vidyasala Aided Junior Basic School, West Main Street and Sri A. R. Subramanian, Assistant, Panchayat Union Basic School, Ammapet Railway, Kokery Post of Thanjavur West.

Sri A. David, Headmaster, Bishop Heutman Memorial Senior Basic School and Sri S. K. Duraiswamy Iyer, Headmaster and Manager, Aided Higher Elementary School, Sirunavalur of Tiruchirappalli.

Sri T. Narayanaswamy, Teacher, Panchayat Union Junior Basic School, Annavasal and Sri C. Syed Abdul Rahman, Headmaster, Panchayat Union Elementary School, Puthanatham of Pudukkottai.

Sri N. Ganapathi, Assistant, Panchayat Union School, Meensurthy and Sri P. A. Soosai, Headmaster, Harijan Welfare School, Lalapuram of Ariyalur.

Sri C. H. Musagu Meeran, Headmaster, Municipal Main Elementary School, Cumbum and Sri A. Muthupackiam, Headmaster, Hindu Nadar Elementary School, Kamatchipuram of Dindigul.

Sri S. Palaniappan, Headmaster, Jeyabharath Higher Elementary School, Ahimsapuram and Sri N. Hariharan, Headmaster, Panchayat Union Elementary School, T. Vadipatti of Madurai.

Sri N. K. Ramaswami, Headmaster, Panchayat Union Elementary School, Tiruppachetti and Srimathi Florence Gnaniah, Assistant, Panchayat Union Higher Elementary School, Idambadal, Kadaladi Range of Ramanathapuram Central.

Sri V. Shunmugasundaram, Headmaster, Municipal Annavithottam Higher Elementary School, Sivakasi and Sri S. Pathamuthu, Headmaster, M.S.P. Nadar Municipal Higher Elementary School, Virudhunagar of Ramanathapuram West.

Sri R. S. Krishna Iyengar, Assistant, Panchayat Union School, Pandugudi and Sri R. Madhavan, Headmaster, Muthathal Higher Elementary School, Devakottai of Ramanathapuram East.

Sri N. Bhagavathi, Headmaster, Muthiah Higher Elementary School, Koilpathu, and Sri M. S. Gnanamirtham, Headmaster, Sacred Heart Elementary School, Kavalkinar of Tirunelveli South.

Sri G. Thangapalam, Headmaster and Correspondent, Higher Elementary School, Carpenter Street, Tuticorin and Sri M. Muniyandi Chelladurai, Headmaster, Hindu Nadar Free Higher Elementary School, Kulathur of Tirunelveli North.

Sri N. Thayumanava Sundaram, Headmaster, Hindu Higher Elementary School, Sivanthipatti and Sri S. Kovil Pillay, Headmaster, C.M.S., Evangelical Higher Elementary School, Karingal (via) Cheranmahadevi of Tirunelveli Central.

Sri V. K. Ponnuswamy, Headmaster, Panchayat Union Elementary School, Palayapudur and Srimathi S. Krishnaveni, Assistant, Panchayat Union Elementary School, Vellakovil East of Erode.

Sri P. Rangaswamy Konar, Assistant, Panchayat Union Higher Elementary School, Karupparayampalayam and Sri S. Vellingiri Thevar, Headmaster, Panchayat Union Elementary School, Rengasamudram of Coimbatore.

Sri A. Anganan, Headmaster, Panchayat Union Junior Basic School, Arasur P.O. and Sri K. Chikkanan, Headmaster, Panchayat Union Elementary School, Neganam P.O. of Pollachi.

Sri A. Matha Gowder, Headmaster, Panchayat Union Elementary School, Sakkatha, Aravenu P.O., and Sri K. P. Raghavan Nair, Headmaster, Panchayat Union Elementary School, Gudalur of the Nilgiris.

Sri M. S. Rajulu Chetty, Teacher, Bharatha Matha Aided Elementary School, Gugai and Sri S. R. Ananthanarayanan, Headmaster, Panchayat Union Elementary School, Chinnappampatti of Salem.

Sri D. M. Perumal, Headmaster, Panchayat Union Elementary School, Ommiyampatti, Thoppur P.O. and Sri S. Venkataramiah, Headmaster, Panchayat Union Elementary School, Hosur of Dharmapuri.

Sri A. Ovianna Pillai, Headmaster, Panchayat Union Higher Elementary School, Pattanam and E. Samuel, Headmistress, S.B.M. Higher Elementary School, Senthamangalam Post of Namakkal.

Sri S. Selvam, Teacher, Government Lower Primary School, Kadamalaikuntur and Srimathi K. Saraswathiamma, Assistant, Government Lower Primary School, Tiruvattar of Nagercoil.

The awards will be distributed at a public function to be organised by the Director of Public Instruction later in which the Governor and the Chief Minister will be present.

Planning forums-Basic Grants for 1964-65

Sanction is accorded to the payment of grants-in-aid amounting to Rs. 2,250 to the following college Planning Forums for undertaking constructive activities during 1964-65.

Rs. 400 each to Palaniyandavar Arts College, Palani, Madurai district; P.S.G.R. Krishnammal College for Women, Peelamedu, Coimbatore district; Sacred Heart College, Tirupattur, North Arcot district; H.H. Rajah's College, Pudukkottai; Government College for Women, Kumbakonam and Rs. 250 to Raja Sarfoji College, Thanjavur.

A PEOPLES' AIR FORCE

Whether at the hazardous Himalayan heights where our troops keep lonely vigil, or in the calamity-stricken areas of South India, the Indian Air Force boys have endeared themselves by the silent but efficient manner in which they have gone about their multifarious tasks courageously and even at the risk of their lives.

At about 11-30 a.m. on the Republic Day this year, rose petals sparkled against the blue winter sky over Rajpath, in New Delhi, and the air resounded to the roar of jet engines, as the Indian Air Force helicopters showered flowers and its jet aircraft provided the stirring finale to the Republic Day Parade in a spectacular fly-past.

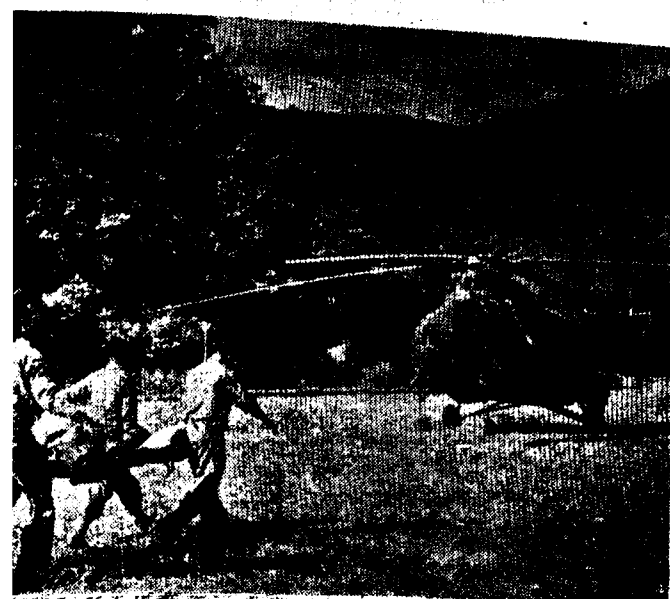
Ordinarily, this is the closest view the lay public gets each year of the power and prowess of its Air Force. This is because by and large, the Air Force works in the background, away from the public gaze, backing up the troops, standing vigil in the forward areas, or rushing succour to the civil population in distress.

Relief operations

The memories of "Operation Dhanushkodi" launched by the Indian Air Force a few months ago

I.A.F. helicopter pilots flew long hours in hazardous terrain and weather during the operations against the Chinese in the N.E.F.A. in 1962. Despite enemy fire, they kept flying low and evacuated many casualties and stragglers.

Photo taken during the N.E.F.A. operations shows an I.A.F. helicopter evacuating a casualty not far away from the battle field.



are still fresh in the public mind. Within hours of a cyclonic tidal wave having hit Rameshwaram and Dhanushkodi, I.A.F. dakotas were on the job for relief operations. In spite of inclement weather, the first aerial reconnaissance and food dropping sortie was flown on December 24, within hours of receipt of news about the calamity. Helicopters were flown out from one end of the country to the other for rescue work. By the time the operation ended a total of 32,000 pounds of supplies had been air dropped over the affected areas.

Two months earlier, at the end of September, I.A.F. transport aircraft and maritime reconnaissance aircraft went into operation to bring relief and succour to cyclone victims in Andhra Pradesh. Besides rushing food and medical supplies, the maritime aircraft located 500 fishermen who had been swept out to the sea.

Guarding Our Freedom

But the guarding of our freedom remains the main task of the Air Force, and for this it is continuously trying to expand and modernise itself.

Training is an essential part of the process of expansion. Only recently, at Hakimpet, Hyderabad, the Defence Minister, Sri Y. B. Chavan, reviewed a passing out parade and awarded commissions and "wings" to the largest course ever to pass out from the Transport and Jet Training Wings. This was the result of the increased recruitment in all categories of Air Force personnel following the Chinese invasion. Earlier, in 1964, similar large courses passed out from the Technical College at Jalhalli and the various ground training schools and other Air Force institutions.

A modern air force must have modern aircraft. One lesson which was learnt from Exercise "SHIKSHA" held in 1963 related to the need of supersonic interceptor fighters in the country's air defence system. Efforts continue to be made to equip the Air Force

with Mach-2 supersonic aircraft. Meanwhile, India has built her own Mach-1 supersonic aircraft at Bangalore (HF-24). Christened as *Maruta*, the first two of these fighters were handed over to the Air Force on May 10 last year.

Work is also in progress on the three factories in the MIG complex for the manufacture of MIG 21 aircraft. In the meantime, agreement has already been announced between India and the U.S.S.R. for the import of a certain number of MIG 21 aircraft.

The installation of the radar system supplied by the U.S.A. is expected to be completed in the next few months. This will provide a radar screen, with the necessary communications equipment, for aerial defence of our country from the North.

Logistics Support

On the transport side, the mounting logistic support commitments of the Air Force, since the Chinese aggression in 1962, have been met by putting into service additional aircraft purchased from the U.S.S.R. and Canada, and those given as aid by the U.S.A. and Canada. More AN-12s, which have been standardised as the heavy transport equipment in the I.A.F. were purchased from the U.S.S.R. and put into service. The 16 Caribous contracted for from Canada, have been arriving in the country, flown by our pilots, and have been sharing the task of keeping our troops supplied in the remote mountain areas of Himalayas. The high altitudes at which the C-119 Packets have to operate have necessitated the installation of an additional jet engine on these aircraft to provide an extra margin of safety.

As in case of transport aircraft, so also in the case of helicopters the flying conditions in the forward areas are extremely hazardous. The valleys of the Himalayan Mountains are difficult to fly in, the weather



An I.A.F. helicopter at the base camp of the Nanda Devi Expedition where it air lifted supplies for the expedition in the middle of last year.

is fickle and unpredictable. However, the pilots who are entrusted with the responsibility of reaching succour to the sick, have become more experienced with the passage of time and are able to handle their jobs with increasing confidence.

A number of airfields have been renovated and additional facilities provided. Also, new air strips and landing grounds have been constructed so as to make remote areas of our northern border more easily accessible.

When the Air Force celebrates its 32nd Birthday on April 1, this year, India's increasingly large family of airmen can legitimately pride themselves on their remarkable achievements during the two difficult years since the Chinese invasion.

For their part, the people of India will gratefully remember that but for these airmen and their feats of daring, our troops in the Himalayas might still have been far from well-equipped to fight a possible threat from our treacherous neighbour in the North.

NOTE TO SUBSCRIBERS

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At a N.C.C. Camp

To-day the youths of our Nation need proper training and guidance in their self-development. The N.C.C. is intended to impart the qualities of leadership, self-discipline etc., among the youths.

The 1 Madras Battalion N.C.C. had its annual training camp at Model High School, Saidapet for 10 days from December 27, 1964. The cadets in the camp had an intensive training programme. It proved how resourceful our youths are.

The senior division annual training camp of 1 Madras Battalion N.C.C. commenced at the Model High School, Saidapet, on 27th December 1964. The camp which lasted for ten days was commanded by Maj. P. S. Chittiappa, Officer Commanding, 1 Madras Battalion N.C.C. Eight N.C.C. Officers and 335 cadets drawn from the two City Colleges, the Pachaiappa's



Chief Minister, Sri M. Bhaktavatsalam, inaugurated the scheme for the supply of foodgrains and other provision to the State Government servants. He is visiting the stores after the function.

College and Dwarka Das Govardhan Doss Vaishnavi College had attended the camp, besides the Training Officer Maj. Sidharthan from Tiruchirappalli, Battalion Second-in-Command Maj. V. S. Sundaralingam and the Administrative Officer of the Bu. Capt. A. Md Yousuff and the regular Army Instructional staff.

The Object

As the annual camp was intended to be the culmination of all the training imparted to the cadets in Colleges during the training year, greater stress was laid in the camp, on the practical aspects of military training and community life and above all on the development of initiative, leadership, resourcefulness, self-reliance and capacity to shoulder responsibilities.

Basic training in the use of weapons like rifle, light machine gun and 2" Mortar had been supplemented by firing practice with rifle using live round by all cadets at the Minambakkam shooting range. As theoretical knowledge cannot be complete and perfect without practical experience, ample opportunities were provided in the camp for the cadets for practical training. They were made to march in battle formation to a village (Narayanapuram) on the Velachery Road, seven miles away from the camp site, where they witnessed a demonstration of platoon attack put up by senior cadets. Exercises in map reading, field craft and tactics were also conducted. The above training had been organised and carried out with thoroughness and efficiency by the Camp Commandant and the training officer, ably assisted by Instructional staff. In the camp every day cadets had to work strenuously. Each day commenced with reveille at 5-30 a.m. and the parades were held from 6-30 a.m. to 5 p.m. with the usual breaks. To infuse a competitive spirit and healthy rivalry, competitions in drill,

guardmounting, interior economy and musketry were held in the camp. Throughout the training period the discipline of the cadets had been extremely good.

In the evening after roll-call and dinner the cadets had for themselves programme of variety entertainment. A recreation-cum-information room had provided them facilities for relaxation. Thus the day's strenuous work was matched by relaxation and recreation. The cadets retire usually by 10 p.m.

A Medical Officer along with a nursing assistant deputed by the State Government was always in attendance in the camp. The general health of the cadets in the camp had been good.

Sense of duty

Much emphasis was laid in the camp on orderly living and community life. Punctuality on parades, proper laying out of kit, maintenance and cleanliness of barracks and avoidance of wastage of food and water were insisted upon. Some cadets, according to their seniority of service were assigned some important offices. They thus got an opportunity for getting trained in special duties such as guard duties, security, messing and sanitation. Through these assignments a high sense of duty was sought to be developed in them.

Important visitors were conducted around the camp by the Commandant and various aspects of camp



Rifle Training to the N.C.C. Cadets of the Senior Division at a Camp held at Model High School, Saidapet.

life were explained to them. Important among them were Lt.-Col. S.S. Chowdary, officiating Director N.C.C. Dte., Madras and Pondicherry, Dr. Raghavachari, Member of the State Advisory Board for N.C.C., Sri J. Sivanandam, Chairman, M.P.S.C., the Principals of the Teachers' College, Pachaiyappa's College and Vaishnava College, Sri N. D. Sundaravadivelu, Director of Public Instructions, and Sri C. D. Natarajan, Secretary, Legislative Assembly. The visitors had paid glowing tributes for the excellent way in which the camp had been organised and conducted and to the smartness and the enthusiasm of the cadets.

"CARE" ASSISTANCE



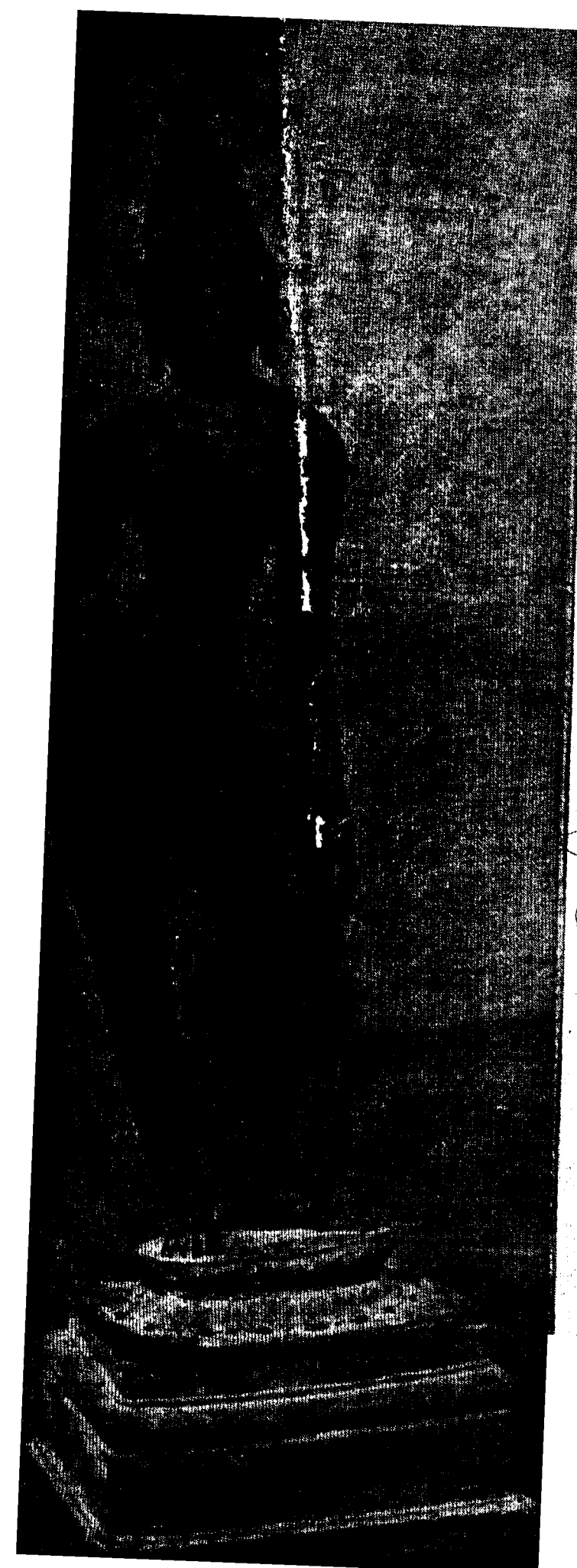
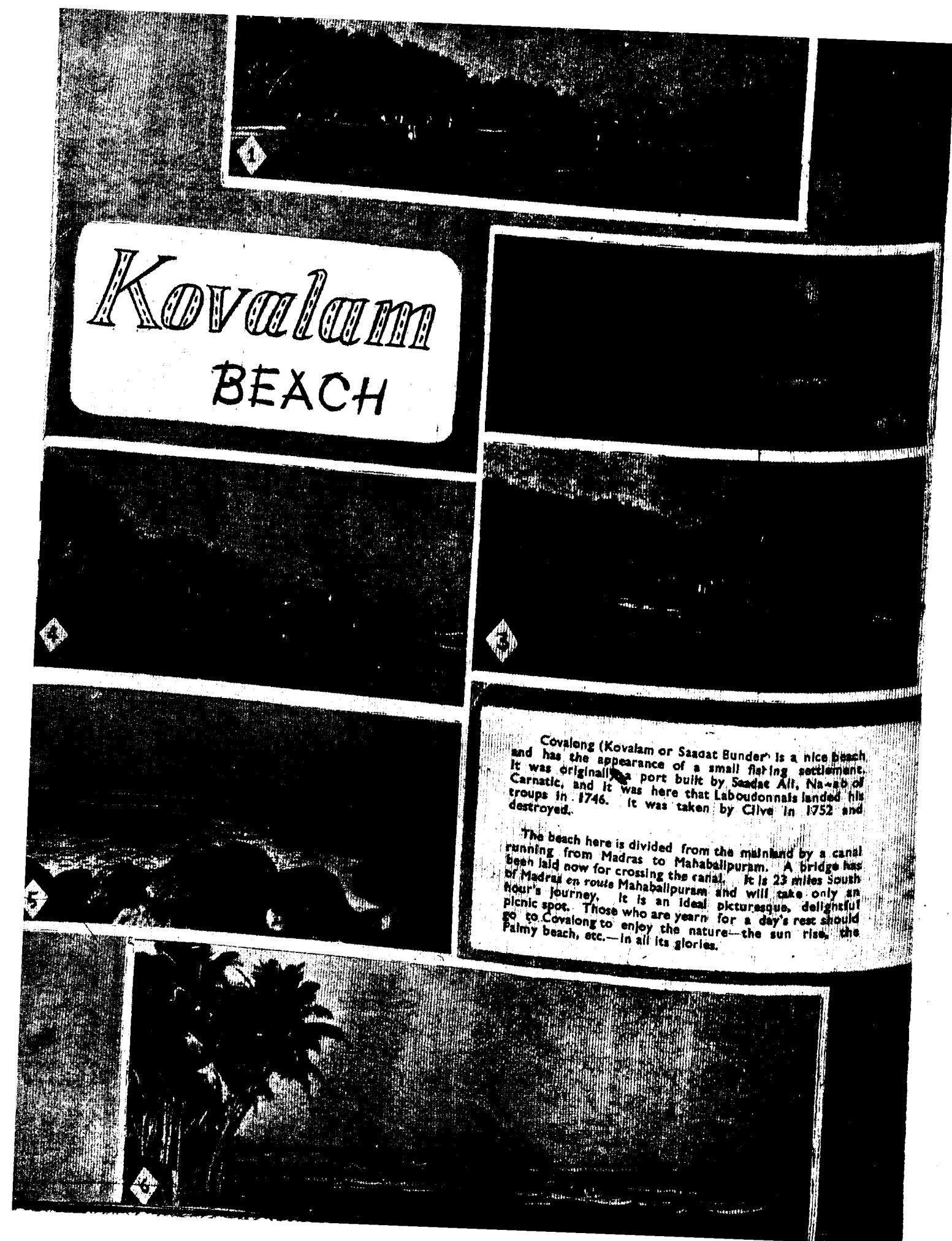
The pumpset donated by the CARE to the Panchayat, Salem district.

From the first of the year a CARE donated pumpset has gone into operation in the village of Sendamangalam, Salem district, Madras. The pumpset is another CARE assisted partnership project made possible by the donations of the people of the U.S. and Canada through CARE. The Madras Government is meeting the recurring expenditure and the local panchayat supplying the labour. The pump will irrigate 7 acres of previously unproductive panchayat lands, out of which 1½ acres will be used for growing vegetables, to be supplied free of cost to the elementary schools in the area for the Government of Madras—CARE partnership mid-day meals scheme. The remaining land is being planted with fruit trees, the income from which will be utilized for the benefit of the people of the Panchayat through further Community Development Projects.

FACTS ABOUT MADRAS

Area (Tenth largest State in area)	..	130,357 sq. kms. (50,331 miles)
Population	..	33,686,953 (3'37 crores)
Density (Fifth largest State in Density .. of population)		258 persons per sq. km. (672 persons per sq. mile)
Rate of population growth in 1951-61	..	21'4 per cent
Length of Land boundary	..	1,200 kms. (750 miles)
Coastal Length	..	992 kms. (620 miles)
Districts	..	13
Taluks	..	103
Towns and Cities	..	338
Revenue Villages	..	14,124
Total number of Villages including hamlets.	..	19,120
Members of Parliament : Lok Sabha	..	41
" " Rajya Sabha	..	18
Members of Legislative Assembly	..	207
Members of Legislative Council	..	63
Percentage of Literacy	..	33'4 per cent
Universities	..	2
Arts and Science Colleges	..	69
Medical Colleges	..	6
Engineering Colleges	..	5
Veterinary College	..	1
Teachers' Training Colleges	..	19
High Schools	..	1,998
Primary Schools (as on 30th September .. 1964)	..	30,138
Schools for Prof. Education	..	88
Panchayat Unions	..	374
Panchayats	..	12,523
Development Blocks	..	373
Net sown area	..	14,817,73 acres
Livestocks	..	24,638,800
Area under Forests	..	17'1 per cent
Area of Reserved Forests	..	17,236 sq. miles
Towns and Villages Electrified (up to 1st .. October 1964)	..	17,579
Registered Factories (by the end of 1963)	..	6,572





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THIS MONTH'S COVER

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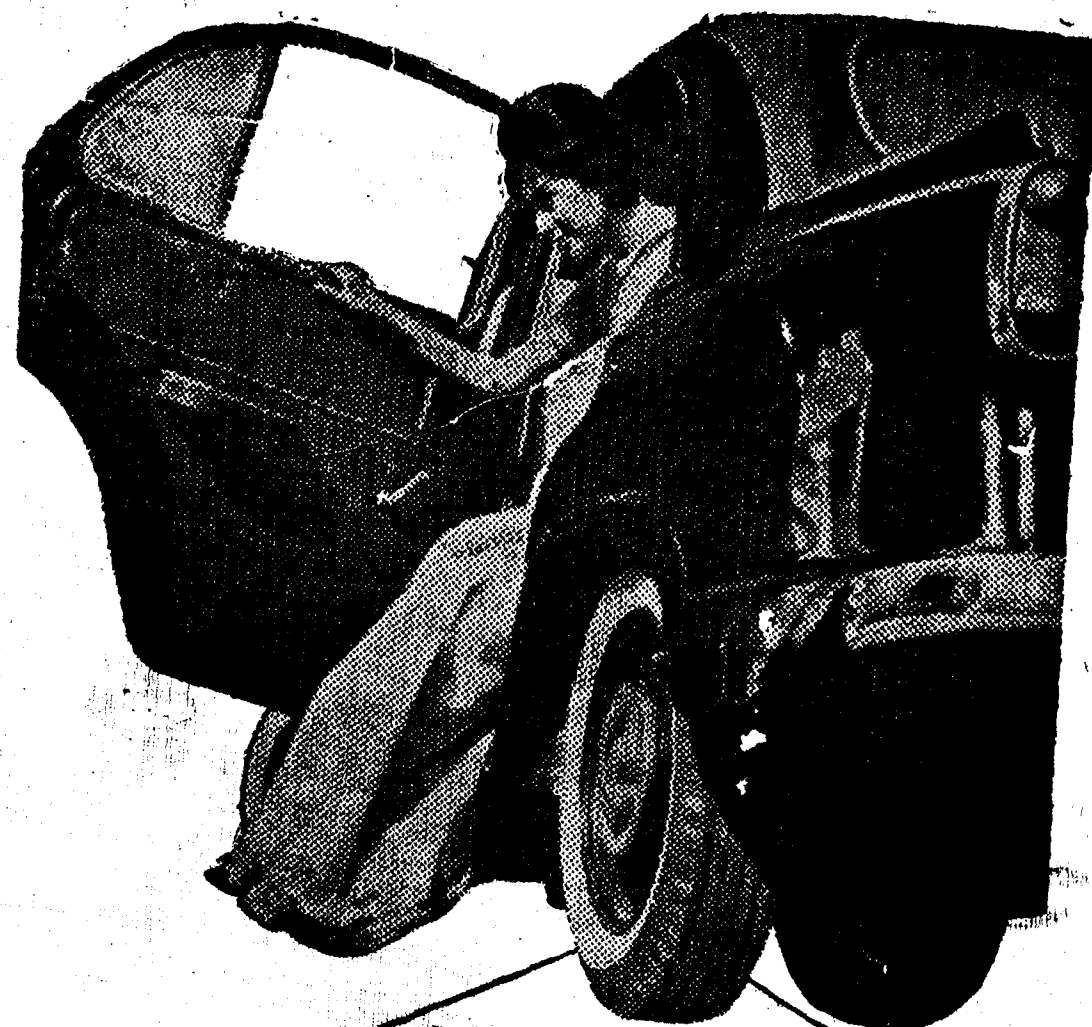
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Madras Information

APRIL 1965 - 20 PAISE





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57-10-66

Madras Budget

PLANNING IN MADRAS STATE

Sri M. Bhaktavatsalam, Chief Minister, presenting the Budget for 1965-66 to the Madras Legislature on 1st March 1965 said that special significance is attached to the Budget for the year 1965-66 as it marks the fulfilment of the Third Plan. The Budget has, in recent years, become an instrument for the realisation of the targets and objectives of the Plan and while considering the Budget for the last year of the Plan, the House, he said, would naturally like to make an assessment of the progress of the State in different sectors in the Third Plan period. It is on the basis of the achievements of the Third Plan that we can determine the size and strategy of the Fourth Plan.

On the basis of existing taxation, a revenue of Rs. 163.63 crores has been estimated for 1965-66. Expenditure on revenue account has been put down at Rs. 170.60 crores. Thus a deficit of Rs. 697 lakhs on revenue account has been left uncovered.

The Third Plan of the State had originally visualised an outlay of Rs. 291 crores. The implementation of the Plan has been according to schedule and in certain vital sectors even well ahead of it. Within the framework of the Five-Year Plan the outlay for every year is determined in consultation with the Planning Commission. It should be a matter for gratification that our performance in every year of the Plan has exceeded the outlay initially agreed upon. The outlay on the Third Plan will, therefore, be nearly Rs. 340 crores against only Rs. 291 crores originally agreed upon. Madras is among the few States where there will be no default in the fulfilment of the Plan.

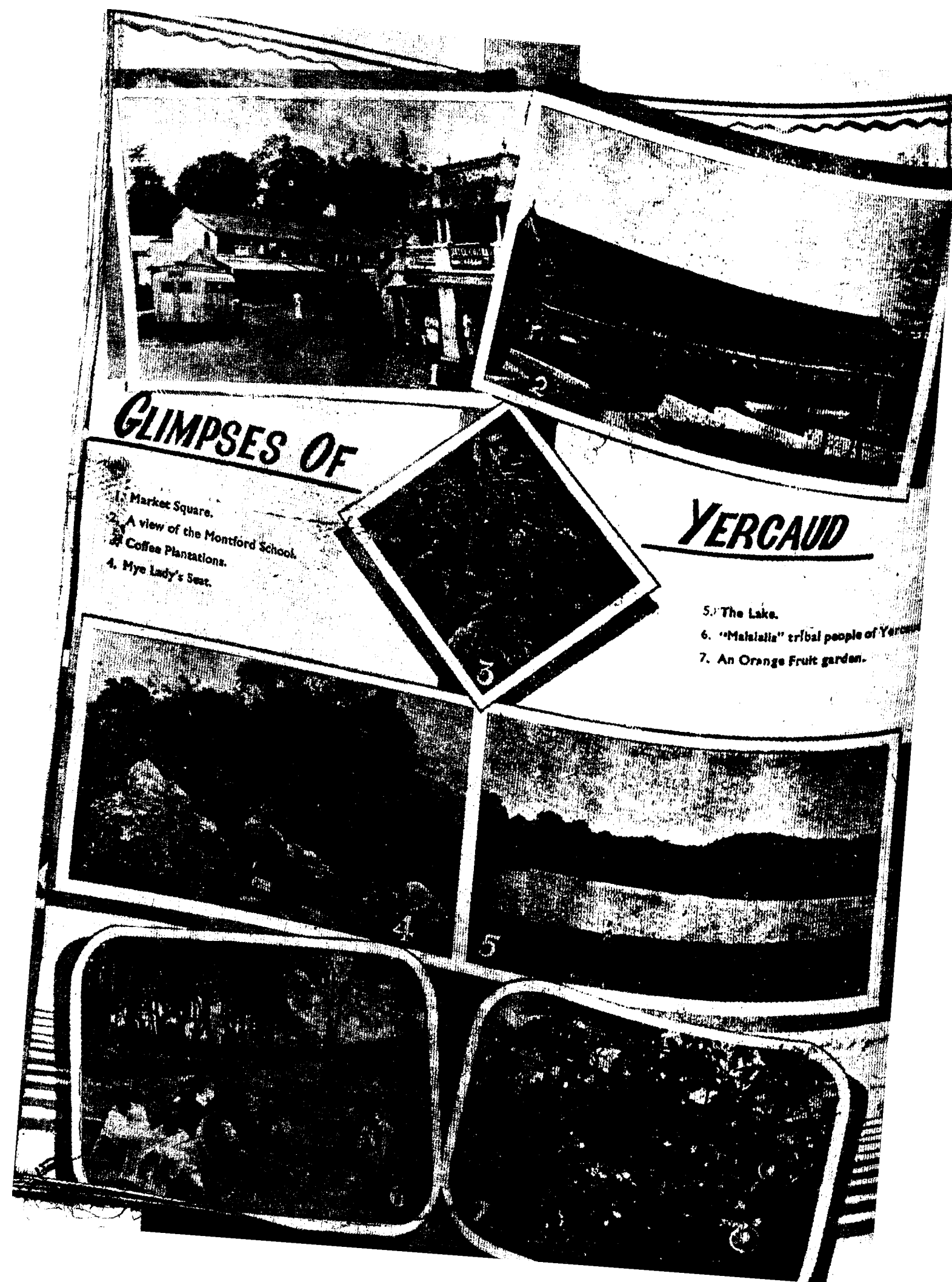
Third Plan Progress

This satisfactory performance has been rendered possible because we have in the last decade built up a sound techno-administrative machinery fully geared to the tasks of development. Our success is also in no small measure due to our determined efforts to raise the necessary resources for the Plan. When the size of the State's Plan was fixed at Rs. 291 crores, the Centre had agreed to extend assistance to the extent of Rs. 190 crores, the balance of Rs. 101 crores being contributed by the State. On the current forecast of our resources for the Plan period as a whole, it is seen that our contribution to the Plan would be of the order of Rs. 147 crores. Madras is again among the few States of India which have fulfilled what was expected of them in regard to mobilization of resources. The Planning Commission, which recently made an

has recorded its high appreciation of our efforts and the progress we have been able to register in all key sectors of growth like Agriculture, Power, Industries and



Sri M. Bhaktavatsalam, Chief Minister, who also holds the Finance portfolio, with the "Annual Financial Statement" of the State for 1965-66 before entering the Assembly Hall.



EXHILARATING YERCAUD

In the present tempo of life there is little doubt that survival and periodic relaxation go together. It is good fortune of Madras State that nature has endowed her with the venues for such rest and recuperation. Yercaud is one of the finest smaller hill resorts. Those who cannot afford trips to Ootacamund, Kodaikanal and Kotagiri can very well go to Yercaud. The name Yercaud is supposed to have been derived from the Tamil word Erikkadu (Eri + Kadu) meaning "lake wood". One other similar place that springs to one's mind is Yelagiri on the top of the Yelagiri Hills in Tirupathur taluk of North Arcot district.

Sports-cum-health resort

Yercaud hill station is a sanatorium and is steadily growing in favour as a hot-season resort. It is situated in the Shevaroyas at an elevation of 1,370 meters (4,500 feet) in the Yercaud taluk of the Salem district. The climate is very delightful and salubrious seldom rising above 75° and never falling much below 60°; and it is particularly very equable between March and June. It has good rainfall (80") all the year round.

Yercaud hills have all the attraction of a sports-cum-health resort with its beautiful lakes, water falls and commanding peaks. It is an ideal spot for short period rest and relaxation such as week ends, casual leave, short periods after fever or post-operational recuperation which find their possessors, almost victims at a loose end vegetating in uncongenial cities.

A one-and-a-half hour's journey by bus from Salem town will take you to the hill top of Shevaroyas—the Yercaud—through jungles and thick Coffee plantations. It is at a distance of 32 km. (20 miles) from Salem junction and 35 km. from Salem Town. The scenery is of great variety and beauty and includes the charm of views and almost every point over the plains, not obtainable in Ootacamund and Kodaikanal, for example.

Among the places of interest, the lake is one of the most bewitching scenery. It is said that the lake was created by a German Priest in the Vaniyar in 1850. It has a circumference of seven furlongs. The area of the lake is 285 acres, length 440 yards, breadth 350 yards and the depth varies from 5' to 13'. It is at a

height of (4,400') 1,340 meters. The lake is surrounded by thick forests. Boating facilities are available. Fish is also grown in this lake.

The Catholic Missionary runs here two schools one for boys and one for girls. Even foreign students come to study in this Montford school which is an indication of its standard and it is a must place for every visitor. One must see the beautiful buildings, the lawns, the gardens, etc., of the school to enjoy them.

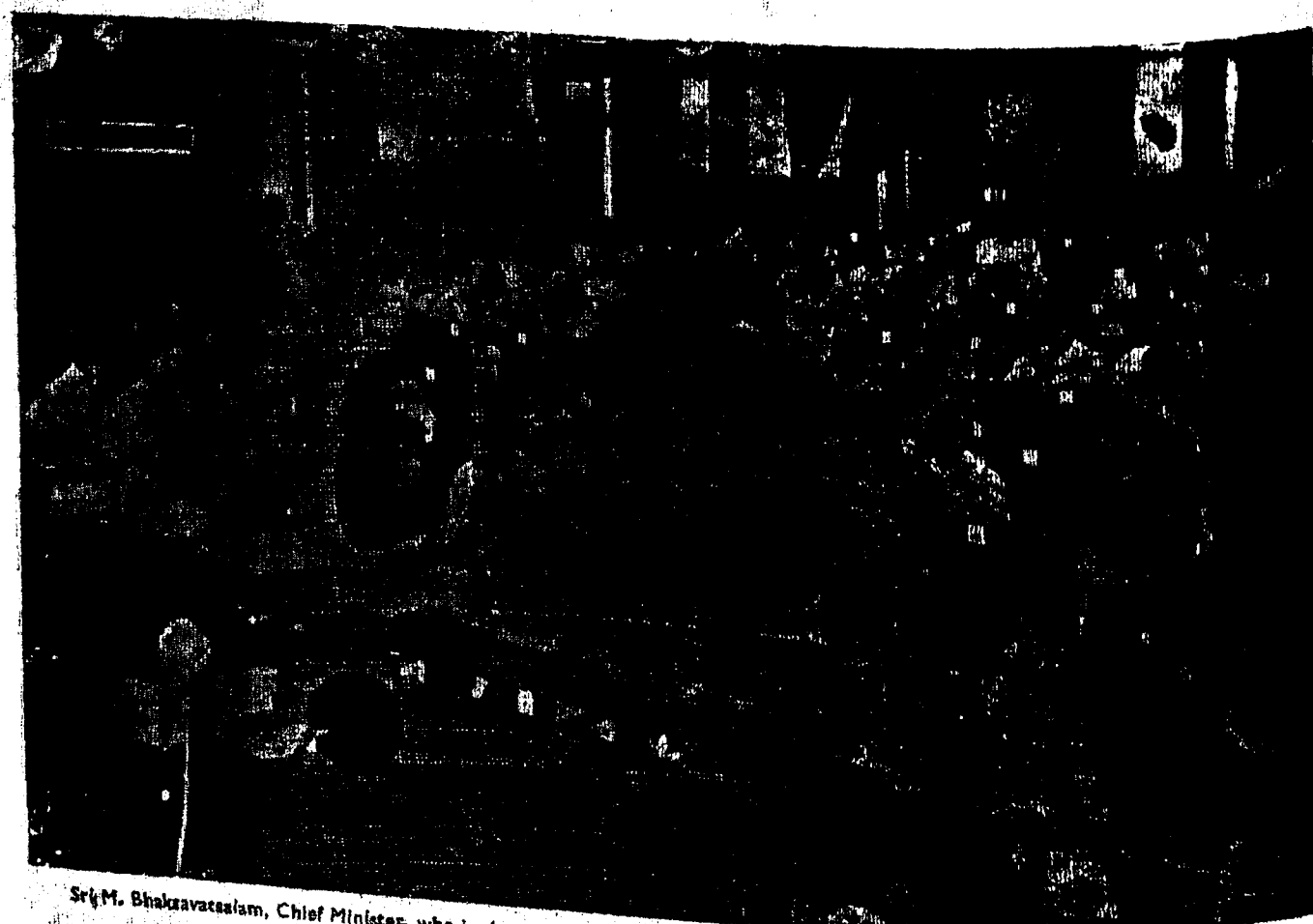
Mye Lady's seat near the school, overlooking the plains is really an attractive spot, unforgettable for the impression it leaves. Sitting over the boulders at this place, one can view the valley down below, the sprawling town of Salem between the mountain ranges, the magnesite quarries which are now being exploited and if the sky is clear the Mettur Dam in the distance. An introvert is sure to take back with him memories of this spot. There is a Kennel at Nagaloor Road for dog lovers, where all breeds of dogs are available.

Other important places are Lover's Lane, Churchill Road, Sericulture Research Station, Market square, Municipal office, Pagoda point, Killiyur falls, etc.

Products

Pear, Lemon, Orange, Guava, Custard apple, Pomograte, Plantain, Jack fruits are available. In order to exploit the horticulture wealth in Yercaud area and to increase the fruit production on modern lines a model orchard-cum-nursery was established in Yercaud under the Second Five-Year Plan at a cost of Rs. 55,000 to serve as a demonstration centre. World's finest coffee is produced here. Geranium, Wattle bark and Teak are some of the other commercial products of Yercaud. Indian gall nut, sandal nut and some valuable medical herbs are also available.

There is a Municipal choultry and a Government of India rest house for the Railway employees. There are several decent hotels with boarding and lodging facilities. The Madras Government has sanctioned a sum of Rs. 2.5 lakhs under the Third Five-Year Plan for the construction of a Low-income group rest house. After all no nation can afford to neglect the things beautiful if it is to make real progress.



Sri M. Bhakavatsalam, Chief Minister, who is also in-charge of the Finance portfolio, presented the "Annual Financial Statement" of the State for 1965-66 to the Madras Legislature on 1st March.

Transport. I would like to emphasise that the increase in Plan outlay is only in part due to escalation in costs. A significant part of the increase is directly attributable to the taking up of new schemes like the Second stage of the Mettur Tunnel Hydro-Electric Scheme, Kodayar Hydro-Electric Scheme and enlargement of the scope of Medium and Minor Irrigation Projects. While a detailed assessment of our achievements in physical terms should await the completion of the Plan period, it is even now clear that the targets in important fields like Power, Irrigation, General and Technical Education, Small-scale Industries, etc., will all be realized and to an extent exceeded.

Agricultural Production

The rate of growth in agricultural production is one of the major determinants of the progress of our economy and some concern has been expressed about the poor progress on the front in the current Plan period. In assessing the progress in this sector, it should be recognized that while as part of the Plan, Government can provide necessary facilities for increased production, in the

form of irrigation, improved seeds and fertilizers, the actual results will depend upon the response of the farmers. Government's role, though vital, is indirect and can bear fruit only to the extent it helps and induces the farmers to take the right decisions on such matters as adoption of improved cultural practices. Seasonal factor also plays an important part in determining agricultural production. In spite of these limitations, our efforts in the last four years of the Plan have resulted in the creation of considerable additional production potential. The advance estimates of production for the current year as compiled by the Director of Statistics, point to an actual production of the order of 60 lakhs of tonnes of foodgrains, as against 53 lakhs of tonnes at the commencement of the Third Plan.

In our programme for stepping up agricultural production we have placed reliance principally on increased application of chemical fertilizers and use of improved seeds. It is a matter for gratification that the consumption of nitrogenous fertilizers has registered an impressive increase from 1.13 lakhs of tonnes at the end of the Second Plan to 2.75 lakhs of

STATE BUDGET AT A GLANCE

	Accounts, 1963-64.	Budget, 1964-65.	Revised, 1964-65.	Budget, 1965-66.
	(IN LAKHS OF RUPEES)			
Receipts	1,34,77	1,38,48	1,47,01	1,63,63
Expenditure ..	1,35,00	1,40,82	1,51,77	1,70,60
Revenue deficit ..	— 13	— 234	— 476	— 697

tonnes at the end of 1963-64. In the current year, it is estimated to increase up to 3.25 lakhs of tonnes. Arrangements have been made to increase the number of retail distribution points to 4,000 and also associate private dealers with sale of fertilizers as an experimental measure in the districts. Of some long-term significance is the start we have made with the sale of fertilizers to ryots through a mobile van in Thanjavur district. In view of the difficulties of foreign exchange, the Government of India have been unable to comply in full with our requests for increased allocation of nitrogenous fertilizers. It will therefore be prudent for the present to assume that only about four lakhs of tonnes of fertilizers will be made available to the State in the next year, as against the Plan target of 5.8 lakhs of tonnes.

Keeping these limitations in view and on current trends in agricultural production, we have to draw up our Plan for agricultural production in the Fourth Plan period on the basis that the production of foodgrains at the end of the Third Plan will be about 65 lakhs of tonnes. Though falling short of the Third Plan target of 69-70 lakhs of tonnes, this will still represent a substantial increase over the base level production and compare favourably with the increase of the order of nine lakhs of tonnes achieved during the Second Plan period. Any little increase over this level due to favourable seasonal conditions or larger availability of fertilizers will of course provide a higher base for growth in the Fourth Plan.

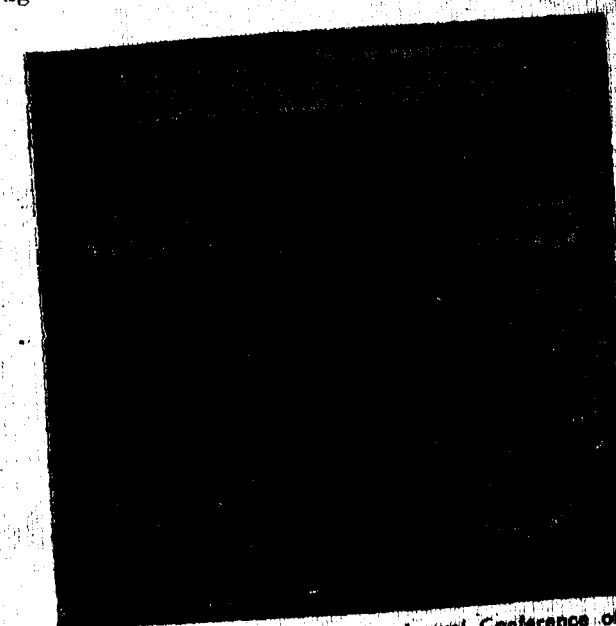
In this context our efforts should be directed towards popularisation of improved strains which can effectively absorb increased dosage of chemical fertilizers. A new strain of short-term paddy, called A.D.T. 27, has been evolved which is capable of responding to higher application of fertilizers and giving highly increased yield without lodging. Large-scale demonstrations conducted during the last season have shown that yields up to 4,000 lb. and more per acre can be obtained with this strain against an average production of about 2,000 lb. only given by A.D.T. 20 in the same area. The Government have recently sanctioned a scheme at a net cost of Rs. 4 lakhs for multiplying and distributing

A.D.T. 27 in the Cauvery Delta, so as to cover about two lakhs of acres by the end of 1966-67. This scheme alone, when fully implemented, will assure additional food production of the order of one lakh of tonnes.

Past experience has also underlined the need for concentration of efforts in selected areas offering special facilities for achieving increased production within a short period. This is the approach underlying the Package Programme. Consistent with this approach, it is proposed to implement an Intensive Cultivation Area Programme in selected tracts in Chingleput, Coimbatore, Madurai and Tirunelveli districts. The agricultural extension staff in these areas will be substantially strengthened and increased production targets aimed at on the basis of farm production plans and supply of necessary facilities including credit in relation to such farm production plans. Provision has been made in the Budget Estimate for Rs. 16 lakhs for this scheme.

Irrigation Programmes

In the context of increasing agricultural production within a short period, emphasis has to be laid on quick maturing schemes. It is in this view that we have stepped up substantially the Minor Irrigation Programmes. We have in particular launched a drive for the sinking of a larger number of wells and have raised the limit for sanction of loan from Rs. 2,000 to Rs. 5,000 per well under the New Well Subsidy Scheme. About 4,000 wells are expected to be completed in the current year as against only about 3,000 in the last year. Besides,



Chief Minister who inaugurated the Annual Conference of the Madras Civil Service (Executive Branch) Association with the Minister for Works Sri V. Ramiah after the function. The President of the Association, is at the extreme right.

as part of the Crash Programme, about 1,000 wells are proposed to be sunk in Orathanad and Pattukkottai areas in Thanjavur district. In the light of the encouraging response to the scheme in the current year, we have set a target of 8,000 wells for the next year. The Government have also sanctioned a special scheme at a cost of Rs. 37 lakhs for sinking 2,000 filter point tube wells in Thanjavur district, with a view to enable the ryots to raise an additional crop during the summer. When this scheme becomes widely popular, supplemental irrigation with well water will become the normal agricultural practice in the delta area. The scheme will also assist in a substantial increase in average yield of the kuruvai crop by facilitating the early raising of seedlings.

Our Major and Medium Irrigation Projects are also making satisfactory progress. The peak outlay on Parambikulam-Aliyar Project will be reached in the current year as will be evident from a provision of Rs. 6.1 crores in the Revised Estimates. The Aliyar Reservoir, one of the important dams in the chain of dams visualised under this project, has already been completed and water made available for irrigation of 17,500 acres. In 1965-66, the Parambikulam, Tunacudavu and Tirumurthi Dams will also be completed along with connected works like the Sarkarpathi Tunnel and the Contour canal. With the provision of Rs. 550 lakhs for this project in 1965-66, an additional irrigation potential for about 80,000 acres will be created. We are moving the Government of India for an additional allocation of Rs. 1.5 crores in 1965-66 to enable us to speed up the works on the projects further and facilitate provision of irrigation for 45,000 acres in advance of the schedule otherwise possible. A provision of Rs. 258 lakhs has been made in the Budget Estimates for other medium irrigation projects with a view to ensure completion of (i) the scheme relating to remodeling of Palar Aicut and Channels, (ii) Sathanur Projects II Stage, (iii) Gomukhi Nadhi and (iv) Manjalar Schemes. With an allocation of Rs. 186 lakhs, the work on Chittar Pattanamkal Scheme will also be appreciably speeded up.

Animal Husbandry

In our present drive for improvement of agricultural production, we should also bear in mind the need for stepping up production of subsidiary foods such as milk, eggs and fish. The pace of execution of programmes for development of Animal Husbandry has been appreciably stepped up in the current year as is evident from the provision of Rs. 86 lakhs for Plan Schemes in the Revised Estimates as compared with only Rs. 61 lakhs in 1963-64. The provision for next year

has also been fixed at Rs. 86 lakhs and could be further raised with reference to the progress of the schemes. Provision has been made among other things, for the opening of ten key village blocks and 24 veterinary dispensaries in the Annual Plan for 1965-66. We have besides launched a number of special schemes of development as part of the Crash Programme sponsored by the Government of India. Schemes entailing an outlay of Rs. 203 lakhs have been sanctioned for implementation in the current year and next. Among these, the scheme for the establishment of three Intensive Cattle Development Blocks in the milk shed areas of Madras, Madurai and Coimbatore at a total cost of Rs. 134 lakhs deserves special mention. The main objective of the programme is to improve the dairy cattle in these tracts through integrated action for the upgrading of the existing breeds, thorough crossing with imported Jersey and other high yielding breeds like the Red and White Sindhis and Murrah buffaloes, development of feed and fodder resources and provision of veterinary aid on a large scale.

Among dairying schemes, the principal achievement in the current Plan period has been the completion of the Madhavaram Milk Project. We have now taken up, with assistance from UNICEF, a project for the improvement of supply of milk for Madurai City, which among other things, provides for the installation of a pasteurisation plant with a capacity of 50,000 litres of milk per day.

Fisheries Development

Our State, with its long coast line, offers immense possibilities for development of fisheries. In the current drive for production of subsidiary foods, the tempo of execution of schemes in this sector has been accelerated. The schemes taken up under the Crash Programme with their emphasis on supply of mechanised boats and improved nets will result in an additional production of 78,000 tonnes of fish valued at Rs. 2.75 crores. With the completion of the boat building yard at Royapuram in the current year, there will be a substantial step-up in the capacity for fabrication of improved boats. The target of 400 mechanised boats set for the Third Plan will be realised and it is visualised that production of fish will be raised from 1.34 lakhs tonnes to about 2.9 lakhs tonnes during the Third Plan period.

The Indo-Norwegian Project for development of fisheries started at Mandapam, with the technical collaboration and financial assistance of the Government of Norway, envisages the establishment of a boat building yard and an ice-cum-cold storage plant with

a freezing unit with complementary arrangements for transport and marketing of fish. A centre for training of fishermen is also to be set up and exploration of fishing grounds undertaken. A provision of Rs. 34 lakhs has been made for the project in the Budget Estimates for 1965-66.

Public Sector Industries

The State has also made appreciable progress in industrial development in the current Plan period. The textile industry was the only fairly well-developed industry worth mentioning at the beginning of the First Plan period. We have during the last two Plan periods built up a broad-based industrial complex and have also achieved a fair measure of dispersal of industries in different parts of the State. In spite of the deficiency of the State in basic raw materials, our State has made appreciable strides in industrialisation in recent years by fully exploiting other favourable factors, such as availability of trained manpower, cheap electric power and a resourceful entrepreneurial class.

The Neyveli Lignite Project, which is the biggest of the industrial undertakings in the Central sector has now entered on the second phase of its development from 250 MW to 400 MW and the sixth unit with 50 MW of installed capacity is expected to go into operation shortly and thus provide relief to our grid in the next season. The scheme for raising the capacity of the thermal station to 600 MW has also been sanctioned and the preliminary work relating to the scheme of expansion has been taken on hand. The project was originally intended for mining only 3.5 million tonnes of lignite. It is now proposed to raise the capacity of the first mine to 5.5 million tonnes in the first stage and to 6.5 million tonnes in the second stage. The work relating to the briquetting and carbonising plant and the urea plant is also in progress. The Ammonia plant is expected to be commissioned in June 1965.

The Heavy Vehicles Factory at Avadi involving a capital outlay of Rs. 16 crores has also made substantial progress and the first tank is expected to roll out of the factory in the next few months. A factory for Small Arms is also being set up at Tiruchirappalli at an anticipated cost of nearly Rs. 8 crores.

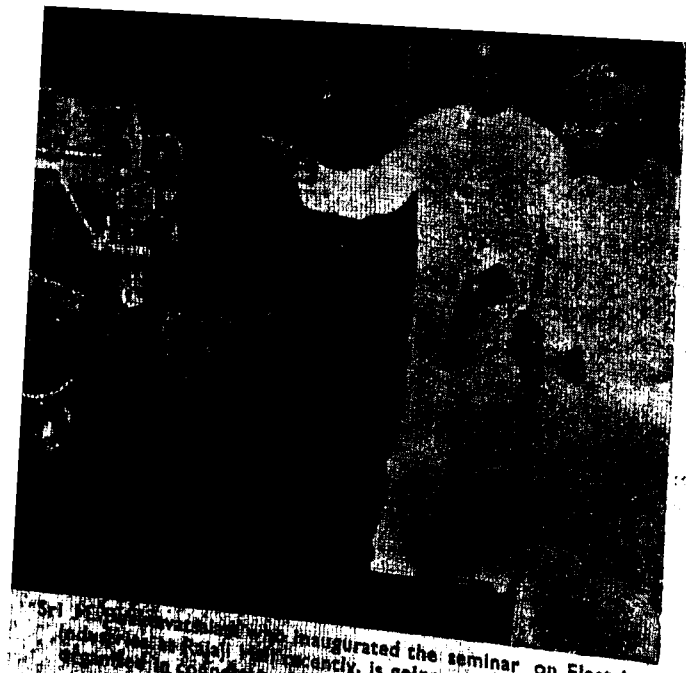
The Hindustan Teleprinters, Limited, who are producing about 800 teleprinters a year, have moved into a factory of their own and are expected to achieve their full licensed capacity of 1,300 units shortly. The work relating to the expansion of the productive

capacity of this unit to 8,000 teleprinters a year has also been taken on hand. The Surgical Instruments Factory with an initial capital outlay of Rs. 5.25 crores is also expected to go into production in the middle of 1965. The High Pressure Boiler Plant near Tiruchirappalli, which with a capital outlay of Rs. 25 crores, one of the biggest public sector undertakings in the State is progressing fast and will go into production by March 1966. The construction of the Hindustan Photo Films Factory is proceeding according to schedule.

The Government of India have decided to locate a Petroleum Refinery in the Madras State with a capacity of 2.5 million tonnes of crude and also a fertiliser factory with a capacity of 200,000 tonnes of nitrogen per year. Lands for these projects are under acquisition and the State Government are now doing preliminary investigations for the provision of various facilities like water, railway siding, roads, etc. The Central Government are also investigating suitable sites in this State for the location of a Tele-communication Cable Factory, a Pumps and Compressor Project and a Heavy Plates and Vessels Shop.

The detailed project report prepared by Messrs. Dastur and Company, Consultants, appointed by the Government of India has established the technical and economic feasibility of the Neyveli-Salem Steel Plant beyond doubt. The project report envisages a plant with an initial capacity of 0.5 million tonnes of steel with scope for expansion to 1.2 and 3 million tonnes respectively in subsequent stages. The capital investment required for the first stage of development is estimated at Rs. 95 to 100 crores. The project will have one of the lowest raw material assembly costs among the steel plants in the country and will be specially suited for the production of special steels and alloy steels, as the iron-ore proposed to be used is free from sulphur and phosphorous. We are confident that this project will be taken up for implementation in the Fourth Plan.

In the State sector, the work relating to the establishment of nine co-operative spinning mills is making excellent progress. The Co-operative Spinning Mill at Salem has already been commissioned in June 1964 and the other mills are expected to go into production in 1965. Similarly, the work relating to the establishment of co-operative sugar mills is making satisfactory progress. The Co-operative Sugar Mill near Mohanur in Salem district has gone into production with a capacity of 1,000 tonnes of cane per day. The other two



Sri R. Venkataraman, Minister for Industries, inaugurated the seminar on Electrical Industries. He is, in the foreground, looking at the exhibition arranged in connection with the seminar.

Co-operative Sugar Mills at Kallakurichi and Madurai respectively, are also expected to be completed in time for the next crushing season.

The State Government have decided on the establishment of the Madras Industrial Development Corporation as a company wholly owned by Government for the purpose of setting up large-scale industrial undertakings in the public sector. Provision has been made in the Budget Estimates of 1965-66 for an initial contribution of Rs. 75 lakhs towards the share capital of this Corporation. The Corporation will, in the first instance, take up the establishment of a Continuous Casting Mill at Aranyankottai and a Cement Plant near Rajapalayam. The Government are also planning to start two projects involving a capital outlay of nearly Rs. 8.5 to Rs. 9 crores will be taken up by the Corporation.

Industries in Private Sector

The State Government have made satisfactory progress in the current year. A few of the automobile ancillary production units, a welding electrode unit, a large-scale sugar mill, a cement mill, an oxygen plant, a few roller flour mills and a number of other engineering industries have gone into production. The most significant achievement in the current year will be the commissioning of the Aluminium Smelter near Mettur with a capacity of 10,000 tonnes per annum. This is perhaps the largest venture in the private sector in the State and the State Government, besides assisting this enterprise with supply of power at concessional rate has also participated in its capital structure to the extent of Rs. 1.5 crores through the Madras Industrial

Investment Corporation. Another important development in the private sector in the current year is the setting up of the South India Shipping Corporation with collaboration from West Germany and the United Kingdom for the purpose of acquiring and operating five bulk cargo carriers. The Madras Industrial Investment Corporation has played a useful role in stimulating industrial development in the private sector. In 1964, it has sanctioned cash loans to the extent of Rs. 2.32 crores, joint loans to the tune of Rs. 42.9 lakhs apart from guaranteeing loans for Rs. 1.48 crores. It has also encouraged flotation of new ventures by underwriting shares to the extent of Rs. 2.9 crores and direct subscription of the order of Rs. 1.13 crores.

Power Schemes

The fair measure of success we have achieved in expansion and diversification of industries in the State in the last ten years has to no small extent been due to the energetic implementation of power programmes. Out of the total Third Plan outlay of Rs. 291 crores, a little over Rs. 100 crores had been earmarked for development of power. We have since then taken up new schemes and also intensified rural electrification programmes. The outlay on power programmes in the current Plan period is therefore expected to be about Rs. 120 crores. As against Third Plan target of 1,040 MW of power, the Madras State Electricity Board will have an installed capacity of 1150 MW. With the 400 MW of power to be commissioned at Neyveli, the installed capacity in the State will be 1,550 MW as against only 571 MW at the commencement of the Third Plan. This progress is by any standards phenomenal and will rank as the principal achievement of the Third Plan period.

The pace of execution of power programmes has been well maintained in the current year. A plant with a capacity of 20 MW has already been commissioned in Kundah Power House V. Another unit of 60 MW will go on stream in Kundah Power House III before the end of March. The recent commissioning of 150,000 lb. hour boiler at Basin Bridge has rendered possible an additional production of 10 MW of power. The Madras grid has thus been strengthened with an installed capacity of 90 MW of power in the current year. This apart from the completion of the first stage of development of power at Neyveli to the extent of 250 MW should provide considerable relief to our grid in the coming year. The next year will witness the completion of the Mettur Tunnel Scheme with a capacity of 200 MW, the second Unit of Kundah Power House III (60 MW) and Kundah Power House IV (50 MW) and an additional unit in

Periyar with a capacity of 35 MW. The Parambikulam-Aliyar Hydro-Electric Scheme will also be completed in part and 100 MW of installed capacity will be commissioned.

A provision of Rs. 4 crores has been made for rural electrification programmes in the Annual Plan for 1965-66 and we expect the Government of India to allocate in addition a minimum of Rs. 1 crore outside the Plan as part of their Crash Programme for stepping up agriculture production. By the end of the Third Plan we would have extended power to 20,500 towns, villages and hamlets as against 10,760 at the commencement of the Third Plan. Over 2.3 lakhs of pumpsets will be connected to power by the end of the current Plan period and the additional irrigation potential thus created is substantial. In spite of the increase in installed capacity, the demand for power is found to be constantly in excess of the available supply and Government have therefore been constantly exploring possibilities for new power schemes in the State. As part of our advance action of the Fourth Plan, we have initiated work on the Kodayar Hydro-Electric Scheme with a capacity of 100 MW and the expansion of Basin Bridge Thermal Station by an additional 30 MW. Keeping in view the need to maintain a proper balance between hydel and thermal power, we have already obtained clearance of the Planning Commission for setting up a thermal station with a capacity of 300 MW at Ennore.

Progress in Education

The pace of expansion of technical education has a direct bearing on economic development. The programmes for this sector have been worked out with reference to long term projections of our requirements of economy for trained technical manpower. By the end of the Third Plan, the admission capacity in the Engineering Colleges in the State would have been stepped up to 2,140 and that in Polytechnics to 4,200. We would thus overfulfil the target originally set in the Third Plan. The House should be glad to note that arrangements are being made to start the proposed Government Engineering College at Salem with effect from the next academic year. The Budget Estimates for 1965-66 provide for the taking of preliminary action in respect of the new Government Polytechnics proposed to be opened at Thanjavur, Tenkasi, Mettur and Cuddalore, early in the Fourth Plan period.

With the expansion of education at higher elementary level, it is necessary to provide for diversion of boys of the age group 14-17 to technical courses of study. The Junior Technical Schools are intended to meet this

need. Ten Junior Technical Schools have already been started in this State and the Budget Estimates provide for the opening of ten more Junior Technical Schools to be located at Kanchipuram, Narsimharan, Gudiyatham, Salem, Annamalai Nagar, Dindigul, Tuticorin, Karaikudi, Rajapalayam and Aradikudi. Provision has also been made for the establishment of an Institute of Textile Technology and an Institute of Commercial Practice at Madras. The bulk of the expenditure on the development of these institutions will arise in the Fourth Plan.

The importance of education as a factor in promoting economic growth has been recognized in our Plans. The targets under this head of development will be overfulfilled both in physical and financial terms. The expenditure on Education, Plan and non-Plan together, will, in the present budget, be of the order of Rs. 37 crores, representing nearly 22 per cent of the total Revenue Budget. Ninety-two per cent of the children of the age-group 6-11 will be at school by the end of the Third Plan and on the basis of this achievement, we are now in a position to plan confidently for 100 per cent enrolment in the next quinquennium. It may not be out of place to mention here that the Fourth Plan visualises a target of enrolment of only 87.7 per cent for the country as a whole. It is clear that we are far ahead of most of the other States.

The provision of free school meals has been an important contributory cause for the successful enlistment of pupils from poorer sections of the society. This scheme, which is now in force in over 30,000 elementary schools in the State, benefits 16 lakhs of children. The Budget

Industries Minister Sri R. Venkataraman who presided over the seminar on Electrical Industries inaugural function is looking at some of the exhibits organised on the occasion.



for next year embodies a provision of Rs. 186 lakhs for this scheme. The CARE Organization are continuing their generous assistance towards enriching the quality of the mid-day meals programme and the value of their contribution in the form of milk powder, cooking oil and corn meal in the last four years of implementation of the programme is well over Rs. 6 crores. At higher elementary level too, the progress so far has exceeded our expectations and against a Third Plan target of enrolment of 2.1 lakhs of pupils 5.9 lakhs will be enrolled.

Institute of Education

The Government have recently established a State Institute of Education, with a view to ensure improvement in standards of instruction in schools. The institute will impart in-service training to all inspecting officers concerned with elementary schools and the staff of institutions in charge of training elementary school teachers. The institute will also produce literature inclusive of teaching aids for use in elementary schools. In an era of rapid expansion, it has obviously been difficult to maintain adequate standards of accommodation in elementary schools. We have been trying to do our best to tackle this stupendous problem, within the resources available and as in previous years a provision of Rs. 40 lakhs has been made for payment of grants to Panchayat Unions for construction of buildings for elementary schools with an element of public contribution.

With the expansion of elementary education we have also had to take steps for enlargement of the facilities for secondary education. The number of pupils seeking admission has increased appreciably with the implementation of Government's policy of free education up to the Secondary School-Leaving stage. The anticipated enrolment in secondary schools by the end of the Third Plan is 2.75 lakhs as against a Plan target of only 75,000. The expenditure on Secondary Education has risen substantially in the last two years. As against an expenditure of the order of Rs. 6.7 crores in 1963-64 we have to allocate Rs. 11.8 crores in the Budget for next year for Secondary Education. This unprecedented expansion has naturally brought in its wake problems relating to maintenance of standards of accommodation and equipments in the schools. Towards meeting this problem in some measure we have made a provision of Rs. 30 lakhs for payment of grants for construction of buildings for high schools formerly under the control of district boards.

Expansion at secondary level has in its turn necessitated augmentation of facilities for collegiate education.

It is proposed to open seven Government Arts Colleges in the next academic year and consistent with our policy of promoting a wide diffusion of facilities for higher education, these colleges will be mostly located in educationally backward tracts. Provision has also been made in the Budget for the construction of buildings for the newly opened colleges in Cuddalore and Gudiyatham. A decision of far-reaching importance relates to the opening of evening colleges for men and women. It is proposed to make a start in the next academic year with three evening colleges—two for men in the Government Arts Colleges in Madras and Coimbatore, respectively, and one for women in the Queen Mary's College. These evening colleges will benefit a larger number of students and in particular, those in employment, who would otherwise be denied access to collegiate education.

Medical and Public Health

With the successful implementation of the National Malaria Eradication Programme, we have now to devise satisfactory arrangements for continued vigilance in this sphere. As part of such arrangements and in pursuance of our programme for augmentation of facilities for medical relief in rural areas, we have sanctioned the opening of 120 Primary Health Centres in different blocks. The Third Plan objective of setting up one Primary Health Centre for every block will be realized.

It is necessary to ensure that the fruits of economic progress are not dissipated by too large an increase in population. High priority has rightly been accorded to Family Planning Programmes in the Third Plan. We have recently taken steps to intensify this programme. The services of canvassers have been enlisted in popularising the scheme with adequate safeguards for screening through special liaison officers of persons offering to undergo sterilization operation. We have sanctioned additional staff for the different medical institutions and have sought to secure the active participation of Panchayats and Panchayat Unions in the implementation of the programme. This programme is of vital importance from the point of view of raising the living standards of our people and I have no doubt that non-official leaders like the Honourable Members, and the Chairmen of Panchayat Union Councils will play their part in moulding public opinion on this subject.

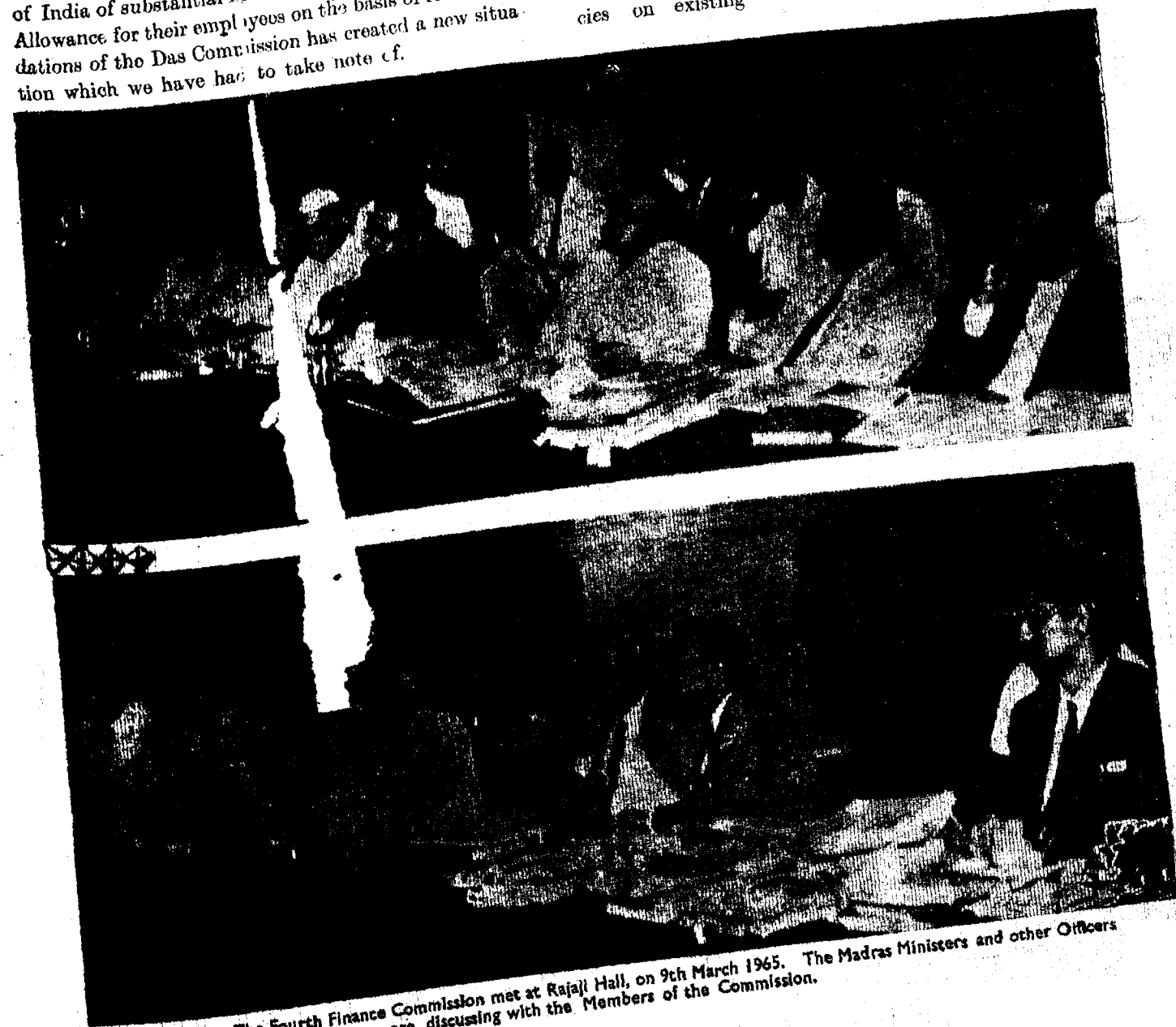
Backward Classes

The Welfare of Backward Classes has always been of special concern to Government. We have made a provision of Rs. 484 lakhs in 1965-66 for schemes for the Welfare of Scheduled Castes and Backward Classes. Schemes for payment of scholarships, residential and non-residential, are all being continued and suitably

enhanced provision made in the present Budget. We have in particular stepped up the pace of acquisition of house-sites for Harijans and a provision of Rs. 38 lakhs has been made for such acquisition in the coming year.

The Budget for 1965-66, after providing for a reasonable element of growth under all elastic sources of revenue such as Motor Vehicles Tax, Sales Tax and Electricity Duties, estimates the receipts at Rs. 163.63 crores and the expenditure on revenue account Rs. 170.60 crores, resulting in a deficit of Rs. 697 lakhs. On current projections of revenue and on the basis of our existing commitments, the deficit should normally be well under Rs. 2 crores. But the sanction by Government of India of substantial increase in the rates of Dearness Allowance for their employees on the basis of recommendations of the Das Commission has created a new situation which we have had to take note of.

Government have carefully reviewed the existing rates of Dearness Allowance for their employees in the light of the decisions of the Government of India. The Government of India, while raising the rates of Dearness Allowance of their employees on the basis of the recommendations of the Das Commission, have left out of consideration the employees in the pay range Rs. 600-1,200. We consider that this class of employees, the bulk of whom had not benefited from the recommendations of the Pay Commission, also need relief. The Government have accordingly decided to sanction revised rates of Dearness Allowance with effect from 1st April 1965, i.e., pay for March due on 1st April. These increases will also apply to employees of local bodies and teachers in aided institutions and financial assistance will be extended to these agencies on existing basis towards this additional



The Fourth Finance Commission met at Rajaji Hall, on 9th March 1965. The Madras Ministers and other Officers are discussing with the Members of the Commission.

Official Language

Assurances of Sri Jawaharlal Nehru

I. Sri Nehru's statement during the debate on Sri Frank Antony's resolution in Lok Sabha on 7th August 1959.

"Dr. Subbarayan referred to the official language, this and that. Our Constitution has laid it down, for a variety of reasons into which I need not go, that Hindi should develop progressively as that, not because Hindi is better or more powerful or whatever it may be, than the other languages, but for certain very practical reasons of extent, this and that. I believe that this should be done.

I believe also two things. As I just said, there must be no imposition. Secondly, for an indefinite period—I do not know how long—I should have, I would have, English as an associate additional language which can be used, not because of facilities and all that, though there is something in that, but because I do not wish the people of the non-Hindi areas to feel that certain doors of advance are closed to them, because they are forced to correspond—the Government, I mean—in the Hindi language. They can correspond in English. So, I would have it as an alternate language as long as people require it and the decision for that, I would leave not to the Hindi-knowing people but to the non-Hindi knowing people.

I will repeat what I mean. Hindi progressively develops, I try for that, but I love English to come into the picture to be used as long as people require it. Some States have followed it; they can go on using it and gradually allow languages to develop and to replace English."

II. Statement during the debate on the report of the Committee of Parliament on official language, in the Lok Sabha, on 4th September 1959.

"Whatever I said then (on 7th August 1959) of course, I hold by it completely—I was not laying down any statute or law, I was emphasising an approach, a mental approach. I was not considering what words to use in a Bill or something like that, but a mental approach to this problem."

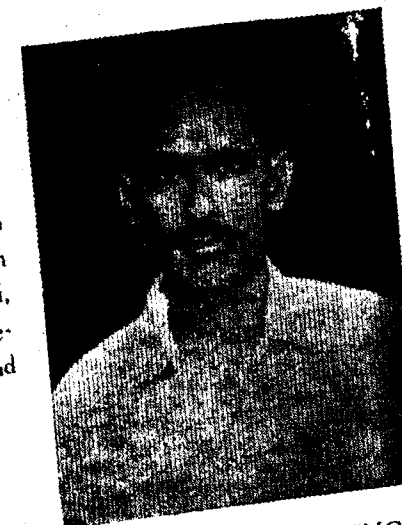
He then explained the policy of the Government on the subject in the following words:—

"I come to English. I had said that English should be an associate or additional language. What exactly did I mean by it? Well, I meant exactly what that means. That is to say, English cannot be, in India, anything but a secondary language in future. In the nature of things mass education will be in our own language. English may be taught as a compulsory language. I hope it will be—to a large number of people; it cannot be everybody but to a large number. It remains as a secondary language. But I say that Hindi, whenever it is feasible, comes into use progressively more and more for the inter-State official work. But English should have a place there; not a limited place. That is to say, English can be used by any State in writing to the Government or writing to each other. Remember that this internal State work will be done presumably in the State language. English comes in only on the question of dealings on the All-India scale between States. To that, it should be open to anybody and to any State to do that in English. There is no limitation on that. We encourage them to do it in Hindi—if they can they can do. But there is no limitation. I say there is no limitation of time even to that, except when people generally agree—and I had said that these very people in the non-Hindi speaking areas who might be affected should agree. I am perfectly agreeable."

Our Salute!



M. RAMASAMI
Born on 1st July 1922. Enlisted as Police Constable on 7th November 1942. Promoted as Head Constable on 6th April 1959 and Sub-Inspector on 18th July 1963. Native of Thadagapatti, Salem district. He has earned 88 rewards. Dependents: Wife and 5 children (2 sons and 3 daughters).



RAMACHANDRA SINGH
Born on 5th September 1920. Enlisted as Police Constable on 30th August 1943, promoted as Head Constable on 1st October 1947. Native of Thamarapatti, Melur taluk. He earned 25 rewards. Dependents: Wife and 5 children.



N. K. VENKATESAN
Born on 1st July 1925. Enlisted as Police Constable on 12th October 1944, promoted as Head Constable on 17th April 1959 and Sub-Inspector on 21st May 1964. Native of Big Conjeevaram. He earned 55 rewards. Dependents: Wife and 5 children (2 sons and 3 daughters).



DEVARAJ
Born on 1st July 1919. Enlisted as Police Constable on 31st July 1946. Native of K. Rajakapatty, Dindigul taluk. He earned 37 rewards. Dependents: Wife and a son.

During the recent agitation many Police officials had laid down their lives while on duty. Some of the photos of the Police officials who had been killed and injured are seen here. The picture of their bereaved families are given in the next page.



MUTHUSWAMI
Police Constable No. 1093, Gadalur Police Station. Injured during the disturbances, is undergoing treatment at present in the Erskine Hospital, Madurai. He is a native of Chatrapatti, Palani taluk.

commitment devolving on them. This enhancement in rates of Dearness Allowance will entail an additional expenditure of the order of Rs. 5.58 crores per annum.

The revenue deficit of Rs. 697 lakhs, though large, is due entirely to the two instalments of increases in Dearness Allowance in the current year and the further increase proposed in the next. The Finance Commission which is now in session should take note of these additional commitments and propose suitable devolution of resources. We have therefore decided to leave the gap in revenue account uncovered and have not proposed any additional taxation. The ways and means position, too, will continue to be difficult in the next year. We will have to keep a close watch over our receipts and expenditure and intensify our efforts for mobilisation of resources through collection of arrears and checking of tax evasion. There is also scope for improvement in collections under Small Savings and the Honourable Members and other leaders of public opinion like Chairman of Panchayat Unions and Panchayat Presidents have a great part to play in spreading the message of the Small Savings Movement, particularly in rural areas. It is only to the extent that we divert in this manner a part at least of the increased incomes generated by the implementation of the Plan for further investment in Plan projects that we can sustain the increased developmental growth visualised in the Fourth Plan.

Highlights of the Madras Budget

- Ninety-two per cent of the age-group 6—11 will be at school by the end of the Third Plan while only 87.7 per cent has been visualised in the Fourth Plan for the country as a whole.
- At higher elementary level too 5.9 lakhs of pupils will be enrolled by the end of the Third Plan as against the original target of 2.1 lakhs.
- An Institute of Education will be started to improve the standard of teaching and education.
- Seven Arts Colleges will be opened in the next academic year in the educationally backward tracts of the State.
- Evening Colleges will be opened in the next academic year for Men and Women.
- The Neyveli-Salem Steel Plant, will have one of the lowest raw material assembly costs among the Steel Plants in the Country.
- As against the Third Plan target of 1,040 MW of Power, the Madras State Electricity Board will have an installed capacity of 1,150 MW with the 400 MW of Power to be commissioned at Neyveli, the installed capacity in the State will be 1,530 MW as against only 571 MW at the commencement of the Third Plan.

The Fourth Plan will be a bigger Plan—bigger than all the preceding Plans together. We have prepared our draft Fourth Plan, keeping in view the targets and objectives of the national Plan, and with due regard to local problems and local needs. In settling the strategy and pattern of investment in the Fourth Plan, we have kept in view the fact that the density of population in Madras at 669 per square mile is far higher than that for the country as a whole. The per capita availability of culturable land per head of agricultural population is also lower in our State. The possibility of stepping up production of foodgrains through a mere build-up of economic overheads, such as irrigation, is limited. We have, therefore, to lay emphasis on an expansion of output through utilization of increased and improved material inputs like good seeds, fertilizers and green manures. We are thus entering a more challenging phase of agricultural development in our State.

On a careful consideration of these and other relevant factors, it has been estimated that it will be possible to step up production of foodgrains from 45 lakhs of tonnes to 80 lakhs of tonnes in the Fourth Plan period. Within the agricultural sector, there is also need for diversification of cropping pattern in favour of high value yielding crops such as sugarcane, long staple cotton, groundnut, fruits and vegetables.



Sri M. Bhaktavatsalam, with the U.S.S.R. Parliamentary delegation who paid a visit recently to Madras.

By the end of the current Plan, Madras would have almost reached the limits of utilization of its water resources. The southern region on the whole however is well endowed with water resources and it should be the objective of national policy to promote their utilization in the best interests of the region. The State Government have provided in the Fourth Plan for the diversion of some of the west-flowing rivers and will seek to obtain the concurrence of the Planning Commission and the neighbouring States for these schemes. Apart from this, attention will have to be concentrated on improvement of the old irrigation systems, so as to promote a more economic utilization of water and facilitate further extension of irrigation with the water so conserved. Highest priority is being accorded in the Fourth Plan to the modernization and improvement of channels in the Thanjavur Delta. Investment on similar lines for the improvement of the Periyar System has also been undertaken. Provision is also being made in the Fourth Plan for the following new medium irrigation schemes :—

- (i) Provision of irrigation facilities to Avinashi area.
- (ii) Parappalar Scheme.
- (iii) Chinnar Reservoir Scheme.
- (iv) Palar-Perandalar Scheme.
- (v) Marudayar Scheme.

The rate of growth proposed for the agricultural sector in the Fourth Plan being slightly lower than visualised in the national Plan, it is proposed to aim at a faster

rate of progress in other ancillary sectors, particularly under fisheries which offers great potentialities for development.

The Fourth Plan of the State also calls for a substantial increase in the contribution of the industrial sector to the State income. It has been estimated that an investment in industries of the order of Rs. 600 crores, spread over the Central sector, State sector and the Private sector will be required to achieve the desired rate of growth. The direct investment by the State Government in industrial development has so far not been substantial. The Government's policy has been one of stimulating private sector, in promoting industrial ventures with provision of necessary economic structure and patterns of industries as it has developed in the State in the last ten years. There is, in particular, need for development of certain basic industries producing raw materials and intermediaries which could be used by other industries. It is also increasingly realized that the State should directly engage itself in the production of certain vital consumer goods needed for mass consumption. Keeping all these objectives in view it is visualised that the State Government should play a more active role in industrial development in the Fourth Plan. The private sector will still have an important role to play and the provision of industrial finance to them through agencies already in existence and through new agencies like the Agro-Industries Corporation and the Export Corporation is one of the important elements of industrial policy.

(Continued on page 24)



CENTRAL BUDGET PROPOSALS

Salient Features

The following are the salient features of the tax proposal of the Central Budget presented to the Parliament last February by Union Finance Minister Sri T. T. Krishnamachari. The Budget is considered balanced one after many years with a marginal surplus.

Excise duty on footwear, cycle parts, cycle tyres and tubes, printing and writing paper used in the publication of registered dailies including their weekly issues to be removed.

Effective rates of fabric duties on price controlled varieties of grey as well as processed coarse and medium cloth are to be reduced by 50 per cent. Duty on vegetable products to be reduced by about 50 per cent. Cheaper type of printing and writing paper and certain other qualities of typing and manifold paper to be reduced by 30 per cent.

Duty on rayon yarn of coarser and industrial deniers, cellulosic staple fibre to be reduced. Marginal reducing of duty on staple fibre yarn.

Duties on a few other items such as silk fabrics, gramophones, cigars and silver are also to be removed. These reductions will mean a loss of revenue of Rs. 29.5 crores. It is expected that these reductions of duty on articles of common consumption will be passed on to the consumer. If they are not, it will become necessary to reimpose the duty in the course of the year.

Certain technical adjustments are being made in excise duties mainly in respect of cigarettes and tyres. These modifications will increase revenue by Rs. 40 lakhs in the case of cigarettes and Rs. 35 lakhs in the case of tyres.

The duty on copper and copper alloys in crude form will be raised from Rs. 300 to Rs. 1,000 per tonne and on circles and sheets, etc., from Rs. 500 to 1,500 per tonne. It is also proposed to raise the duty on steel ingots, plates and rails and sleeper bars by Rs. 10 per tonne, on semi-finished products and bars, rods and structures by Rs. 15 per tonne, on black sheets and hoops by Rs. 40 per tonne, on skelp by Rs. 50 per tonne, on strips by Rs. 20 per tonne and on galvanised plates and sheets by Rs. 100 per tonne. The effective duty on tin plates and tinned sheets are to be raised from Rs. 165 to Rs. 225 per tonne. The increase of duty on this group will yield an additional revenue of Rs. 15.75 crores.

The total exemption now enjoyed by a large number of smaller powerloom units producing cotton fabrics is being replaced by a small compounded levy of Rs. 25 per annum per loom. The anti-fragmentation provision is also being rephrased.

The net loss of revenue as a result of all the changes in excise duties will be Rs. 13 crores. Because of the steady increase in excise duty revenue from Rs. 145 crores in 1955-56 to about Rs. 773 crores in 1964-65, Government, for the first time in many years are able to give relief to the consumer.

In the field of customs the regulatory custom duty of ten per cent of the value of imported goods imposed

BUDGET AT A GLANCE.

(In Lakhs of Rupees.)

Receipts.	Budget, 1964-65.	Revised, 1964-65.	Budget, 1965-66.
(1)	(2)	(3)	(4)
Revenue Budget—			
Receipts	21,24.30	22,28.41	23,53.09
Disbursements.	20,41.31	19,99.26	21,16.48
Deficit (—)			(—) 6.38
Surplus (+)	(+) 82.99	(+) 2,29.15	(+) 2,36.61
Capital Budget—			
Receipts	19,92.99	20,87.70	21,83.95
Disbursements.	19,14.89	19,95.00	20,93.79
			(—) 6.38*

* Effect of Budget proposals.

ten days earlier the budget session must continue in the present circumstances. In some cases, it is necessary to increase the present rates of duties where there is a very large gap between the landed prices and the current market prices. Therefore, it is proposed to increase the import duty on stainless steel plates and sheets from 30 per cent to 100 per cent *ad valorem* and the duty on steel tin plates from Rs. 100 per tonne plus 5 per cent to Rs. 325 per tonne continuing the present preference of Rs. 20 per tonne where it is applicable.

The duty on non-cellulosic art. silk yarn and thread will be raised from Rs. 7.5 per kilogram or 55 per cent whichever is higher to Rs. 10.25 per kilogram or 75 per cent whichever is higher.

The duty on paints, colours, and painters' materials not otherwise specified is to be raised from 60 per cent to 75 per cent, on sodium hydrosulphite from 40 per cent to 100 per cent, on essential oils and perfumery not otherwise specified from 75 per cent to 100 per cent and on paper not otherwise specified but excluding newsprint and printing and writing paper from 50 per cent to 75 per cent.

The statutory import duty on raw cotton will be raised to 50 Paise per kilogram.

The total additional revenue from customs will be Rs. 14.5 crores.

In order to mitigate the disadvantages of new export industries which have yet to achieve their full competitive position in the world markets, powers

will be taken to issue tax credit certificates to exporters up to 15 per cent of the value of such exports. The tax credit certificate could be used for payment of taxes or refunded in cash to the extent that their value exceeds the tax liability.

Corporate Taxation

The list of industries producing articles mentioned in Part IV of the First Schedule to the Finance Act, 1964, which are entitled to certain tax benefits, is to be enlarged to include lime stone, flame and drip proof motors, malleable iron and steel castings, calcium ammonium nitrate and ships.

The tax concession given to section 104 companies wholly or mainly engaged in the manufacture or processing of goods or in mining or in the generation or distribution of electricity or any other form of power whose whole income did not exceed Rs. 5 lakhs is to be enlarged. All such companies, except foreign companies, will be liable to tax at 50 per cent on the first Rs. 10 lakhs of their income irrespective of the total size of their income. The penalty rate of taxation for non-distribution of profits is to be reduced to 25 per cent for companies other than trading companies.

Manufacturing companies have been given certain concessions to enable them to build up adequate reserves. For non-trading companies it will be provided that the higher statutory percentage of 90 per cent for compulsory distribution of profits will be attracted only if the accumulated profits and reserves exceed twice the amount of their paid-up capital and loan capital or the value of their fixed assets.

At present, where in a public company, 51 per cent or more of the shares are held by another company in which the public are substantially interested or by a 100 per cent subsidiary of such a company, the first

INCOME-TAX LEVEL LOWERED

While streamlining the tax structure and replacing the present taxes by a revised and unified schedule, taxes of personal income have been lowered at all levels. The highest marginal rate on unearned income will go down from 88.25 per cent to 81.25 per cent and that on earned income from 82.5 per cent to 74.75 per cent. That is to say the peak taxation will be reached in respect of income above Rs. 3 lakhs of earned income and above Rs. 70,000 of unearned income.

Bereaved families



Family of Sri Ramaswamy, S.I.
His wife is sitting.



Family of Devaraj, Police Constable
with his son-in-law and two
grand-children (extreme right).

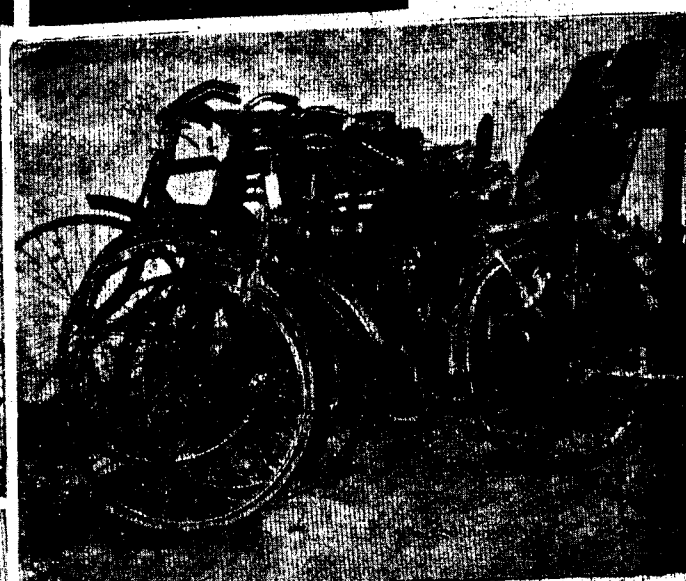
Left: Family of Sri Ramachandra
Singh.



Parents of Sri Venkatesan with their
grief stricken daughter-in-law.



Disturbances LOSS OF PROPERTY



During the recent disturbances all over the State un-social elements caused damages to the public property.

Left: Top to bottom—

Somanur Railway Station was badly damaged during the disturbances; A lorry engaged by the Police was completely burnt by the hooligans in Gujatur, Madurai District. Police jeep and cycles were burnt in front of the Tiruppur Police Station. An Express Bus was also burnt.

Right: Top and bottom—

Debris of the Samathur Ramalingam Boys' High School, Pollachi. Dozens of cycles were damaged by the mob at Gujatur.

mentioned company does not qualify for being regarded as a company in which the public are substantially interested. It is proposed to change this position.

It is proposed in the case of public companies to refund the tax on any capital gain made on the sale of land and buildings in overcrowded large cities to the extent that capital gains are reinvested with prior approval of Government in land and building including housing for employees in a new area.

It is proposed to reduce the standard rate of development rebate to 15 per cent except in the case of industries included in a new Fifth Schedule to the Income-tax Act. Industries included in this schedule can claim a development rebate of 25 per cent. The rebate for coal-mining machinery and for ships will continue at the rate of 35 per cent and 40 per cent respectively. The undertakings for which rebate is now being reduced will however continue to enjoy the existing benefit up to the end of March 1967.

A ceiling limit is proposed to income-tax, including the tax charged with reference to distribution of equity dividends and sur-tax at 70 per cent of the total income of the company. Any excess of the aggregate tax liability over this limit will be allowed as a deduction. This provision will apply to Indian companies and any other company declaring its dividend within India in which the public are substantially interested.

Tax credit certificates to the extent of 25 per cent of the Central Excise Duty paid by any manufacturing unit on production in addition to its production in the base year may be issued to that unit. Also tax credit certificates will be issued for 20 per cent of the additional corporation tax including sur-tax paid by any manufacturing company over the corresponding tax paid

GOLD BONDS TO BE REFLOATED

It is proposed to float once again the Gold Bonds. The terms will be the same as the old bonds except in one respect. The new issue will carry interest at seven per cent per annum. Those who subscribed to the first series and thus co-operated with Government at a time of national crisis will also have the benefit of the higher rate of interest for the remaining years of the currency of the Bonds held by them. The new Gold Bonds will be in the market for three months till the end of May 1965.

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UNACCOUNTED MONEY

Those persons who have undisclosed income to declare can make a declaration with relevant particulars and at the same time deposit in cash at the Reserve Bank of India sixty per cent of the income declared. The remaining 40 per cent of the income so declared can be taken to the assessee's book under intimation to income-tax authorities. No further question of assessment in regard to the income so disclosed will arise and the identity of the persons will not be revealed. This offer will be open only for three months from now, till the end of May. In order to induce people to come out quickly, a rebate of five per cent of the tax on all incomes declared and tax paid thereon in the month of March will be given.

during the base year. This would be further subject to the limit of 10 per cent of the overall tax for the year concerned.

The recommendations made by the Tea Finance Committee are to be accepted in a modified form.

In the case of companies a deduction will be allowed for expenditure incurred by them for payment towards family planning among their employees. Where such expenditure is of a capital nature, it will be allowed as a deduction over a period of five years.

Personal Taxation

An additional wealth tax will be levied on vast accumulation of urban property in towns with a population of one lakh or more. In view of differences in urban property values in towns of different sizes, it has been decided to provide for different exemption limits on the basis of population. The exemption will vary from Rs. 2 lakhs in the smallest of ranges to Rs. 5 lakhs in the highest. Provisionally the revenue from this source has been put down at Rs. 1.5 crores.

Exemption from wealth tax for five years for equity investment in new industrial companies is to be restored. This concession will apply to companies issuing capital for the first time after February 28, 1965.

Companies issuing bonus shares pay a tax of 12½ per cent on the face value of these shares. Such companies will be allowed a rebate of up to 10 per cent of the face value of bonus shares from the capital gains tax on such shares.

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Incomes in future will be chargeable to tax, subject to relief, on account of personal allowance for every individual of Rs. 2,000 with an additional allowance of Rs. 1,500 for a married individual and Rs. 400 for each dependent child up to a maximum of two children. For a married individual with two dependent children no tax will thus be payable up to an income of Rs. 4,300 as against Rs. 4,000 as at present.

Another change towards simplification relates to deductions in respect of contributions to provident fund, insurance premiums and the accumulative time deposit scheme. Apart from raising the money limit for concession from Rs. 10,000 to Rs. 12,500 for individuals, it is proposed to give the concession by a straight deduction from income of 50 per cent of the amount contributed to the items eligible for the relief.

A new provision is being introduced for exempting from tax income up to Rs. 2,400 on account of institutional care of handicapped dependents. In the case of non-institutional care, the limit will be Rs. 600.

The present tax concession in favour of foreign technicians is for a period of three years with a grace period of two years where the employer pays the tax. For certain industries, the services of such technicians have to be retained for a longer period. It is, therefore, proposed that the second period can be extended to three years with Government's approval.

Tax relief is to be given to partners of firms engaged in the profession of Chartered Accountants, Architects, Solicitors and Lawyers on amounts spent for the purchase of life annuities commencing at an advanced age, under an approved annuity scheme or sums

CENTRAL BUDGET TAX CONCESSIONS, ADJUSTMENTS—IN A NUTSHELL

Excise duties on commodities of common consumption removed or reduced
Increase in Excise Duties on certain Scarce Materials
Compounded levy for smaller powerloom mills producing cotton fabrics simplified
10 per cent regulatory Customs Duty to continue and increased in some cases
Tax credit certificates to exporters
Tax benefits to some more industries
Tax concessions for certain section 104 companies
Refund of Tax on Capital gains to Factories shifting from congested cities
Standard rate of development rebate reduced for certain industries
Ceiling limit to corporate Income-tax and surtax
More tax credit Certificates in respect of Excise Duty and Corporation Tax
Recommendations of Tea Finance Committee accepted in modified form
Additional Wealth Tax on vast accumulation of Urban Property
Exemption from Wealth Tax on new Industrial Companies restored
Tax discrimination against unmarried persons removed
Lowering of taxes on all levels of personal income
Highest marginal tax rate on earned income reduced to 74.75 per cent
Highest marginal tax rate on unearned income goes down to 81.25 per cent
Tax relief to partners of certain professional firms
Existing concessions on Estate Duty and Gift Tax enlarged
Gift Tax exemption for donations to places of worship
Incentives for declaring unaccounted money
Gold bonds to be refloated

contributed by them to an approved fund for providing retirement benefits. This relief will be in the form of a straight deduction of such payments from their total income subject to a limit of ten per cent of the total income or Rs. 5,000 whichever is lower.

When foreign investor reinvests the sale proceeds of their industrial holdings in approved industrial securities,

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rebate of capital gain tax, if any, due on the investment will be allowed in proportion to the amount reinvested.

In respect of Estate Duty and Gift Tax, some of the existing concessions are to be enlarged. Certain provisions will be amended where their interpretation has been causing hardship to assessors.

PLANNING IN MADRAS STATE—(Continued from page 15).

projected from the Fourth Plan. The State will also endeavour to secure a fair share of Central investment in industrial development. The Neyveli-Salem Steel Plant is one of the important projects proposed for execution in the Central sector in the Fourth Plan.

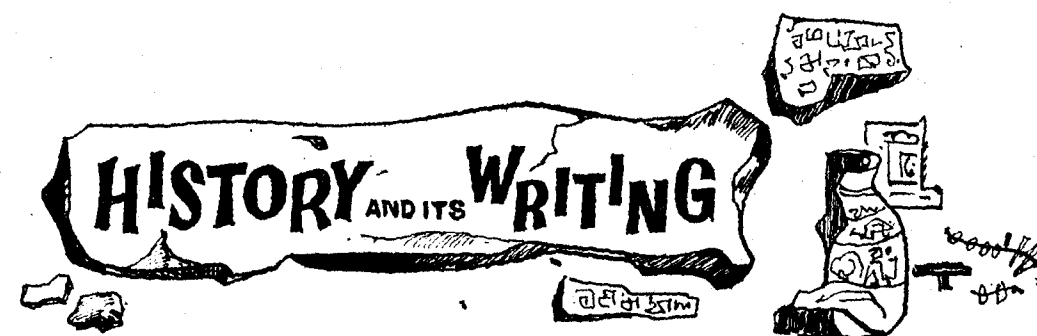
An allocation of Rs. 217 crores has been proposed for power development. Apart from the Hogenekkal Hydro-Electric Scheme, which will need the concurrence of the Government of Mysore, the following new generation schemes have been proposed for inclusion in the Fourth Plan:

Scheme.	Installed capacity.	Estimated cost.
		(Rs. in crores.)
1. Thermal Station at Ennore	300 MW	28.0
2. Thermal Station at Tuticorin	100 MW	11.1
3. Upper Thambaraparni Hydro-Electric Scheme.	155 MW	17.8
4. Pandiyar-Punnappuzha	70 MW	9.2
5. Upper Manimuthar	95 MW	11.7
6. Paralar Hydro-Electric Scheme	30 MW	3.8
7. Suruliya Hydro-Electric Scheme	25 MW	3.2

Further expansion of the Thermal station at Neyveli and the establishment of a nuclear plant are among the other schemes to be taken up as Central projects in the Fourth Plan. The Rural Electrification Programme will be pushed through further and provision is being made for connecting 2.5 lakhs of pumpsets to power.

Under Technical Education, apart from providing for expansion of the existing institutions to the extent feasible, it is proposed to open three new Engineering Colleges and seven Polytechnics. The Fourth Plan as proposed by the Planning Commission marks a distinct departure from the earlier Plans in the emphasis it lays on expansion of Social Services. The provision for social services, such as Education, Medical and Public Health, Water-supply, Housing and Welfare of Backward Classes is being stepped up from Rs. 76 crores in the Third Plan to about Rs. 229 crores. Besides ensuring greater equality of opportunity to the different sections of population, the development of social services will also be of significance as a measure of redistribution of income in favour of the poorer sections.

The success of the Plan will, above all, depend on maintenance of an atmosphere of peace and unity of purpose in which the administrative machinery can concentrate on the tasks of development. Irrespective of differences in political ideology, we have in the last 10 to 15 years forged a common approach to the problems of development of our State and it is this consensus which has enabled the State in spite of several natural handicaps, to register an encouraging advance on several fronts. The events in the last few weeks have all endeavoured to maintain. I can understand the apprehensions and feelings which have swayed the students in this State. But their agitation was soon taken advantage of by unsocial elements, resulting in loss of life and property. We are all profoundly distressed at the suffering which our people have passed through. The administrative organization headed by the District Collectors and our Police forces have played an exemplary sense of devotion to duty in a very difficult situation. The assurances of our late Prime Minister which have now been solemnly reaffirmed by national leaders and will now be formally placed on the Statute book should help to allay whatever genuine apprehensions which the students and the public may have had in regard to Hindi. They may rest assured that the State Government will keep a vigilant watch over their interests and ensure that they are not in any way placed in position of disadvantage in regard to opportunities for employment and advancement in public service. We should all now work together to restore an atmosphere of calm in which we could rededicate ourselves to the development of Tamilnad which we all love.



PROFESSOR K. A. NEELAGANTA SASTRI.

The importance of collecting and preserving the ancient Historical records is discussed in this article. Historical records reveal past history of the Nation and much more says the Author.

History as now understood is really a new discipline; even in the west it was not known before the nineteenth century. Almost the only historian of an earlier time who approaches modern standards is Gibbon. All other writers including our own Kalhana of Kashmir wrote histories of sorts. Until the last century history was often looked upon as a branch of literature or rhetoric.

The nineteenth century was the great period of modern historical writing; the age of great historians in almost all western countries and the period when the new outlook and methods of history were developed and perfected. For a long time the question was debated whether history is a science or an art. In the course of the debate, one English historian went so far as to say: History is a science, no less and no more. But the verdict of another English historian may well be taken to sum the position correctly and neatly, viz., that history is scientific in its method and an art in its presentation.

Lack of historical sense

We Indians have often been accused of a lack of historical sense, and I can recall the names of several eminent Indians of modern times who have without hesitation admitted the correctness of the charge. Not only have we missed producing a historian like the Greek, Herodotus or Thucydides or the Chinese, Su-ma-chien; but considering the size of our country and the length of its history, the volume of our historical records is very little. The archives of states, which must have existed and are occasionally mentioned in literature and inscriptions, have perished almost completely with the exception of some relatively recent village Kaifiyats and revenue accounts. We have no travel records or diaries, though Ananda Ranga Pillai's Tamil diary is a unique exception. We often learn more about our country in the different periods of its history from foreign sources than from our own.

Our whole attitude to history and the record of it seems to have been different from that not only of Western countries, but also of a country like China. We have taken with more alacrity to myth making and philosophy than to sober recording of facts as they occurred. Our literature is rich in fables, puranas, and romances, and legends, and even now some professed students of history are unable to grasp the difference between legend and history.

Religion pervades almost all our activities, and the historian has much reason to be grateful for one religious injunction which made the making of gifts and donations the primary social duty of the well to do, and another injunction which laid down that such gifts be recorded in detail on stone and copper with a description of the donor and donee and the ancestry of each at least up to three generations. Most of our ancient history known to-day has been derived from such donative inscriptions on stone and copper. And it is my purpose to tell you something of a recently discovered copper plate of the Pandyan dynasty which lights up a dark corner of South Indian history. This grant is said to have been received from Tirunelveli through Sri P. K. Arunachala Gounder, Professor of Tamil in the M.D.T. Hindu College, Pettai. I understand that the plates were discovered accidentally in the course of digging a well in the Dalavaypuram village of the Kovilpatti taluk. Dr. G. S. Gai, Government Epigraphist for India, has kindly furnished me, on request with a transcript of the entire charter.

Early Pandyan history of the family of Kadungan and his descendants extends from the middle of the sixth century A.D. to the first quarter of the tenth century when the Chola Paranthaha I conquered the Pandya country and assumed the title Madurai-konda. This history rests altogether on two copper plate grants and two stone inscriptions bearing dates in a well-known era. The grant I speak about falls in date between the

two plates I have mentioned, viz., the Velvikudi and the larger Sinnamannur grants, and is nearer the latter than the former. It gives us much new information on the genealogy of the family and on the history of the early ninth century. The fresh information we get here clears up some difficulties in the history of the Pandyas and the Pallavas of the time. This grant has not yet been fully studied, and as usual it raises some new problems while it seems to give a clue to the solution of some others. It will take some time for a general consensus to arise among scholars on the definitive interpretation of the new facts. I shall put forward here a tentative view which may provide a basis for discussion.

We have here a set of seven plates the first and last of which are engraved only on the inside, the rest being written on both sides and numbered. The writing is Grantha for the first part which is in Sanskrit verse and extends to sixty-five lines, and Vatteluttu for the longer Tamil portion extending from L. 66 to L. 238, grantha being employed even here for Sanskrit names and words just as a very few names of places are written in Tamil in the Sanskrit portion. The writing clearly belongs to the late ninth or nearly tenth century. The plates are strung on a ring with a seal bearing the emblems of two fish (Pandya) along with the tiger (Chola), and the bow (Chera) on a smaller scale and the legend in anush-tup verse reads.

*Samasta Vasudha dhiso Cudaratanamsura jisu
Sasanam Jagati bhartur idam Jatilavarmanah*

The most notable new fact we get from these plates is that the Pandya Sri Mara Srivallabha (815-82 A.D.) had a Telugu Choda queen by name Aggalanimmati; by her he had the son named Parantaka Viranarayana who issued this grant in his forty-fifth year. Srimara's father-in-law is called Srikantha, who is called the nephew of the victorious Manabharana, the chief of Tondiyar; Srikantha is also described as Mayilaiyar Kon and Pottappikulachola. The title of the nephew, Lord of Mayilaiyar; Mayilai is Mylapore beyond doubt, shows that the uncle was Tondaiyar Kon, Lord of the Tondaiyar, people of the Tondaimandalam. This important new fact explains, I think, the big gap that has long been known in the reign of the Pallava king, Dantivarman (796-846 A.D.) whose inscriptions are not found between 817 and 845; between his twenty-first and forty-sixth regnal years. So it seems that for about three decades, the heart of the Pallava country had passed under the occupation of the Telugu-Codas; their neighbours to the north-west; neighbours are natural enemies according to our traditional, political philosophy and according to that rule the Pandyas were also the enemies of the Pallavas, and the

two enemies joined together and contracted the dynastic alliance. The Pallavas obviously suffered a great loss of their power as a result, and the Telugu-codas occupied much of their territory during the part of Dantivarman's reign. The situation was redeemed by the martial ability of Dantivarman's son Nandivarman III who won a decisive victory against his father's foes at Tellaru in Wandiwash taluk of North Arcot district, sometime about 846 A.D. Till now it was a puzzle why a battle between the Pallava and Pandya should have taken place so far north; now we see the reason in the occupation of Pallava territory by the Telugu Codas and in the dynastic alliance between them and the Pandyas by the marriage of Srimara Srivallabha to the Pandya Aggalanimmati. The importance of the battle of Tellaru was long known because in his inscriptions Nandivarman III is very often called the 'Nandivarman' who gained the throne by his victory at Tellaru'. The *Nandikkalambakam* informs us that this victory was followed by a Pallava invasion of the Pandya country and that this invader reached their capital city of Madurai on the banks of the Vaigai river.

Historical records

Another fact of importance is the statement that the grant was issued by Viranarayana in his forty-fifth year when his elder brother Varagunavarman 'was ruling the world thinking always of the god Pinakapand who bore the young moon in his matted locks', viz., God Siva. This at once reminds us of the story of the friendship between Manikkavasagar and Varagunavarman, and goes far to confirm a date in the ninth century for this celebrated Saiva saint. But this is not the whole truth about Varagunavarman, and there is much evidence, literary and epigraphic, to show that he took active interest in politics and had close personal relations with Nandivarman's son Nripatunga. There are also references to rival Pandya princes who fought against both Sri Mara Srivallabha and his son Viranarayana, and our record also says that Viranarayana defeated an elder brother of his in battle. These data may be interpreted in different ways, but I cannot attempt to discuss them here. Our copper-plate is important in other ways also for the administration, economy, and literature of the time. But I have said enough to show the importance of the search for and study of such historical records for our understanding of the past; and this work can proceed satisfactorily only if public interest in it becomes much more active than it has so far been. Small local associations created round colleges and schools can find scope for much interesting and useful work in this line, viz., the collection and study of historical records, and also their safe preservation in a common centre like the Madras Record Office.

—Courtesy: A.I.R.

Problems of Adolescence

Adolescence is a critical period in man's life. The future of a country is bound up with how the growing man hood and womanhood are guided, directed, controlled and trained during their most impressionable period. The problems of adolescence in India to-day, are more like what the advanced countries faced many decades ago. We had the examples of these advanced countries like America and England before us. We can adapt the various solutions tried by them and found effective as "prophylactic" in our country to forestall undesirable developments before it is too late.

Teen-age is strictly the period from thirteen to nineteen years which end in "teen" but the word is used here more to indicate the third stage in human growth after infancy and childhood, a stage of adolescence before full adulthood and the later mature years. This is the age of growth, physical and mental, of preparation for manhood and its duties by observation, education and training and covers the period spent by the fortunate ones among them fully in schools and colleges.

Teenagers from that part of the people of any country or race which, in a matter of few years more, would form the bulk of its active citizenry. It is only obvious that if adequate thought is not given to them at that stage, the country is bound to leave its fortunes to chance, and instead of a well-equipped, well-trained and well-disciplined body of citizens, they would be more like the flora and the fauna in a forest growth each plant vying with the others for room and light and each animal living in constant antagonism with the others striking a low balance of growth and development.

Formative Period

There has always been controversy as to the year by which the formative period of a child is fairly complete. It is supposed to have been an old saying that within the first five years, a child's habits and way of thinking and acting are set. In this connection the following striking observation of Mahatma Gandhi is relevant:—

"We labour under a sort of superstition that the child has nothing to learn during the first five years of its life. On the contrary, the fact is that the child never learns in after-life what it does in its first five years."

It is common experience that during the teens, a boy passes through the most critical stage of his career. Till then he is practically within the fold of his family except among the poorest of the land, going to school and spending the best part of the day among boys of his age and million following the tradition and the routine of the school. Now he sees more of the outer world. His curiosity is roused, his physical and other abilities grow daily, his mind opens out to new horizons and new vistas. He hears of what his immediate seniors have done and very often he is told what his parents and friends expect of him. His aspirations are kindled and his desires are roused and he forms high ideals and ambitions to excel others and show himself up as superior to them all. He takes great interest in his personal looks and clothing, becoming conscious that he is growing to be an important entity and according to environmental influences and the examples of others, he forms in his mind certain objectives which he wishes to reach. He becomes keen to secure the esteem of his colleagues the approbation of his teachers and parents and wishes to secure the leadership among his comrades. This is also the period in which he proceeds, as it were through a screening operation. If he has not the fire within him, he drops either into the middle of the herd in which on all sides he is contained and well-protected or drops on the way as a casualty.

Cause of Ambivalent attitude

General experience shows that while influences at work during infancy and the childhood do have great power for good or evil in moulding a child, the teenage

period offers an impressionable stage at which the results of these influences can be countered or corrected and a boy's future assured. Many a mischievous youngster turns out to be an active person directing his energies towards profitable and constructive directions acquiring distinction in different fields. But if neglected during that period or exposed to bad weather and undesirable influences he may tend to become sullen and dull and steadily lose his enthusiasm, zest for life and interest in improvement and fail in the race of life.

In this atomic age, a boy in his later teens in India studying in College, is often puzzled by the spectacular advances made by the Western countries and the Soviet Union on the one hand and the miserable scenes of poverty, disease and illiteracy in India on the other. He finds it difficult to reconcile the well-known religiosity of his countrymen with the (seeming or apparent) lack of any tangible reward. But he also learns that Europeans, Americans and Russians who are not apparently religious enjoy a much higher standard of living. This brings about a gradual loosening in feelings of piety on the part of some University students in our country, an irreverence towards spiritual values or at least an ambivalent attitude towards life, if not a positive leaning towards atheism.

On the increasing complexities in Urban centres such as Calcutta, Madras and Bombay, children do not get the constant watch, attention and guidance from the parents, the family and the community as obtained in the past and still obtains in villages. Children particularly of the poor classes do not attend schools and are left uncared for. Many of these vagrant boys are picked up by clever and unscrupulous criminals who teach them to pilfer from railway stations and yards or turn them into pick-pockets or initiate them into more advanced criminality. Girls could be and have also often been used for worse.

Although, the incidence of juvenile crime in our city and the country is not yet near so big as in the industrialized West, enough signs and portents are already noticeable in India, to justify an early collaring of lop-sided adolescent exuberance. We have to learn from the mistakes as well as the progress made by Westerners. And the guiding principle in this is, of course, "Prevention is better than Cure."

In advanced Countries

The subject of "Teenagers" or adolescents has received considerable attention in advanced countries and there is quite a large volume of literature particularly in England and America where the special significance of this stage in the life of a person has been fully

appreciated and serious thought given to it. The importance of making field studies to have authentic information in the problem so as to correctly assess its size and its needs has been duly recognized by them and such studies have been made and action taken on the basis of such studies.

Despite the race for mechanisation for prosperity and affluence, the real progress of a country does not rest on the machines, but on the men they make them and the men that work them and even more on the men that can make better machine and work them better. Adolescence is a critical period in a man's life. And the future of a country is bound up with how the growing manhood and woman-hood are guided, directed, controlled and trained during their most impressionable period and helped in their self-development and their capacity for furthering economic growth imbued with a spirit of service to the country.

There is at present a large gap in our way of planning for the development of the largest potential wealth of India, viz., its manpower in the critical period of its growth. Our attention should, therefore, be directed towards the teenagers—both boys and girls—to find out how they are utilizing their leisure time.

Telling the Teenager

Mrs. Rose Hacker's book entitled 'Telling the Teenagers' a book which, to quote Mr. Hugh Lyon from his foreword, is the worthy fruit of so much knowledge and experience. As is said therein, the problem of teenagers is the most intractable problem and she had chosen it and made a frontal attack upon it. From fifteen to eighteen, only a small fortunate minority are still attending schools. All other teenagers inhabit that 'untouched' area where the discipline of schools give way to the freedom of shop or factory, where the strict home becomes irksome and the lax home reaps the harvest of its negligence, where the church or club make but limited and largely ineffectual headway. Still children in body and mind, with an outlook varying from complete ignorance to precocious sophistication, these young people are thrown into an adult world, where they are subjected to every kind of questionable influence from without and unregulated impulse from within. The younger child has protectors, the adult a measure at least of self discipline and good sense. But what of those who are neither? As Keats said in his famous preface to *ENDYMION*, the imagination of a boy is healthy, and mature imagination of a man is healthy, but there is space of life between in which the soul is informant, the character undecided, the way of life uncertain, the ambition thick-sighted. It is of those young people and their problems that Mrs. Hacker has written.

"Our successors may one day regard our failure to deal wisely with this turbulent age-group as one of the gravest blots on our civilization. Fine work is being done by thousands but the workers themselves are the first to admit how small a proportion of the youngsters they want to help come within their range. It is the old story of preaching to the converted. Yet advance is it since the first beginning of most forms of social service, we perhaps take heart. Those like Mrs. Hackers who are spending so many devoted hours in work which often must seem unavailing may one day be looked back to with the respect due to all doughty pioneers, some day we may even read without a guilty conscience the words of the Russian Philosopher "When we see children we say here are princes. But where are the kings."

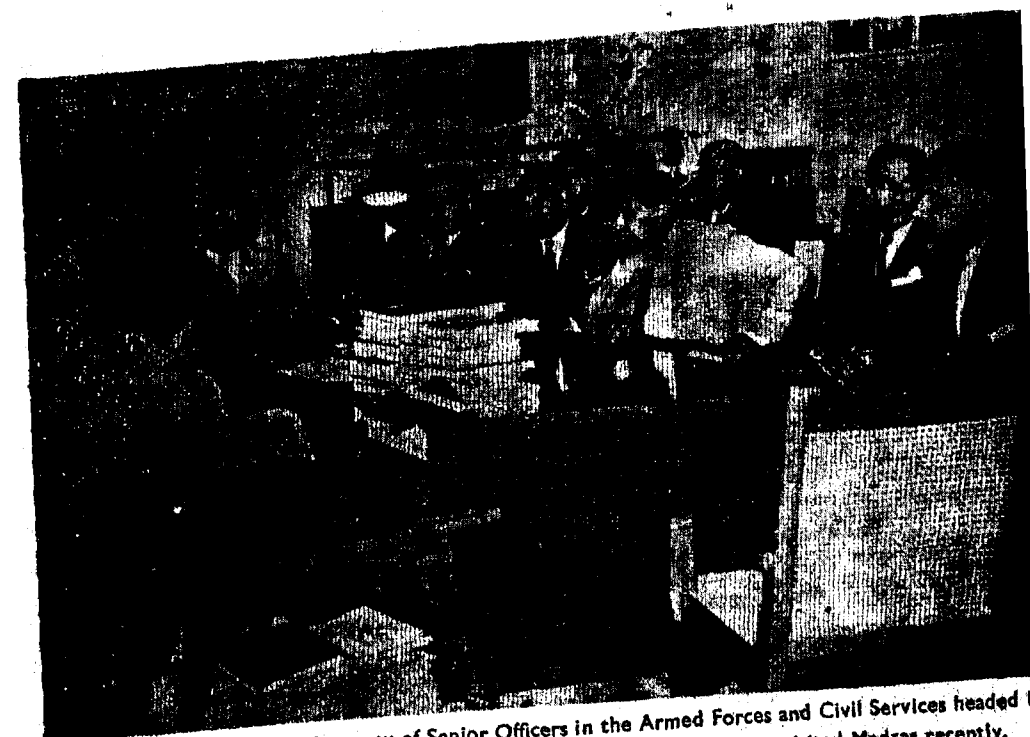
This book was published in 1957 and the reports contained therein relate to a state of things in an advanced country, England. It might perhaps afford us some

(From the Study of Leisure-time activities and needs of teenagers and University Students sponsored by the Indian Conference of Social Work, Madras Branch.)

comfort that our problem has not reached that intractable state but it will be cold comfort indeed as the march of history in all countries which speed towards industrialization has shown. We will soon be in such a stage if we do not propose to be alert and vigilant and take precautionary measure betimes.

Forewarned is forearmed

The problems of teenagers in India, today, are more like what those advanced countries faced many decades ago and what is in store in the future for the less-developed peoples. As was pointed out pertinently by an eminent writer, "England and America had no precedents and had to grope in the dark", but we have their examples before us and it is up to us to benefit by their experience. We can adapt the various solutions tried by them and found effective as "prophylactic" in our country to forefend undesirable development. Here too, as in others, "Forewarned is Forearmed."



Sri M. Bhaktavatsalam with the party of Senior Officers in the Armed Forces and Civil Services headed by Sri J. N. Goyal from the National Defence College, New Delhi when they visited Madras recently.

Preserving Antiquities



Chemical Conservation Laboratory at the Government Museum

BEFORE



AFTER

SRI N. HARINARAYANA, M.A., B. SC., (Tech.),
Curator, Chemical Conservation, Government Museum, Madras.

Objects which have come down to us from antiquity are precious because they are materials that recapture to us our past and tell us about it. Besides if they are artistically superb, they are all the more invaluable, and we wish to preserve them more carefully. When this caring is scientifically done, it goes by the name of Chemical Conservation.

Nearest home, in Madras we have such a Chemical Conservation Laboratory at Government Museum, Egmore, for scientific caring of our precious antiquities.

This Laboratory was organized in 1930, the Government Museum at Madras being the first Museum to organize a Laboratory of this kind in India. As far back as 1931, when few museums had Chemical Conservation Laboratories in India, this Laboratory was set up for conserving the antiquities and arts objects in the Museum. The idea for the Laboratory was first conceived by Dr. F. H. Gravely, Superintendent of the Museum, between 1920-40. He realised the danger

imminent to bronzes from corrosive salts which encrusted the objects and continued to eat into the metal. The collection of South Indian bronzes, renowned for their art and antiquity, is the best anywhere, and naturally it was considered wrong to let them slip into shapelessness through chemical decay. After some experimental work and much consultation, this Laboratory was set up in 1930 and Sri S. Paramasivan appointed to be in charge of it. A most elaborate equipment for the electrolytic restoration of bronzes was installed. The idea behind this treatment is to strip the bronzes of the corroding and ugly crusts of salts and sandy materials by subjecting them to the action of hydrogen generated when a current is passed through a 2 per cent solution

of caustic soda in water. This is a most elegant way of ridding of bronzes of ugly encrustations and revealing the artistic workmanship in them.

Objects of other materials too came to be treated. Wood carvings were cleaned of tarry deposits which defaced them. Stone objects were rid of salts which broke up their surfaces and blurred the artistic details. Leather shadow-play figures were saved from embrittling dryness by being given protective coatings. Rusted swords and other arms of iron were freed of rust and protected from further rusting.

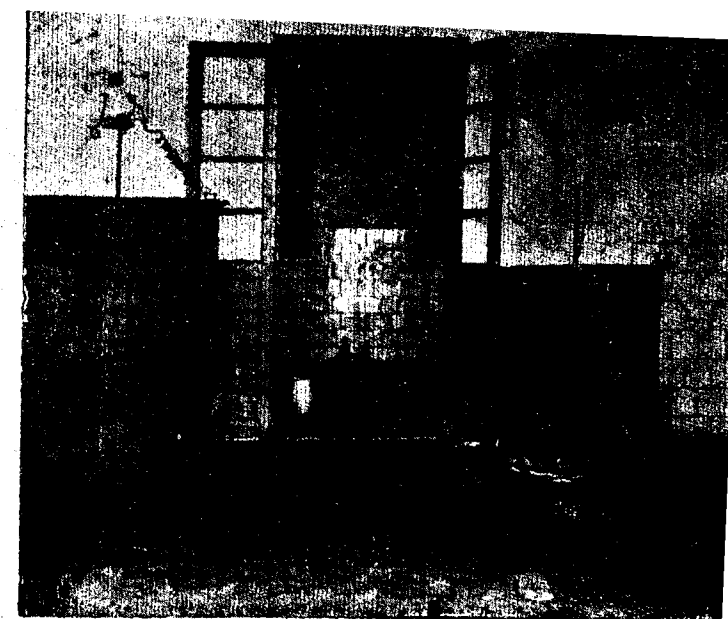
Besides the services of the chemists of the Museum were availed of for the study of the technique of Indian wall paintings as well as the treatment of such paintings, especially the famous ones at Sittannavasal. It was valuable work all the way which gives us an insight into the techniques and materials used by Indian painters of antiquity.

Expansion

The expansion of the scope of the Laboratory through the years, the expansion of the scope of chemical conservation itself to include the study of techniques



Extension to the Chemical Conservation Laboratory of the Government Museum opened in 1963.



Electrolytic Cells in the Laboratory for Restoration of Bronzes.

of artists and craftsmen in the past, the impact of developments in the other scientific field—all these made it necessary that the facilities of the Laboratory be increased to take in the larger amount and the greater range of work presenting itself as years rolled by. This expansion was realized through grants given under the Third Five-Year Plan. A new two-storeyed building was constructed in 1962. It was furnished and some more equipment obtained for the laboratory by 1963. The new building was formally thrown open on September 16, 1963, by the then Governor of Madras, Sri Bishnuram Medhi. Since then more equipment has been added and more is being obtained.

This new expansion of the Laboratory has been effected in three aspects. First, the facilities for conservation of materials have been increased. A rectifier unit has been added to strengthen the electrolytic side. A vacuum impregnation apparatus has been ordered for consolidating fragile objects of wood, bone and ivory.

The chemical analysis section of the Laboratory has been broadened. Equipment like an air oven, a water still, an air compressor, a gas plant have been added. A conductivity meter and a thermomagnetic stirrer have also been purchased. A Zeiss Spectrophotometer has been ordered and will be supplied shortly. Besides, great deal of Laboratory glass apparatus has been acquired.

Scientific examination

But it is the third aspect of this expansion that adds a new dimension to the value of the Laboratory for chemical conservation. This is the provision of facilities for scientific examination of antiquities. Towards this end an X-ray equipment has been purchased. It is the Contact and Cavity Therapy apparatus supplied

Wood Carving Before Treatment.

Wood Carving After Treatment.

by Phillips, Limited that can be used for taking radiographs of paintings. Already the equipment has been installed and a few experimental radiographs of paintings taken successfully. Ultra-violet and Infra-red ray equipment have been obtained for the study of antiquities under these radiations which bring to light numerous facts about the condition and hidden details of the objects themselves. Two Zeiss microscopes will be soon added that would help us to study the surface of the objects and learn many things about

them. There is also an air-conditioned room Laboratory for keeping antiquities under conditions of temperature and humidity during course of their being treated chemically and restored.

All these new facilities make this Laboratory (which was long ago a well-equipped one) one of the best of its kind for looking after the well-being of antiquities and objects of art that are the very stuff of great cultural heritage.

[The author of the above article is now working as Assistant Chemist, Salarjung Museum, Hyderabad.]

Womens' Education

That elementary education for girls should be made free even in those areas where it was still on a fee-paying basis, was one of the most important recommendations made by the National Council for Women's Education, at its seventh meeting held recently.

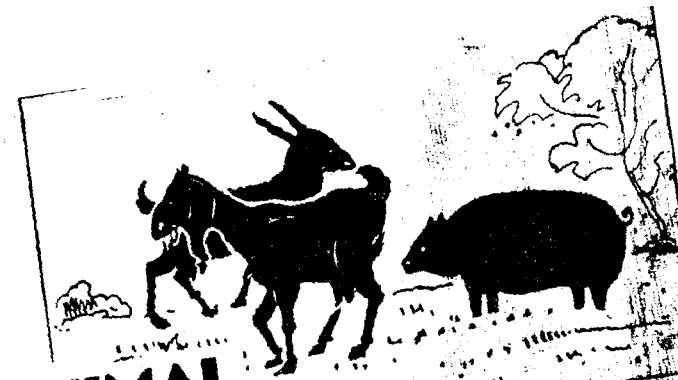
The Council recommended that steps should be taken in such areas to provide primary education on universal basis by the end of the Fourth Plan at the latest.

The Council urged upon the State Governments and the State Councils for Women's Education the need to set both financial and physical targets for education on an annual basis separately for boys and girls at the State, District and Block level for the Fourth Plan period. Separate financial allocations and physical targets should be shown for girls' education in the Primary, Middle and High School stages.

As regards part-time training and employment of women, the Council recommended more attitude surveys with particular emphasis on study of their differences in the attitude towards part-time employment vis-a-vis their educational attainment and vocational training and their attitude towards part-time employment as teachers.

It also recommended relaxation of the normal P.W.D. building standards of Central and State Governments in order to make it possible to construct inexpensive buildings for schools and hostels and teacher's quarters. Establishment polytechnics for girls by the voluntary organisations with special financial assistance from the Government of India during the Fourth Plan period.

The Council recorded its appreciation of the work done by the Bakthavatchalam Committee for its report on the causes of lack of public support, particularly in rural areas, for girls' education.



KATTUPAKKAM ANIMAL HUSBANDRY CENTRE

SRI V. A. VASUDEVARAJU, M.A.,

Lecturer, Extension Officer's Training Centre, T. Kallupatty.

The need for expanding the production of supplementary and subsidiary foods, especially of animal origin, has been increasingly realised in recent years. With increase in population and rise in incomes the demand is likely to increase rapidly in the coming years. The prospects of augmenting the supply of protein foods of animal origin depend ultimately on progress in the development of animal husbandry.

Development of Animal Husbandry is envisaged as an integral part of a sound system of diversified agriculture. Integration of animal husbandry with farming is essential for the fuller utilisation of farm by-products, maintenance of soil fertility, fuller employment throughout the year and increase in rural incomes. Development of animal husbandry suffered serious limitations such as the large proportion of uneconomic and surplus cattle, deficient nutrition, shortage of breeding varieties, shortage of trained personnel, etc., in the First and Second Plans.

One of the main bottlenecks affecting the progress of developmental efforts in animal husbandry is the limited number of high class specimens of animals available in the country. 'Well defined breeds' are available only in limited areas. Over large parts of the country the animal wealth is 'non-descript' and do not belong to any defined breed. To improve the local stock in different parts of the country the Indian Council of Agricultural Research has drawn up the All-India Breeding Policy which has been accepted by the Central and State Governments.

Kattupakkam Sheep Farm.

Veterinary hospitals and dispensaries, Artificial Insemination Centres, Key Village Blocks, Cattle Farms

and Poultry Farms were given due importance in the first two Plans. But the starting of Sheep Farm gained much significance in the Third Plan. Fifty Sheep Farms are sanctioned in the Third Plan for the whole country.

The Kattupakkam Sheep Farm 25 miles from Madurai on the Southern Grand Trunk Road, is an emerging centre of animal husbandry which is developing as Extension and Research Centre in the State. It is interesting to find that, what was only a reserve for a few years ago is now being transformed into an important research centre. The Sheep Farm is situated on an area of 593-67 acres of forest area which was transferred to the Animal Husbandry Department in 19

Animal Husbandry at KATTUPAKKAM



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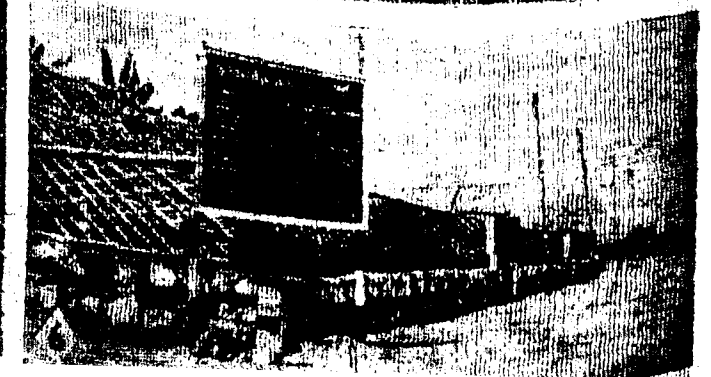
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1. Entrance of the Farm.
- 2 & 3. Views of the farm land before and after reclamation.
4. Seedlings Section.
5. Yorkshire Sow with Piglets.
6. Flock of Mandya Sheep.
7. Sheep Sheds.

for starting the Farm. The Department can rightly feel proud of its achievements in the Farm as a result of sustained efforts in the past five years.

Objectives

The objectives of the Sheep Farm are—

- (1) To study the potentiality of the Nellore type of Madras sheep for meat and skin production ;
- (2) to explore the possibilities of obtaining superior hybrids by cross breeding and evolving new breeds ;
- (3) to study the production capacity of Bannur (Mandya) sheep under local conditions.

Pure breeding of Madras Red breed, pure breeding of Bannur sheep, cross breeding of Madras Red with Bannur Rams, evaluation of the meat yield of Madras Red and the Cross breed of Madras Red and Bannur Rams are the technical programmes undertaken in the Sheep Farm. These programmes form part of the ICAR schemes of developing the mutton breed of sheep.

The foundation stock of 300 sheep consisting of Mandya, Mecheri and Ramnad varieties and Madras Red were introduced in the Farm in October 1968. The total stock held in the Farm was 671 at the beginning of 1965 excluding sales. The local sheep fetches only Rs. 60 per pair when sold for mutton purposes ; a single Mandya sheep commands a price of Rs. 100 in the market. The skin of Madras Red has got good value and export market. Hence, the Sheep Farm is exploring the possibilities of evolving and developing a cross breed of Mandya and Madras Red Sheep so that the farmer could be assured of a good price both for mutton and skin. It is, indeed, heartening to note that the Department is taking necessary precautionary steps in collaboration with the Central Leather Research Institute that the quality of the skin is maintained in the 'dual purpose' breed evolved in the Farm. The efforts of the Farm have taken a definite shape in respect of cross breeding and has commenced the slaughter of sheep to evaluate the mutton value to find out the results of research in this promising experiment.

The Sheep Farm is also supplying Mandya Rams and Nellore Rams to local breeders through Panchayat Unions for upgrading the local stock. All the sheep are weighed once a month and the weights are recorded. Except lambs below four months all other sheep are dosed with phenothiazine to eradicate internal parasites. They are fed with concentrates which consists of a mixture of groundnut-cake, wheat bran, crushed horsegram, salt and mineral mixture. Each animal gets a quantity of 240 gms. per day. During mating seasons

rams are fed with 226 gms. of germinated horse-gram in addition to the usual concentrates. The sheep are grazed for 6 to 8 hours a day. In the evening all sheep are fed with cut greens and lucern when available in the farm. Proper care is taken to cull the sheep of poor growth and suffering from diseases.

Pig breeding too

In addition, the Farm has also taken up pig breeding since 1960. Intensive development in this industry can make a material contribution towards raising the economic levels of several groups among the weaker sections of the community. The objective of the Farm in breeding pigs is to supply boars and sows to the Piggery Development Blocks and other interested piggery breeders in the State to grade up the local indigenous stock of pigs. A total number of 221 pigs of Yorkshire breed—famous for early maturity, efficiency in feed conversion and high quality pork production—and Yorkshire graded and Berkshire graded pigs were the stock held in the Farm at the beginning of 1965. During the period 1962-64 about 420 pigs of these varieties were sold to the breeders in Piggery Development Blocks. The boars are supplied at a nominal cost of Rs. 10 to the breeders.

Development of grazing areas and production of fodder are also given due importance in the Farm.

In March 1964 only about 33 acres of the area was under cultivation. By the end of 1964 about 160 acres of the area were reclaimed and made fit for cultivation out of which 82 acres were actually brought under cultivation. Perennial grass varieties are grown in 5 acres of land. Annual and seasonal fodder crops are grown in 12 acres and 10 acres are used for leguminous crops. Annually an average quantity of 50,000 kg. of green fodder is produced in the Farm in addition to 10,000 kg. of silage and 8,000 kg. of dry fodder. The Agricultural staff are carrying out experiments to find out the increase in yield by using the different varieties of farm yard manure and the chemical fertilisers in demonstration plots. This experiment is conducted in respect of Lucern, Pusa Giant Napier and Guinea Grass and the results are awaited.

The article on "Fisherman Co-operatives in Madras State" published in the last issue of Madras Information was written by Sri A. P. JEGARAJ, B.A. (hons.) Deputy Registrar of Co-operative Societies (Fisheries).

The visitor is much impressed by the systematic running of the Farm. The approach to the Farm and its atmosphere are quite pleasing. Self-explanatory sign boards enable the visitor to know the work done in different sections while on round. Well laid up road in straight lines planted with revenue yielding trees on both the sides speak of the foresight with which the layout is planned. Commendable efforts are being made to convert more and more of the forest area into grazing lands. It provides a natural setting for the animals while grazing. The road to the small hillock is an attraction in the Farm. Standing at the top of it and comparing the southern part, where reclamation work is going on, to the northern part in its original state would make one realise the transformation that is taking place in this vast stretch of land. Availability of labour and lack of adequate supply of water are the twin problems faced by the Farm at present. With a few more wells, available

for irrigation in future, the Farm would be in a position to produce more of fodder and also develop a nursery and prove to be a good example of mixed farming.

The Director of Animal Husbandry and other technical officers of the Department are taking keen interest in the development of the Farm. With the Poultry Marketing Scheme and Central Hatchery Units in its campus, the Kattupakkam Sheep Farm is full of potentialities and it definitely occupies an important place in the Animal Husbandry map of the State. Being near to the City it enjoys all the advantages. It is becoming a popular extension centre of 'Improved Practices' in Animal Husbandry and it is sure to attract the visitors in large numbers. The benefits to the people of surrounding areas, as a result of the development of the Farm, is increasing day by day.

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81

*Madras
Informative*

MAY 1965

NEHRU NUMBER

VISITORS FROM ABROAD



A party of American Farmers toured Madras State as guests of Farmers' Forum, Madras. The Director of Agriculture (centre) is also seen in the picture.



His Excellency Dr. Zake, Education Minister, Uganda visited Madras recently. He is seen with a Cultural Troupe at Kalakshetra, Madras.

M. K. G. Kelsinger, Chief Minister of Baden Württemberg, West Germany at the Industrial Estate, Guindy, who paid a visit recently to Madras.



The Honourable J. M. Angaine, Minister of Lands and Settlement, Kenya, at the I.C.F., Perambur, Madras.



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CITIZEN'S DUTIES

1. To render all possible help and assistance for the defence personnel.
2. To increase the production of his factory.
3. To intensify efforts for increased production of agricultural and small-scale industrial commodities to make his State self-sufficient.
4. To avoid all strikes and lock-outs that may hamper production.
5. To maintain the price level of all essential commodities and curb the tendencies of hoarding and profiteering by conforming to the various legislative and other popular measures.
6. To maintain the supply lines of essential commodities.
7. To contribute generously in the form of money and gold for the war effort.
8. To inculcate the highest sense of duty and responsibility.
9. To join the various organizations set up for the defence of the country.
10. To prevent anti-social and anti-national activities of the fifth columnists.
11. To observe strict austerity in consumption of food, clothes and other essential goods and save for the National Defence Fund.
12. To avoid unnecessary travel so that more important and essential movement may not be hampered.
13. To keep up the morale of the people and prepare them for sacrifices.
14. To check rumour-mongering and to disseminate true and faithful news and information.
15. To join or help Citizens' Committee, N.C.C., Territorial Army and Lok Sahayak Sena and Rifle Clubs.
16. To pray for the victory of our Motherland in this struggle and set aside all differences of caste, creed or party.

MADRAS

Information

Vol. XIX

MAY 1965

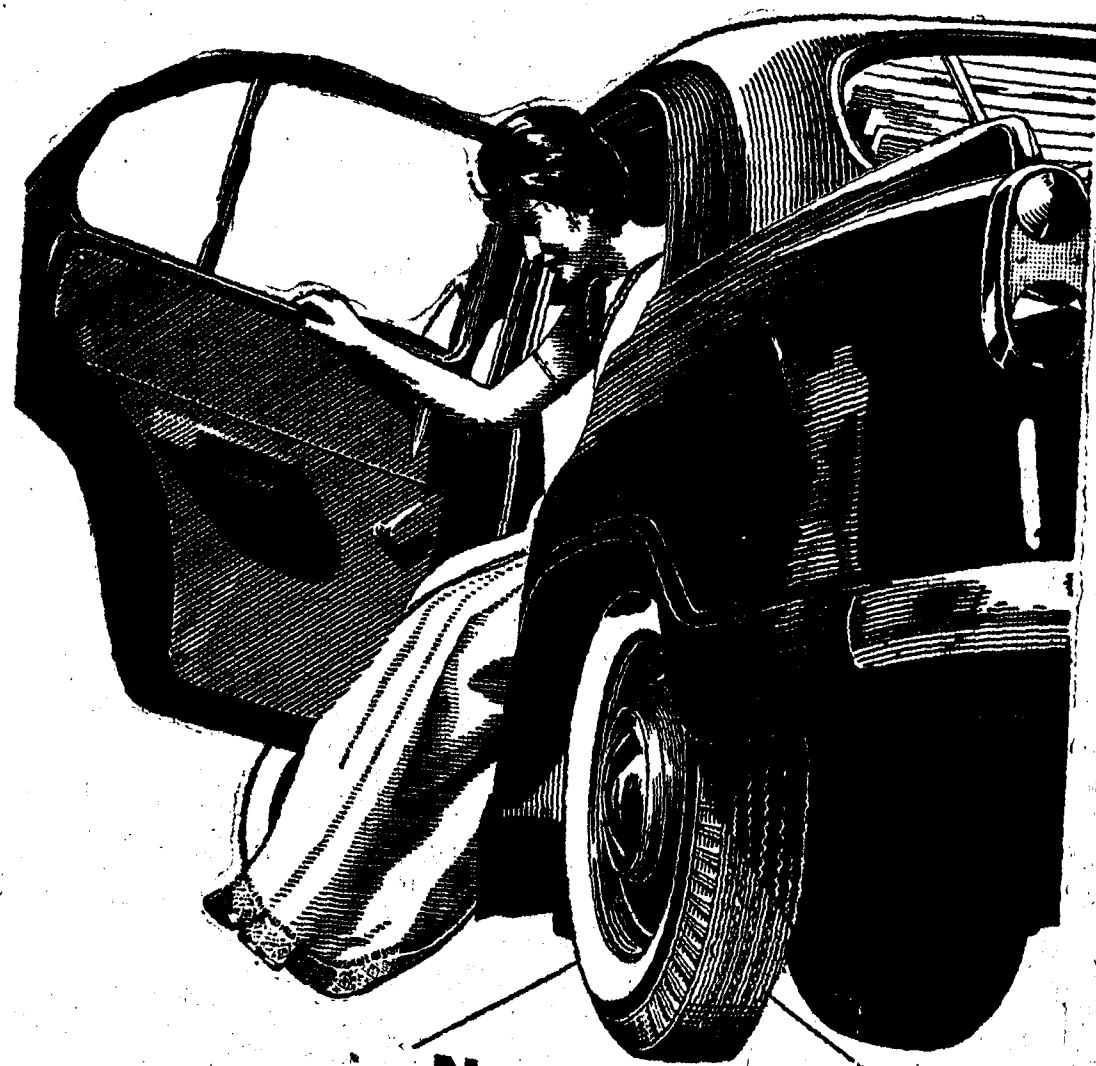
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THIS MONTH'S COVER:

When, on the 27th of May, India pays its homage to the memory of Jawaharlal Nehru, the maker of modern India, it does so with a pledge that it will strive hard to carry forward the great economic revolution which he initiated. On this day, every Indian will rededicate himself to the service of the country and resolve to defend her borders against aggressors and work hard in the fields and factories to make the meaning of freedom real and purposeful.



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JULY 1955-56

THE GREAT NEHRU HERITAGE

Jawaharlal Nehru has dedicated his life for the liberation of India and for its onward march so that his countrymen may lead a happy and contented life. The following article has been compiled from his writings and speeches in which an attempt has been made to present his ideas and policies for his country men.

We inherit this whole past of India with its glory and its failures. We are part of it; we cannot, and must not, deny it. We have to live in the present and mould the future. That duty and high task are especially cast on the young men and women of today. They will have great burdens to carry and great difficulties to face. But will also have the chance of high adventure and great living, for great living comes by attachment to great causes. They will have to fight the many evils that beset us and narrow us and make us unworthy of this adventure—The evils of religious conflict and bigotry, of provincialism, linguism and casteism. There is no hope for us if we allow those disruptive tendencies to influence our national life.

National Heritage

A nation does not die. Men and women come and go, but the nation goes on. It has something of the eternal about it.

Nothing is more advantageous and more creditable than a rich heritage; but nothing is more dangerous for a nation that to sit back and live on that heritage. A nation cannot progress if it merely imitates its ancestors; what builds a nation is creative, inventive and vital activity.

I am quite convinced that, if we adhere to the right course and do not stray from it, even from the opportunist point of view of some present advantage we shall win through, and any country that bases its case on an essential falsehood cannot gain its ends.

Let us tread the path of truth and dharma.

1A

Democracy, as I understand it, means something more than a certain form of Government and a body of egalitarian laws. It is essentially a scheme of values and moral standards in life. Whether you are democratic or not depends on how you act and think as an individual or as group.

Meaning of Democracy

Democracy, if it means anything, means equality; not merely the equality of possessing a vote, but economic and social equality.

Democracy demands discipline, tolerance and mutual regard. Freedom demands respect for the freedom of others. In a democracy changes are made by mutual discussion and persuasion and not by violent means.

We prize the parliamentary form of Government because it is a peaceful method of dealing with problems. It is a method of argument, discussion and decision, and of accepting that decision, even though one may not agree with it. However, the minority in a Parliamentary Government has a very important part to play. Naturally, the majority, by the mere fact that it is a majority, must have its way. But a majority which ignores the minority is not working in the true spirit of parliamentary democracy.

The democratic apparatus is ultimately good even from the point of view of war, provided the apparatus and everything else is not swept away at the first rush. We can be sure that it will not be swept away. Therefore,

SIGN OF LIFE

The fact of our isolation from all the other nations of the world is the cause of our degeneration and its only remedy is getting back into the current of the rest of the world. Motion is the sign of life.

—Swami Vivekananda

It becomes a question of utilizing people's enthusiasm in a democratic manner with such limitations as war imposes upon us and directing it to defend the country. We have to think from a long-term view. It should not be a case of losing our breath too soon. We may have to run long, long distances, and we have to carry on with determination and with fortitude for a long, long time.

Socialism

The only key to the solution of the world's problems and of India's problems lies in socialism, and when I use this word I do so not in a vague humanitarian way but in the scientific economic sense. Socialism is, however, something even more than an economic doctrine; it is a philosophy of life and as such also it appeals to me. I see no way of ending the poverty, the vast unemployment, the degradation and the subjection of the Indian people except through socialism.

We have accepted socialism as our goal not only because it seems to us right and beneficial but because there is no other way for the solution of our economic problems. It is sometimes said that rapid progress cannot take place by peaceful and democratic methods. I do not accept this proposition. Indeed, in India today any attempt to discard democratic methods would lead to disruption and would thus put an end to any immediate prospect of progress.

Our ideal is a socialist pattern of society in India. Our ideal is that every man, woman and child in India should have equal opportunities, and that big disparities should go. It is not an easy objective, because it means improving the human being by training, education and in a hundred other ways. Socialism depends on how we organise our own system of sentiments and thinking, how we act towards our neighbour and how we develop our capacity to work together. Socialism implies co-operation and removal of barriers. The main thing to remember is that we have to bring about the changes by peaceful and co-operative methods

The question before us is how to combine democracy with socialism through peaceful and legitimate methods. That is the problem India has set before itself. We cannot achieve it by any compulsion or coercion. We have to win the goodwill and co-operation of the people.

Planning

The re-making of our country is a great theme and we are engaged in a tremendous task which requires not only all our united effort but united effort with enthusiasm and crusading spirit.

We ultimately want better human beings. We want our people to have greater opportunities, not only from an economic or material point of view, but at other levels also.

I believe in the rapid industrialization of the country, and only thus, I think, will the standards of the people rise substantially and poverty be combated.

An integrated plan for the economic growth of the country, for the growth of the individual, for greater opportunities for every individual and for the greater freedom of the country, has to be drawn up and drawn up within the framework of political democracy.

The ultimate aim is to put an end to the differences between the rich and the poor, between the people who have opportunities and those who have very few or none. Every obstacle in the way of that aim must be removed, whether it is in a friendly and co-operative way or by State pressure or by law. Nothing should be allowed to come between you and the achievement of that social objective.

A plan of this type does not merely mean establishing a number of factories or increasing production in some instances. That of course, is necessary but something with a deeper significance, something that aims at the gradual development of a particular structure of society, has to be achieved.

Emotional awareness

Planning will help us in having an emotional awareness of our problems as a whole. It will help us to see the isolated problems in villages or districts or even provinces in their largest context. Therefore the mere act of planning, the mere act of having approached the question of progress in this way and of producing a report of this type is something on which we might I think, congratulate ourselves.

A nation's foremost duty is to strengthen and preserve its freedom. This is the one yardstick to measure every other activity. If we give importance to other things, like our group, our State, our language or our caste, and forget our country, we shall be destroyed. All these have their proper place but if we place our State, our language, our group, above our country, the nation will be destroyed.

The time has surely come when every Indian must look within and ask for himself whether he is with the nation or with a particular group. This is the challenge of our times that every man, woman and child must face.

Political integration has already taken place to some extent, but what I am after is something much deeper than that—an emotional integration of the Indian people so that we might be welded into one, and made into one strong national unit, maintaining at the same time all our wonderful diversity. I do not want this diversity to be regimented and taken away, but we must be wary of losing ourselves in petty quarrels.

Time for Work

There is a time for work and there is a time for play, just as there is a time for laughter and there is a time for tears. And today is the time for work in this nation. For, this generation of ours, if I may say so, is condemned to hard labour.

I want work and work and work. I want achievement. I want men to work as crusaders. I want

men who are going to fight for what they think is right and not submit humbly to wrong. I want you to do big things. I want you to build up India.

The work of a nation or a country is never completed. It goes on and no one can arrest its progress—the progress of a living nation. We have to press forward.

Priceless treasure

What will the historians of the future say? They will record that India produced a great leader, Gandhiji, and he taught the people to work together. He taught them to break down the walls which separated the people from one another. He taught them to uplift the Harijans because it was his desire that everyone, irrespective of his caste, creed or religion, should enjoy equal rights and be free. The people of India rose as one man from the Himalayas to Kanyakumari, threw off some of the burdens from their backs and, under the leadership of the great Gandhi, moved forward and won independence. After centuries, India's star rose in the horizon. Its voice was heard in the councils of the world, because it was the real voice of India. And then these very people of India, who had shown courage and determination, fell into a dream and into carelessness and quarrelled among themselves. Sometimes they fought in the name of religion, sometimes in the name of caste or language or State. . . . We should not lose ourselves in wrong directions. We cannot allow our country to fall. Let not this priceless treasure of our freedom slip through our hands because of our weakness.

PLANNING

I feel that the Five-Year Plans will certainly solve the problem of unemployment. Unless modern techniques are adopted, it would not be possible to feed, clothe or supply the basic necessities to the growing population of our country or of the world. There are also such things as Harijan uplift and development of village industries. All these things are there. But the whole of our Five-Year Plan is a big book. It includes a hundred other things.

—JAWAHARLAL NEHRU

Nehru and Socialism

There is a wide understanding about Nehru's contribution to the theory of Socialism. Much had already been written by eminent writers from different walks of life on Nehru—the Socialist. We had accepted the establishment of a socialistic pattern of Society in India. It would therefore be better to understand the ideas of our great leader Sri Jawaharlal Nehru who had proclaimed the philosophy of Socialism even before independence, at the Karachi Session of All-India Congress Committee, in 1931.

Western Influence

Jawaharlal was attracted towards the philosophy of Socialism from every early in his life. He was profoundly inclined towards this economic doctrine through his study of Marxist philosophy, British Fabian thought, the Russian Revolution and the problem of Indian poverty. His glowing love for his country and its people had made him think of the "terrible cost of not changing the existing order."

But, under the alien rule, he felt that it would be impossible to bring about economic freedom to his country before winning political freedom. Unlike others, he considered political freedom only as a means for the economic and social freedom of the people. Hence political freedom for him was not an end in itself.

He further thought, that if the political freedom was won without any clear-cut idea of leading the country after independence, it would be disastrous. For, he felt, that if the leaders failed to guide the people, the latent energy of the people aroused during the struggle for freedom would go astray resulting in internal conflict. He even went to the extent of posing the question whether in this India, crying aloud for radical and fundamental change, in this World pregnant with revolutionary, and dynamic possibility we should forget our mission and our historic destiny and slide back to static futility. But he never lacked faith in his people.

To quote Sri Nehru himself: "And if some of us feel tired and hunger for rest and quiet, do we imagine that India's masses will follow our lead when elemental forces and economic necessity are driving them to their inevitable? If we enter the backwaters, others will take our place on the bosom of the flowing stream and will dare to take the rapids and ride the torrents."

Idea of Planning

Even as he thought of the Socialistic philosophy as the only way of lifting India from the morass of poverty, into which she had sunk during the past, and shaping her into a modern socialist state, he was also deeply conscious of the need to evolving a proper policy to translate the philosophy into practice. It was this driving force which had urged him to accept the chairmanship of the National Planning Committee formed at the instance of the Congress in 1938 in spite of the apparent difficulties which he had to face. As the fascination of this work grew in him he also became aware of the hard realities which face planning in a country like India. This was an important milestone in Indian Planning.

Again when Sri Nehru assumed the office of the Vice-President of the Interim Government, in September 1946, he had taken two important steps. The first was the appointment of an Advisory Planning Board which recommended the setting up of a Planning Commission. The next was the setting up of a Scientific Manpower Committee which laid the basis for a remarkable advance of scientific and technical education in later years.

Why Socialism?

Socialism has been the watch word ever since we launched upon successive Five-Year Plans after independence. Nehru, through years of experience had evolved his own ideas of socialism; and as he worked

he wanted to give them a practical shape. At one time he said: "Socialism for me is not merely an economic doctrine which I favour, it is a vital creed which I hold with all my head and heart. I work for Indian independence because the nationalist in me cannot tolerate alien domination. I work for it even more because for me it is the inevitable step to social and economic change."

He never wanted to adopt the western socialism blindly. But he was willing to adapt it if possible to Indian conditions and if not to evolve an indigenous one. In the process of the implementation of the doctrine of socialism he ruled out violence. Violence, revolution, and force as a means to socialism long appeared to him as wrong. But he had great faith in the legality of the coercive powers of a democratic State. A representative Government aimed at the welfare of the people perforce has to deal with the antiquated values and ideas.

Greatest good to the greatest number through controlled production and distribution is the aim of a Socialistic State. If anybody stands in the way whether it be an individual or an institution it will have to be removed. And, "Democracy means the coercion of the minority by the majority," he said. However, Nehru had not ruled out the possibility of conversion.

Though he had faith in socialism he was not the one to blame capitalism or capitalists. In his view capitalism has done the greatest service to the world. "The question now is whether capitalist system has not outlived its day and must now give place to a better and a saner ordering of human affairs, which is more in keeping with the progress of science and human knowledge."

Scientific Approach

It is, therefore, evident that, in his thought Nehru laid complete faith in a scientific approach to social problems. He believed in the adjustment between social problems and the forces of time by means of scientific approach. In facing these problems he wanted to follow the way of observation and precise knowledge and deliberate reasoning according to methods of science. In a nutshell, in dealing with the every day problem of life of the people, Nehru wanted to be intensely practical. He will say, "A living philosophy must answer the problems of today."

TRY IT

I am a socialist not because I think it is a perfect system, but half a loaf is better than no bread. The other systems have been tried and found wanting. Let this one be tried—if for nothing else, for the novelty of the Thing.

—Swami Vivekananda

Nehru having thus set his ideas on socialism proceeded to work for a Democratic Socialistic State. He attached greater importance to public sector than to the private sector. Nevertheless he was very cautious towards the private sector. "I would beg of you", he had pleaded on one occasion, "not to imagine that because socialism conceives of nationalised industry, therefore you must have all industry nationalised."

Socialistic Pattern of Society

Cautious though, Nehru's policy, the goal before India is fixed. While speaking in the Lok Sabha, in December 1954, he said: "The pattern of society that we look forward to is a socialist pattern of society which is classless, casteless." The 60th Session of the All-India Congress held at Avadi, in January, 1955, adopted the resolution aiming at a socialistic pattern of society. He defined socialist pattern of society thus: "We mean a society in which there is equality of opportunity and the possibility of everyone, to live a good life," and proceeded to lay great emphasis on removal of poverty first and the achievement of equality second. The Bhubaneswar Resolution of the All-India Congress Committee had again clarified the position regarding the attainment of a socialistic pattern of society.

In conclusion, it may, therefore, be said that Jawaharlal Nehru had, through years of his experience, developed a deep faith in the ultimate success of socialism as the panacea of human ills—poverty and inequality. For him there seemed to be no other way of ending the object poverty, stark unemployment, gross inequality, and utter the degradation and subjugation of the people except through socialism.

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NEHRU

THE GUIDING STAR OF INDIAN DEMOCRACY

DR. S. RADHAKRISHNAN

President of India

Jawaharlal Nehru left an impress on different aspects of our life. There is not one side of life in our country which has not been affected by him. Nations, like individuals, suddenly get a spurt, mobilize their resources, make a new start and determine their future. The last fifty years of our life has been a period of such shattering change. First Mahatma Gandhi, then Nehru. All the principles which developed during the period of the struggle were formulated in our Constitution. We had so many things to do but we tried to do all those things within the framework of democratic institutions. Ever so many countries emerged into independence after the Second World War. But many of them preferred to come under arbitrary and authoritarian rule. There are different kinds of democracy—guided, controlled, basic and popular. We adopted parliamentary democracy, the rule of law and representative institutions.

Guiding Star

Jawaharlal Nehru functioned as the leading member, the guiding star so to say, in the Constituent Assembly in the Provisional Parliament and the Parliament itself. He made this parliament the home of liberty and democratic practices. He attempted to do it and he succeeded to a large extent. He was tolerant even to the intolerant. He never proceeded by mere weight of numbers or majority rule. I remember two graphic instances which occurred in recent times. When the proposition was put forth that the Law Minister should become Attorney-General, it was set aside. When the Eighteenth Constitutional Amendment was proposed, it was taken up for consideration in Parliament; at the first stage it passed through but when he saw there

was so much opposition to it, he dropped it. It shows how responsive he was to public opinion. His mind was not a dogmatic one but an elastic, hospitable one, ever ready to respond to expressions of public opinion.

That these democratic instincts got firmly rooted in our mind is illustrated by the way in which the transition was effected after he passed away—so smooth, so quiet and so democratic. The whole world was stirred deeply by the way in which we effected that transition.

Science and Technology

As a democrat he believed in the importance of the individual. No individual is to be thrown on the rubbish heap of humanity. He must be regarded as significant, as purposeful, and nobody—no State or organisation—should try to suppress the individual. The State exists for the individual, not the individual for the State. That was his cardinal principle.

In ever so many speeches of his, he referred to these things. If you want to give a chance to all the individuals of our country to develop, you have to increase your production, agricultural and industrial. So he adopted science and technology as the cardinal principle which we should apply to the development of our life. Whichever side you go, you see industrial projects, you see colleges of engineering, technology, etc., and you find that a new spirit has come over the country which makes science so important.

He was the Chairman of the Atomic Energy Commission. In a recent book by Beaton and Medox, it is said that Canada and India are the two powers which

are ever ready to become nuclear powers, and in the chapter on China, that book makes out that China in 1963 may make nuclear weapons; but India, if she wishes to do so, can do it faster than China. This is what Beaton and Medox has said. In other words we are adopting the principle of developing our scientific power and energy, but we do not wish to use them for any military purposes. We unqualifiedly declared ourselves to be in favour of developing nuclear energy for the purpose of developmental things.

But the more important thing is not merely scientific achievement but developing a scientific frame of mind, scientific habit of thinking. Many of us are scientists in the class room but when we get back into our own homes, we burn in the fire of superstition which leads to so much fear, morbidity and mental distortion. These things are happening in the rural areas more than in urban areas. These are things which he protested against. He tried as much as possible to remove these superstitious habit of mind and things which have come down to us for ages. Some of them are good habits, some of them are bad habits. Bad habits we have to discard; good habits we have to adopt.

Great lover of Art

He loved children and children loved him. What is the good of loving children if we are unable to give them full scope for use of their surplus energy? If we cannot make them civilised human beings, there is no point in saying we love children.

Jawaharlal Nehru was a lover of beauty, of art. All these things made a deep impression on him and moved him. This world is a blend of laughter and tears. So

Nehru inaugurated the School Improvement Conference at Thekur, Ramanathapuram district in 1959. Here he is seen going around the gifts contributed by the public for the improvement of the schools after the inauguration of the conference.



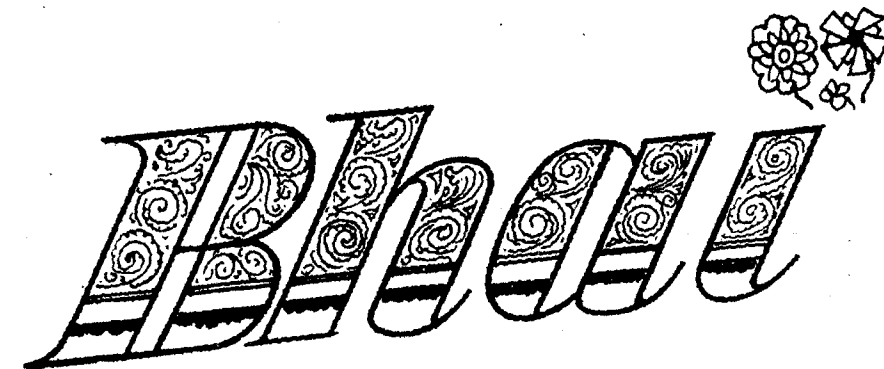
many things in this world give rise to tears. Other things give rise to laughter. We have the great verse which tells us—on one side *veena-vadyam*, on the other side *ha hata ruditam*; on one side pretty women, *nari-ramya*, on the other side, *jara jara vapuh*: broken dilapidated bodies. On one side *vidvad gosti*, assembly of wise men; on the other side *sura matva kalaha*: drunken men; on the other side *amrita maya* or *visha maya*? That is the question. Nehru's attempt was to reduce the visha side, the deadly side of things, to wipe away the tears from men's eyes.

He tried his best to give women a chance of expression, a chance of expressing themselves in this life.

Non-alignment

Most of all, in international affairs, he believed that we are living in a time when even the term Foreign Affairs is irrelevant. In an increasingly inter-dependent world, we are taking global views, world views; we are not trying to take a small view of this or that country. Narrow nationalism is a form of political bigotry. He felt that war is not inevitable nor is peace impracticable. He adopted the policy of non-alignment. What is the meaning of it? Not that we are not committed to anything, we are not isolationist; we do not wish to engage ourselves in this conflict for power which the great powers are waging. He therefore tried to steer clear and to have the power of independent judgment, of independent action, not merely as camp followers of this or of that particular group. His anxiety was that India should try to help, should try to mediate if possible; and we were committed to the policy of the United Nations. That has been our goal. We have sent our troops to the Gaza strip; we sent them to the Congo; we sent one of our Generals as the Chairman of the Korean Repatriation Commission; the same General is working in Nicosia in Cyprus. We are not given to cutting ourselves away from world affairs. We wanted to do our best to help world affairs, to bring about some kind of peace in this world. That is what we have been attempting to do.

All these things require a temper of mind which we do not possess, which we have to cultivate. A new world requires a new kind of man, a man who is free from attachment, from any kind of hatred, from any kind of fear—*bhita raga bhaya krodha*. We must be devoid of attachment, of fear. A new world, a brave world and a petty generation do not go together. With all his love of nature, of art, of music, of literature, he gave us an example of a human being unique, great, a kind of human being which we should all try to emulate as far as we can.



Bhai has inspired me in many ways and I have learnt much from him. What I value most of all is the lesson that life is not lived in compartments—personal life and public life are both guided by the same principles and one is but the projection of the other. His action flow from this belief as does his capacity to 'lead you to the threshold of your own mind instead of offering you the wisdom of his own.

—VIJAYALAKSHMI PANDIT

What was most dear to him was to create a new age, to build up a new society in which poverty did not exist, in which everyone had enough to eat and had an initiative to work hard—not to fill one's own pockets but for the betterment of an entire nation.

He became what he was—an ideal to his people—because he held fast to his own principles and refused to compromise with truth and integrity.

By his emotional richness, culture, utter sincerity as well as his very earthiness and belief in the common man, he was able to express the faith of an entire people who had willingly left their destiny in his hands. But one wonders whether the Utopia he visualised and worked for will ever come into being.

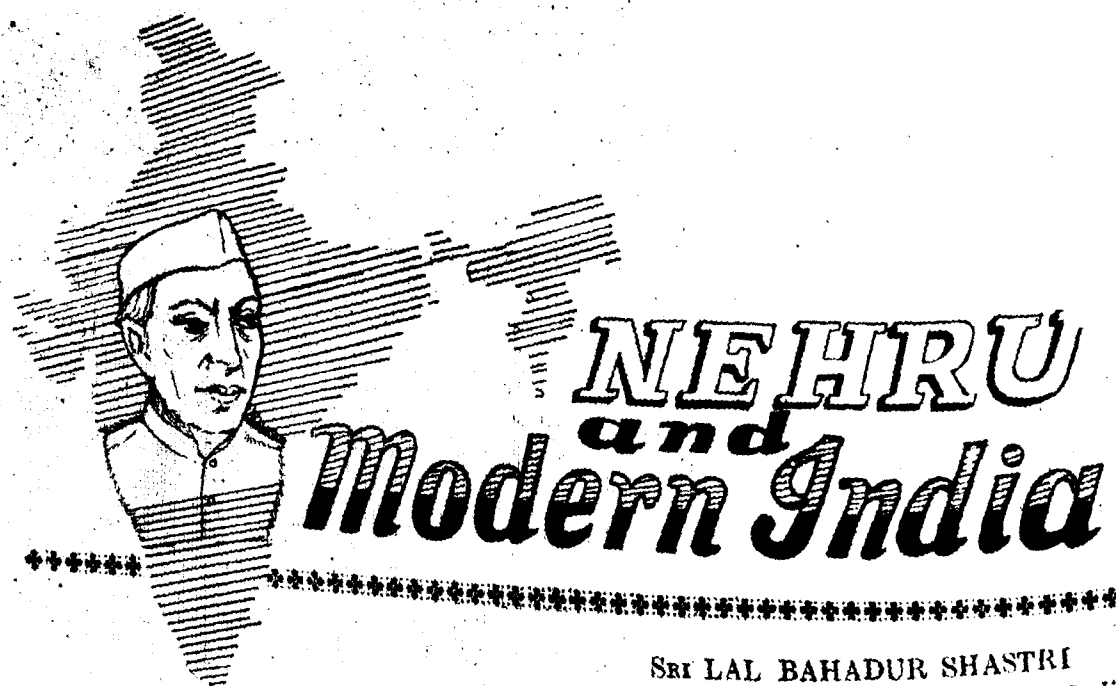
To see India at the pinnacle of her glory, which Bhai dreams of incessantly, can be achieved by him alone, if he so desires, by being himself—the Jawahar of yore and not merely a tired, ever burdened Prime Minister.

—KRISHNA HUTHEESINGH

WOMEN OF INDIA

You know, I am keeping interest in the progress and advancement of women of India. To the measure women go ahead, to that measure India will advance.

—JAWAHARLAL NEHRU



It was only through science and technology that India could lift herself out of the centuries of stagnation and the depths of poverty. Only through science could the farmer flourish and factories increase their production. At the same time it should not be forgotten that science and rationalism, divorced from human values, could produce ruthless efficiency symbolised by the atom bomb. It was, not enough to have the mind of a scientist if one did not have the heart of a humanitarian. It was the greatness of Sri Jawaharlal Nehru that he had them both.

I should like to remind every man and woman in the country that so many things which today they take for granted are in the nature of a legacy which Jawaharlalji has left to the nation. He it was who in 1929 proclaimed that complete independence and not mere Dominion Status was the political goal of India—a goal which was adopted officially by the Congress on January 26, 1929. And on January 26, 1950 during his Prime Ministership, India became a Sovereign Independent Republic. It was he who took the lead in putting forward the concept of planned development for India even before the World War II broke out. He presided over the launching of India's First Plan in 1951 and during his lifetime, the nation made phenomenal economic and technical progress. He it was who first pointed out that without socialism, democracy will not be complete and in his lifetime, socialism was accepted as the goal towards which we must move. It was Jawaharlalji who evolved the doctrine of non-alignment and peaceful co-existence to which an ever-increasing number of countries in the world subscribe. And it was his wisdom and

counsel which, on many an occasion, reduced the tensions which were building up and removed the threat of war.

Yet it is not with his achievements alone, great as they were, that we should try to identify him. We should rather identify him more with the forces which he generated throughout the country; forces which imparted a new dynamism. It is for us to keep the flame burning, the Spirit alive.

There is hardly any aspect of Indian life—social, political or economic—to which he did not give a new impetus. Let us remind ourselves of some of the perils which he fought and brought under control and which, if we are not careful, may raise their heads again. He was, as you know, against Communalism. His attitude towards the minorities was one of equality, indeed of generosity. The secular State which he shaped was born out of the feeling so deep in his heart, that every citizen of India—whether he is a Hindu, or a Muslim, or a Christian, or a Sikh, or a

Parsee, or a Jew, or a Buddhist, or a Jain—has equal rights. Let all those who remember Jawaharlal with affection dedicate themselves to the task of national unity and pledge themselves to fight communalism, linguism and casteism, in whatever shape or form they may appear.

Humanitarian Approach

The same humanitarian approach was at the root of his thinking; on economic subjects, his passion for planning and his desire to create a socialist society. He wanted to banish hunger, disease, illiteracy and all the ills that attend upon poverty (from this land) and towards this end, he sought the co-operation of everyone—of labour, of the business community, of the administration, of teachers and of people in politics. Speaking shortly after Independence, he had said that ours was a generation sentenced to hard labour in order that the vast potential of progress could be converted into actuality.

It was in this same spirit of love for humanity that he approached international problems. When he spoke on international affairs, he had only one thought—to promote peace. He did not take up positions calculated to help India in one way or another, but rather he thought of humanity as a whole. The same peaceful approach was to be found even when India herself was a party to a dispute. Twice in his lifetime, India was exposed to naked aggression. Even while fighting in India with the force of arms and the gallantry of our soldiers, he never abandoned the peaceful approach. He went to the U.N. over Pakistan's aggression. For Jawaharlalji, no other course was possible for he believed in peace and in settling international disputes by peaceful methods. We cannot be enemies for ever. He declared, referring to Pakistan in 1950. This is the spirit of peace, he accepted the Colombo Declaration regarding Chinese invasion without any reservation. We must, he used to say quoting Gandhi, look at international problems not with blood-lust, but with eyes which are clear.

Love of Science

Jawaharlalji was a great devotee of science. It was only through Science and Technology that India could lift herself out of the centuries of stagnation and the depths of poverty. Only through Science could the farmer flourish and factories increase their production. But his scientific approach was not something different from, but an integral part of his human approach to all the problems of life.



Jawaharlal Nehru at the Neyveli Thermal Plant, in 1963.

He was at once a visionary and a scientist. The Scientific spirit is an attitude, rather than an aptitude. It pertains to the mind. It should not be confused with manual skills or mechanical devices. It is based on a passion for truth, truth sought relentlessly, rejecting dogma and doctrine, through actual living experiment. It is not without significance that Gandhiji chose to call his autobiography "The Story of my Experiments with Truth".

Let us not lose the capacity to make experiments, to try things out and to discover the truth for ourselves. Truth is not something which is inherited, not something which is prescribed by authority. Science rejects authority. No scientist would defend a theory by quoting another. Gallileo, Newton, Einstein and now Narlikar have upset the theories built up by their predecessors. Science is always revolutionary. The slogans which dominate politics and the superstitions which sometimes envelope our daily life can be dispelled only through a scientific approach, a rational approach to life which Jawaharlalji always had.

TWO THINGS

Two things were uppermost in the mind of our late Prime Minister—the creation of an atmosphere of love and harmony in this country and the creation of mutual understanding and universal goodwill in the world. These were ideals he constantly cherished and successfully carried through and his life will continue to be an illumination and a guide to all of us in the discharge of our functions.

HIS HIGHNESS MAHARAJA SRI JAYACHAMARAJA
WADIAH BAHADUR
Governor of Madras

At the same time, let us not forget that science and rationalism, divorced from human values, can produce ruthless efficiency symbolised by the atom bomb. It is not enough to have the mind of a scientist if we do not have the heart of a humanitarian. It was the greatness of Jawaharlalji that he had them both. Indeed, he was at pains to emphasize how important it is, to quote his own words, "for the human mind and human spirit to control science and direct it in the right direction. The great path of science has to be tempered by something and that something", he said "is spirituality".

As long ago as 1947, speaking in the Constituent Assembly, he said:

"We hear a lot about the atom bomb and various kinds of energy that it represents. In essence today there is a conflict in the world between two things, the atom bomb and what it represents and the spirit of humanity. I hope that India will no doubt play a great part in all the spheres, she will always lay stress on the spirit of humanity and I have no doubt in my mind that ultimately in this conflict that is confronting the world, the human spirit will prevail over the atom bomb."

A Nation Does not Die

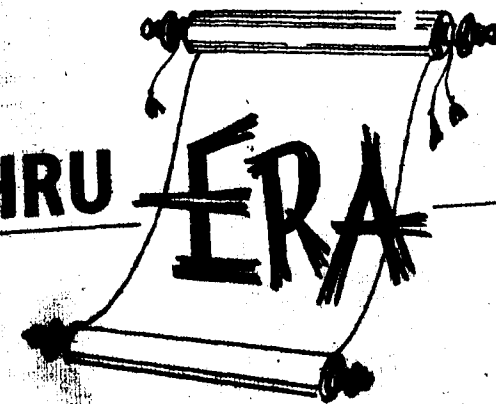
In the 17 years of independence, India has seen many great men who had waged a heroic struggle against foreign domination. Gandhiji, Sardar Vallabhbhai Patel, Maulana Azad and now Jawaharlalji himself. Unfortunately for us, he presided over the destinies of India through the most difficult period of her history. He has no more. But the country whom they served so devotedly lives and is moving on the road to prosperity. As Jawaharlalji had said rightly in 1949, "Nation goes on and on, A Nation does not die".

It will be for the youth of today to assume the responsibility tomorrow of running the affairs of this great country. Let the humanism and the scientific spirit which Jawaharlalji had in such abundance, enrich your hearts, ennoble your minds and guide your actions.



Jawaharlal Nehru who inaugurated the Parambikulam-Allyar Project in October 1961 is seen viewing the site.

THE NEHRU



Smt. INDIRA GANDHI,
Union Minister for Information
and Broadcasting

There were three major achievements of Nehru in addition to the role that he played in securing freedom for the country. These were: initiation of concept of economic planning, establishment of democratic process and policy of non-alignment.

Long before independence, Nehru had introduced into the Indian National Congress a concept of planned economy. This was an extremely difficult task at that time as many people could not realise its importance and, therefore, opposed it. It was entirely due to the initiative and perseverance of Nehru that when India became free, she had already a definite economic policy and had, therefore, settle down to work without losing time. Two Five-Year Plans have since been successfully implemented but there have been difficulties in the Third Five-Year Plan mainly due to the Chinese invasion of India.

Nehru had unflinching faith in democracy and had it not been so he could have become a dictator any day.

India is a vast country with contrasts and contradictions and it was indeed a pioneering effort to establish a modern democratic system in it. The monumental Indian constitution is a tribute to Jawaharlal Nehru. Since her independence, India has held three general elections and democratic process has come to stay.

When India became free, the world was divided in two hostile blocks. Nehru decided that India would not align herself with any of those blocks and would follow an independent policy based on the merits of each issue. This did not mean that India remained neutral on problems faced by the world. Today a majority of the nations of the world are following the policy of non-alignment and there is better understanding of it.



NEHRU as humanis

SRI SHRI PRAKASA

Having had opportunities for more than 45 years to be associated with Sri Jawaharlal Nehru in public life, having enjoyed his personal friendship throughout these long decades, having seen him in all possible situations such as, those of personal difficulties, domestic embarrassments, frustrations in public life, anxieties of high office, and having joined him in sports and amusements, the one thing that I always marked in him, and marvelled at, was his essential humanism. He was just a man wherever he might have been, and in whatever position he might have functioned. He never pretended to be a superman nor certainly was he ever sub-human.

"Humanism" can mean many things; and it would be just as well to scrutinise Jawaharlal's life and work from the many aspects that the word "humanism" presents.

Humanism

"Humanism" may mean conducting oneself, whatever one's position in life might be, as an ordinary human being with all his weakness and strength; with all his virtues and vices; with all his urges and ambitions. "Humanism" can also mean the manner of behaviour of an essentially good man who is kind and gentle, courteous and considerate, generous and charitable.

In a way, it is not difficult to study Jawaharlal because, to all outward appearances, he was an ordinary human being, just as we all are. Though a world figure and a person who had attained great eminence, he never tried or wanted to keep himself aloof from the common run of

men and the ordinary concerns of life. He was credited with no miracles such as surround persons who become celebrated. Greatness is always inclined to attract all manner of men and women who as worshippers, admirers or hangers on, invest their heroes with super-natural capacities of being able to do wonders.

Though Jawaharlal's personal friendships were strong and firm, though he was always faithful to and anxious to help his comrades and colleagues, he actually never either wanted or succeeded in having a set of persons closely connected with him and always keeping about him, which is such a common sight seen around all who become leaders of men in any department of life, at least in our country. He thus gave no chance to anyone to present him in any exaggerated shape or form before the public gaze. He was just human, and behaved and reacted as any human being would do to the varied situations in which the lot of man, whether great or small, is invariably cast.

Let us, therefore, study and try to understand his humanism as an ordinary human being. We all common men and women of the world, all like to be blessed with good health, happy family and comfortable home, with enough of material resources to enable us to fulfil our ambitions, to have a proper position in social life, and to be thought of well by others.

Jawaharlal was essentially human inasmuch as he was not above these common characteristics of man.

He took great care of his body. He was intensely devoted to his family. He gave every service and respect to his parents, was most affectionately attached to his wife and sisters, extended help and sympathy to his relatives, and paid the greatest amount of care and attention to the bringing up of his daughter and grandchildren. He had no pretensions like so many so-called great have that they were supremely indifferent to their physical needs, did not care for their families, and that in their so-called public service, they neglected and sacrificed all their own personal interests. Jawaharlal never did anything of that sort and all honour to him for it. He always lived a life of the very wealthy and highly placed, entertained lavishly, and did not deny himself any physical comforts in the matter of good food, good clothes and good surroundings. He had, at the same time, the great urge for freedom, both individual and national. He had doubtless the ambition to be the leader of his fellow-country-men, and also influence and inspire the world to high idealisms, such as he himself entertained.

Responsive to Public Opinion

He was very responsive to public opinion and always had his finger on the pulse of the populace. To give an example, I discovered, almost immediately after taking up the Governorship of the composite State of Bombay in 1956, that Maharashtrians were wanting a separate State for themselves and did not like Gujarat to be tacked on to them as continued to be done even after the new alignment of linguistic States. I feared that the situation would get worse and worse as time went on and might get completely out of hand, and so, strongly recommended to the Centre that Maharashtra and Gujarat should be bifurcated. Jawaharlal and others at Delhi did not agree though the President, Dr. Rajendra Prasad, was of the same view as myself. Late in 1958 when Sri Jawaharlal, as Prime Minister, came to unveil the statue of Shivaji at Pratapgarh, in the Maharashtrian district of Satara, there were hostile demonstrations against him right from Poona to Wadi, of which few could have had any ideal before.

This was followed, early in 1959, by the annual session of the Indian National Congress at Nagpur; and when I broached the matter again to Jawaharlal there, he felt that there was no escape, and that we would have to have separate Maharashtra and Gujarat.

It was soon announced that the separation would take place as early as possible. He later again visited Poona, and the very people, who had held fierce hostile demonstrations against him with the usual black flags and "go back" slogans before, became "Nehru mad" as a friend

said at the time. The whole of Poona came out in the streets to welcome him. He received the most enthusiastic acclamations and adulations everywhere, and thousands of white pigeons were released all along the route as symbol of peace and goodwill. Jawaharlal made no secret of the fact that he was very pleased.

Real Friend

Public ovation always gave him new life. He was truly human. There was doubtless vanity in his nature inasmuch as he wanted to have the good opinion of every body in his favour. There was, however, no pride in him. He was not stuck up. He never had a "What do I care for you?" aim about him. He was appreciative of the real heartfelt feelings of the people at large and readily yielded to them.

Then, let us study his humanism in the other aspect of a kind and gentle person, considerate to his friends, generous to his opponents and charitable to all. That he was a kind-hearted person and gentle in his approach, was known to all who had any occasion to come in contact with him.

He was very sensitive to the sufferings of others and his reaction was immediate to try to relieve pain wherever he saw it. Regardless of his position as Prime Minister, he would begin massaging the body of a fellow member of a committee if this friend suffered from some sudden pain.

When he and I shared the same room in a hotel at Mussoorie, during Mahatma Gandhi's tour in Uttar Pradesh in 1929, I happened to develop a terrible headache late one evening. It was the latter part of October when it was cold enough on that hill station. When Jawaharlal came back about 10 at night and found me writing in agony, he at once rushed out and briskly walked quite a mile to the nearest chemist shop to bring some tablets that gave me immediate relief. I was very greatly surprised when Jawaharlal told me on one occasion that he had never suffered from headache and so did not know what it was like. This was certainly most unusual. I wonder if there are many persons in the world of today who can say as much.

Lover of books

He was very fond of the company of cultured women and neatly-dressed children, and was most attentive and helpful to them in piloting them through crowds and in other ways.

He loved flowers and trees, and always wanted them to be properly tended and nourished.

It hurt him even when anyone maltreated a book. I remember his telling our common friend Sri Mohanlal Saksena, with whom both he and I were once staying at Lucknow, that a book was a living thing and must be treated properly when he found that his host was not sufficiently considerate to the books that he saw lying ill-cared for on shelves.

Though born in a family and community that were non-vegetarians, he had at one time under Mahatma Gandhi's influence, given up meat-eating. In fact, that time he discarded even smoking. Jawaharlal had often been my guest at my home in Banaras (Varanasi) and liked my vegetarian food which was simple as we did not use many condiments with endless spices. He told me that he relished my food very much as Kashmiri food proved unwholesome and unpalatable to him. He asked me if I could give him one of my cooks. I actually sent one at one time to him. He later started both eating meat and smoking, but, to the last, he seemed to prefer vegetarian food, and when there were no meat-eating guests with him, he preferred vegetarian food.

Animal Lover

Meat-eating, though it may indirectly involve a certain amount of indifference to the pain inflicted on animals when they are slaughtered for food, is not exactly the same thing as being positively unkind to them. Many of us vegetarians are really very cruel to cows, for instance, which we prefer to worship as mother, not to speak of donkeys, bullocks and other animals. Jawaharlal liked to fondle with dogs and had a couple of pandas—that looked something like monkeys—with whom he used to play every morning after breakfast. He even reared tiger-cubs. He was very impatient with persons who ill-treated animals and was very averse to vivisection and other practices

LEADER OF MANKIND

Jawaharlal Nehru not only brought his country to nationhood but to greatness. This was the work of a human, cultivated, intelligent man, who was, above all, touched by the inexplicable magic of the leader. And it was no small part of his genius that he left others so well fitted to carry on his work. Men like Nehru belong to all of mankind.

—John K. Galbraith

which scientists indulge in for purposes of experiment, in order to discover medicines for ailments of the human body.

He gave away freely any money, that he had, to causes for the relief of human suffering. He had often entrusted me with money to be given anonymously to fellow-Congress workers who may be in need, as so many of us always were.

A Generous Opponent

Apart from being charitably disposed so far as many was concerned, he is deserving of greater praise and admiration for his generosity to political opponents. I do not remember his getting into unseemly controversies of a personal nature even when bitterly attacked himself.

In the course of his public life, it was noteworthy, he would invite those, who had been his violent critics and even traducers to various high offices in his gift, in his political party or his Government. Many of his ungenerous critics have been given coveted assignments like those of President and Secretaries of Congress Committees and memberships of legislative bodies, and many similar others have been invited by him to be Governors, Ambassadors and Ministers.

I have never known him carrying any grudge or ill-will and have always found that as soon as a debate was finished all controversies were forgotten and persons ranged in the opposition were to him again as they were ever before.

His kindness and generous impulses made him a very humane individual. He abhorred war, and if he struggled to the last with every ounce of his energy for universal peace, even when his fellow countrymen ridiculed him and accused him of weakness and pusillanimity, it was because he was supremely human and compassion was second nature with him. He was always anxious to avoid unnecessary suffering to innocent men and women of the world such as war invariably entails.

Secret of His Greatness

Nehru was truly human—human as a family man, human as a friend and comrade human in his approach to public problems, human as a leader of men.

And if he was so, it may, well be asked: how was he different, as he must have been to the common run of human beings that made him great?

The fact, is, the qualities that made him distinguished were really his human qualities, such as, all of us can inculcate in ourselves even if we cannot attain the fame and eminence that he did, for in the very nature of things, all cannot do so. We can by imbibing these virtues, make ourselves as useful in our own comparatively limited spheres of activity as he did on the wide stage of the world.

These qualities are capacity for hard work, sense of responsibility and courage. There was no laziness in his nature, and really we all also can work hard if only we want to and thus eradicate the stigma of laziness that rightly attaches to us. Then, he was a very responsible person, always meaning what he said, and doing what he offered to do. This is also a human virtue, and we can all cultivate it. We very seriously lack this quality and that is what is causing all the confusion in our social and economic life. We would all be the better if we turned ourselves into responsible citizens who could be depended upon to do the right by fellow-men in all circumstances.

Above all, he was a very fearless individual. That is also no super-natural quality for all human beings can be courageous and not shrink from doing the correct thing for fear of this or that pain or penalty.

Noble figure

In Nehru, thus, we see the picture of a true, good and noble figure of a human being with no super-physical capacities and no super-natural deeds to his credit. He was just natural, and so human.

His humanism while worthy of all admiration, is also capable of emulation; and the greatest tribute that we can pay to his memory, is to imbibe in ourselves the human virtues that he possessed; and thus make ourselves, in our own way, truly worthy citizens of the land which he helped to make free and great, and which he has bequeathed to us and to the generations that are to follow, to keep as such—unaltered and inviolate for all time to come.

—Courtesy: A.I.R.

NO ROOM FOR VIOLENCE

Violence too often brings reaction and demoralization in its train, and in our country especially it may lead to disruption. It is perfectly true that organised violence rules the world today and it may be that we could profit from its use. But we have not the material or the training for organised violence, and individual or sporadic violence is a confession of despair. The great majority of us, I take it, judge the issue not on moral but on practical grounds and if we reject the way of violence, it is because it promises no substantial results. Any great movement for liberation must necessarily be peaceful, except in times of organised revolt.

—JAWAHARLAL NEHRU



Nehru's Vision ~ of India

SRI FRANK MORAES

Nehru's finest hour belongs to the years before independence, those radiant years of struggle and sacrifice which preceded freedom. Though he first met Gandhiji at the Lucknow Congress Session in 1916 he was not actively associated with the Mahatma's politics until some three years later, and it was in December 1921 that he first went to jail.

What drew Nehru to the Mahatma? I think it was the rebel in Gandhiji, a man who hated injustice and cruelty, who refused to be content with the mere enunciation of lofty principles but insisted on action which drew the one to the other. Like the Mahatma, Nehru saw freedom not only in terms of political independence but in the social and economic uplift of the masses. Freedom to Nehru was meaningless unless along with freedom from political bondage came freedom from economic servility which meant the welfare of the masses.

His vision of India

This vision of a free India fired Nehru's mind when in the summer of 1920 he was confronted for the first time with the stark spectacle of peasant India. Hearing of a march on Allahabad by some peasants he decided to visit their encampment on the banks of the Yamuna. What he saw distressed and horrified him. It was a world completely new to Nehru.

Always after that Nehru saw India in terms of the oppressed and hungry peasants. While he shared this vision of India with the Mahatma he differed with Gandhiji on the reluctance of the older man to define his political and economic objectives clearly and to give them an unequivocal character and content. Some of the Mahatma's ideas seemed to Nehru medieval and revivalist.

Nehru's socialism seems to have acquired a definite form and character around the late 1920s. In March 1926 with his wife, Kamala, and his daughter, Indira, then eight, he visited Europe, staying there for a year and nine months. It was fourteen years since Jawaharlal was last in Europe, and the 21 months he then stayed there mark a decisive turning point in his life. They enabled him to graft on his awakened nationalism an internationalism which viewed India not in isolation but as part of a world community whose fortunes impinged on her almost as vitally as her own internal problems did. One of the fruits of this developing interest in the outer world was that it enabled him to formulate an attitude of mind, with which the more educated of his countrymen grew familiar and which he was able to translate almost automatically as his foreign policy when India became independent.

In this again Nehru proved to be a perfect complement to Gandhiji, in the process projecting the India of Gandhiji in terms which not only the world outside but the educated, forward-looking youth of India could understand. He did more than rationalise Gandhiji and Gandhiji. If the Mahatma made Indians aware of India, Nehru made them aware of others. He gave an objective glow to Gandhiji's largely subjective ideas. Individuals interested in Gandhiji, the masses, were magnetised by Nehru.

Visit to Europe

His visit to Europe persuaded Jawaharlal that the struggle for freedom had a global significance. It appeared to have since the subsequent liberation of Asia, Africa, and he was convinced that India's progress

should be part of the broad stream of world progress. His foreign policy when India became independent stood for anti-colonialism, the non-alignment aspect was a slightly later development. Another out come of this visit was reinforcement of his socialist beliefs which now acquired a more coherent form and which were to be further consolidated and congealed during his next visit to Europe in the late 1930's. The visit covered some six months (from June to November 1938, and coincided with the Anglo-French betrayal of the Czechs at Munich. On this occasion Neville Chamberlain's equivocal attitude to Nazism and the British Labour Party's lukewarm support for Indian independence equally irked Nehru.

The two visits, separated by a little over a decade, are landmarks in the metamorphosis and development of Nehru's thinking. He was a parlour Socialist when he visited Europe in 1926 and though even then he felt that nationalism was not enough and that freedom acquired reality only with the economic betterment and awakening of the masses he was not clear about the means he should adopt to accelerate the economic regeneration of his people. In between his two visits, particularly during his many spells in prison in the early 1930's, Nehru had increasing opportunities for study and reflection and he spent much of his time in prison reading Socialist and Marxist literature and relating the ideas he imbibed to the practical needs of the independent India of his dreams. When he went to Europe again in 1938 his views on many important political and economic matters, including socialism and internationalism, had crystallised. They were to alter very little after that except that at that time anti-colonialism was still a part of his thinking.

Nehru's thinking, like Gandhiji's, followed an amazing consistent pattern over the years, and though he adapted his action to suit Gandhiji's policy he never compromised on his thinking. When he returned from his prolonged stay in Europe to the independence struggle, Nehru was the man who was to implement the vision. He insisted that India was not strong and that India must see herself in the larger context of world development and upheavals. It was he who by rationalising the Mahatma's ideas, gave the revolutionary middle-class intellectuals to Gandhiji's banner. He differed with Gandhiji's views on machinery and modern civilisation,

resented his strong stress on the religious and spiritual aspect of the civil disobedience movement, objected to the Mahatma's idealisation of poverty and suffering and saw no special virtue in a life of asceticism. He accepted non-violence, but as a practical weapon, not as a principle.

As far back as 1931, at the Karachi Session of the Congress, Nehru sponsored a resolution on economic policy which advocated for the first time the nationalisation of key industries and services. Two years earlier the All-India Congress Committee, assembling in Bombay, had considered a recommendation, at the instance of the then United Provinces Provincial Congress Committee, for the adoption of an economic programme on socialist lines. In his autobiography, Nehru envisages a Socialist India free from the tyranny of feudal elements such as the Princes, an India where political freedom and planned economic development would march together. Less than 20 years later the Congress at its Avadi Session was to usher in a Socialist blue-print for India.

Nehru Doctrine

"India" Nehru once declared "is a land of destiny". His vision of India was messianic and he saw her as a bridge between contending forces and peoples within the country and outside. Internally he spoke in an idiom which India's people instinctively understood and which with the challenge of freedom and partition they were inspired and resolved to implement. Because he represented an unusual and finely tempered combination of East and West. Nehru was ideally suited to be a bridge between the Occident and the Orient. Internationally too, he spoke to the peoples of the world, both independent and dependent, in a language which challenged the first and held hope for the second. More than anything else the combination of these circumstances fired by Nehru's evocative personality and mind, projected an image of India and gave that image an influence and importance which had neither the sanction of military strength nor of industrial power.

What might be called the Nehru Doctrine emerged spelling out a policy and philosophy attuned to a newly decolonised country in a period of transition from colonialism to independence and at the same time providing a platform from which the deimperilled West could adjust its sights. The Nehru Doctrine gave a legal status to the concept of "sovereign equality" in its application to newly independent countries, one expression of that equality being non-alignment and its adjunct of panchsheel or the Five Principles.

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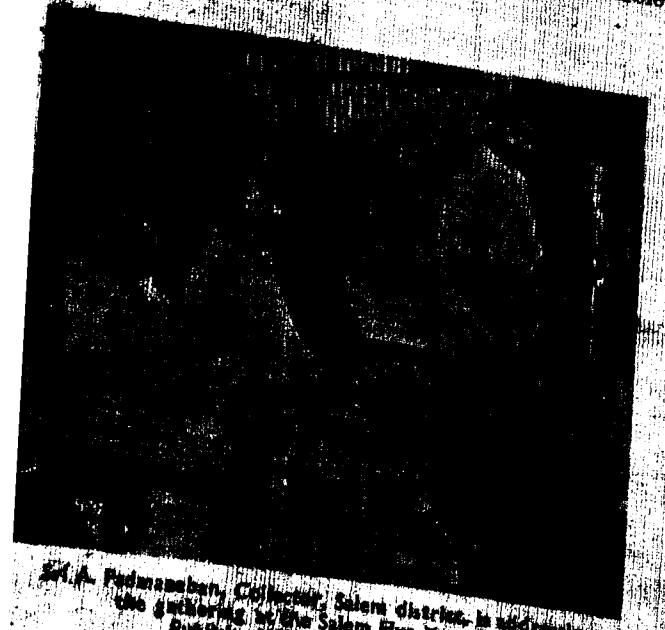
Nehru undeniably produced or rather activated a certain psychology in the Indian people, and in doing so changed the mental and social climate of the country. By refusing to abuse the almost unlimited power that the people's veneration gave him, he implanted in them a real respect for democracy and democratic ways of life. The Constitution he ushered in for India was truly democratic. Despite his resort to the Preventive Detention Act and the Emergency regulations which he invoked to the minimum, he was genuinely concerned with the growth of democratic traditions, with restoring the freedom of the press, the independence of the judiciary and respect for civil liberties. To a person intent, again by personal example, he encouraged, though he did not succeed in firmly imprinting, the secular idea in Indian minds. His passion to lift the people and raise them from the degradation of poverty, to make them more outgoing and forward-looking communicated itself to the country, and Nehru's ideal of the welfare state and of planning have come to stay though democratic socialism will probably assume a different and less doctrinaire pattern than he planned.

India would have been different without Nehru. She would have been the bigger for his presence. He used his magic in many ways to build the India of his dreams. In so far as he set new sights for the Indian people and gave them with him some way to the goal. Like all men, however great, Nehru was human and fallible.

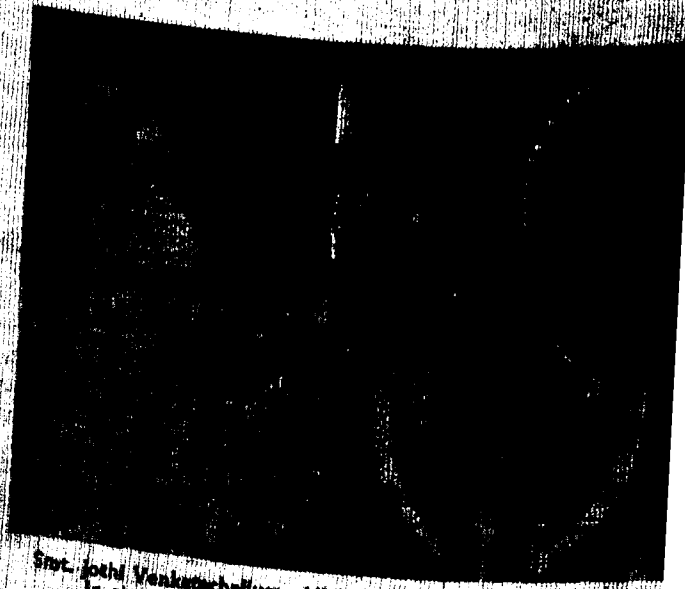
and he made mistakes. Because of the tremendous pinnacle of power he occupied, in isolated but splendid eminence, his mistakes in the short perspective of our time are perhaps magnified beyond proportion. History has yet to assess him. He helped decisively in the creation of freedom for a country which had not known independence in the present-day sense for almost a thousand years, and the question inevitably arises and will be discussed whether Nehru's seventeen years of power were long enough to erase the memory of success and to build anew on fresh foundations.

What was the secret of his overwhelming, compulsive hold over India and her myriad people? Emotionally the people's loyalty to and love for him flowed from the sacrifices he had made for India before independence but intellectually it was rooted in the people's faith in a man who, like the Mahatma, believed in certain basic principles and knew his mind. Above all, the character stood out as a pre-eminently civilised human being an unusual blend of the ancient and the modern, instinctually and instinctively democratic but also with a touch of the autocrat in his make-up, a man anchored to deep loyalties and faiths who tried to the best of his tremendous ability and determination to put them into practice, a man often guilty of impatience from the selflessness of motives, often impulsive and at times mistaken but of a rare sensitiveness and compassion for whom India and the world will remember as one who pursued the right according to his lights and who, however he might have failed, sought always to serve India.

—Continued—



Mr. A. Padmanabhan, Collector, Salem district, is addressing the gathering at the Salem Five Year Plan Publicity Week Celebrations.



Smt. Jothi Venkateshram, Minister for Public Health, took part in the Anniversary Celebrations of the Queen Mary's College and distributed prizes to the students.

NEHRU AND THE Atomic ENERGY PROGRAMME

DR. H. J. BHABHA, F.R.S.
Chairman, Atomic Energy Commission

One field of nation-building activity in which India has progressed rapidly since Independence, is the newest field of human scientific endeavour, namely, the development of atomic energy. Indeed, while the country is economically still a developing nation, in the field of atomic energy she is already bracketed with the half-a-dozen most advanced countries in the world.

This progress, however, would not have been possible but for the great vision, imagination and courage of Jawaharlal Nehru who, as Prime Minister and Minister-in-charge of Atomic Energy, took the keenest interest in this field of work.

For Jawaharlal Nehru the supreme task of the age was to lift mankind from its age-old state of bare subsistence to a social level which provided security, material in plenty and, above all, the opportunities for fulfilment and a higher life to all. He knew that this aim could be achieved through and only through science and its application; and he believed profoundly that India could become a great nation, again, only by basing its way of life on modern science, and he regarded atomic energy as the spearhead of scientific development, something that would set the pace for the rest of our scientific progress in India.

Soon after the creation of the Department of Atomic Energy in 1954, a conference was held in New Delhi on the development of atomic energy for peaceful purposes in India. Inaugurating the conference, the late Prime Minister emphasised the importance of the development of atomic energy for peaceful purposes. "It is more important, relatively speaking", he said "for the underdeveloped countries than for the more developed countries because the more developed countries have got more resources".

He supported atomic research and development from the beginning and held personal charge of the Department of Atomic Energy from the time of its creation in 1954 till the very end. He took the keenest interest in the programme of atomic energy work and visited Trombay on many occasions.

Inevitability of Atomic Revolution

In 1957, while formally inaugurating the Atomic Energy Establishment, Trombay, and Apsara, the first reactor to become critical not only in India but in whole of Asia, excluding U.S.S.R., he said, "We in India and, in a greater or lesser degree in other countries in Asia, are involved in raising the standard of living of our people. Some people may think that the development of atomic energy is not directly related to the question of economic improvement. But we must remember that few things, that we do, produce results immediately... Thus as the Industrial Revolution went ahead whether people liked it or not, so this Atomic Revolution has something inevitable about it. Either you go ahead with it or others go ahead and you fall behind and drag yourself in their trial."

Remarkable Record of the Achievement

Few things in my life have been more impressive than his emergence from the position of an intermittent political prisoner to that of the Prime Minister of India with an influence in the far East so wide, so creative, and so clearly exercised with imagination and responsibility.

—Harold J. Laski

since then, the average *per capita* consumption at the beginning of the Third Plan was only a little over Rs. 23 per month.

About 70 per cent of the people have a level of consumption lower than the national average and a little more than one-fifth less than half the national average.

The task facing the planners is how soon and in what manner this problem of poverty can be solved in India: how to orientate their thinking to ensure a reasonable minimum level of living to all sections of the people over the next 10 or 15 years.

First Pre-requisite

The first pre-requisite to the achievement of the social objective of a minimum *per capita* income is the raising of the level of economic activity. A sharp increase in the rate of growth is also necessary for creating adequate opportunities for gainful employment and eliminating foreign dependence.

The population projections indicate a demand of 124 to 156 million tons of foodgrains by 1971 and 1976. It has become a matter of greatest urgency to achieve the maximum rate of growth in agriculture of which the country is capable—at least the doubling of agricultural production over the period 1961–1976.

In view of the relative stagnation in the initial period of the Third Plan, a six per cent annual rate of growth in agricultural production over the next 12 years appears essential.

In formulating the Fourth Five-Year Plan and also in the implementation of the current one, the basic consideration is that the resources, inputs and facilities required to achieve rapid growth in agricultural production must be made available.

This would involve adequate supply of fertilisers, pesticides, cement, steel, credit, rural electrification for intensive development of irrigation and technical advice and organisation.

A long-term price policy for agricultural commodities to ensure reasonable incentive to the farmer is equally essential. There has also to be an intensive drive for improving agricultural implements and machinery and establishing improved agricultural practices.

One of the objectives mentioned in the Third Plan is to expand basic industries like steel, chemicals, fuel and power and establish machine-building capacity so that the requirements of further industrialisation can be met within a period of 10 years or so mainly from the country's own resources.

The concerted development of basic metals, fuels, chemicals, heavy industries and machinery would not merely contribute towards increasing the sum total of national output but also freeing the country from dependence on external assistance by the end of the Fifth Plan.

This would also be necessary in order to provide the inputs for agriculture and to provide equipment and raw materials for intermediate and small-scale industries.

Employment Opportunities

Substantially larger employment opportunities have to be secured in the Fourth and Fifth Plans, both in the agricultural and in the non-agricultural sectors.

At the end of the Second Plan, there was an estimated backlog of 9 million unemployed persons. The addition to the labour force in the Third Plan is reckoned at over 17 million and in the Fourth Plan at over 23 million.

It is estimated that additional employment opportunities resulting from the implementation of the Third Plan may be nearly 13 million as against the target of 14 million.

Taking the ten-year period 1961–71, a necessary objective would appear to be to absorb into productive employment the addition to the labour force over the decade, that is, to ensure around 40 million jobs. In the Fifth Plan period the addition to the labour force is reckoned at around 30 million.

The problem of unemployment can be tackled by an emphasis on rapid industrialisation with ancillary effects on transport, communications, construction activities and services. It is felt that only through industrialisation can jobs for the growing unemployed be found.

There is a general feeling that much more should be done in the Plan to ameliorate the condition of the backward sections of the community. It will be necessary to identify the groups which constitute these sections. They will include agricultural labourers, industrial workers, tribals, small farmers, etc.

A policy in which these groups are given priority in the Plan may not be adequate. The Plan should indicate positive steps to be taken in this direction consistent with the other objectives.

It will also be necessary to identify the backward regions, and to draw up specific programmes of development for these areas in an integrated manner. Special outlays of sizeable magnitude may be necessary to fulfil the constitutional obligation towards the traditional have-nots.

'Miles to go', indeed!

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In recognising the role of atomic energy in the long range development plans of the country, Jawaharlal Nehru was far ahead of the other leaders of public opinion a good many of whom questioned the wisdom of embarking upon an atomic energy programme at so early a stage of the country's development.

Symbol of Progress

Replying to such critics he said, while inaugurating the C.I.R. and other facilities at Trombay in 1961, "We have to look into the future, 10 years hence, 15 years hence, 20 years hence, 25 years hence, and plan accordingly. This is a tremendous task.....and it is not going to be solved by some petty improvement here or petty help there". He added; "We have, therefore, to look ahead a little, and in looking ahead, we find that among the many, many things that are essential for us, possibly the most important is power. Power is a symbol of almost every kind of progress.....There are 550,000 villages in India and I should like someone to explain to me how those 550,000 villages of India are going to get power by the slow conventional methods of which these critics of ours think.....If you have the picture of the future of India that you are trying to build up, of the power that you require, for which every single resource you may have has to be used, you will come to the conclusion of the inevitability of our building up atomic power for peaceful purposes from now onwards."

It may be interesting to recall here that in August 1955 when, after negotiations in Geneva with the Canadian authorities, it was decided to accept the Canadian offer of assistance for building this reactor (C.I.R.), I sent a cable on August 29 to the late Prime Minister recommending acceptance of the Canadian offer. A reply was received on September 1, conveying the Prime Minister's approval of this proposal. Such a quick decision, involving an expenditure of about Rs. 10 crores, would not have been possible if the Prime Minister had not had complete faith and confidence in the importance of atomic energy.

Role of Scientists

One aspect of India's atomic energy programme which impressed Jawaharlal Nehru the most was the role of young Indian scientists and engineers; and he often went to great lengths to emphasise this fact.

Speaking at the inauguration of C.I.R. and other facilities he said, "When I come here and look at this magnificent dome (of the C.I.R.), I am interested, I am excited. But what interests me and excites me even more than this great dome are the thousands of young scientists of ours who are working here. When I look at their bright faces, I look at their energy, their enthusiasm and their eager look of searching—searching for what—searching for truth, because today science is the search for truth with all its broad meanings and many aspects. I look at the faces of our young men and young women, because for me that is the India of tomorrow. It is they who will make reactors and many other things and change the face of India, and change the thinking of India. When I see, as I have seen whenever I have come to Trombay, the look of our young scientists working here, I have felt happy, satisfied, for in that look there is the future of India, the India of a certain devotion of spirit, of the search for truth in science, of getting out of the rut and static conditions of the past. And so I have felt happy at this glimpse of the future that I saw".

Then on a later occasion in January 1962, while inaugurating the new buildings of the Tata Institute of Fundamental Research, he said, "It is really meeting these young people, who have already distinguished themselves and who I am quite sure will distinguish themselves still more in future, it is in meeting them and finding out what they have been doing, that I have felt so hopeful, so optimistic about the future of science in India".

Not for evil purposes

Jawaharlal Nehru felt deeply that all scientific knowledge and achievement should be used for promoting the welfare and happiness of humanity. On the occasion when he formally dedicated *Apsara*, the first reactor in Asia, in January 1957, he said, "I should like to say on behalf of my Government, myself, and I think that I can say it with some assurance on behalf of any future Government of India, that whatever might happen, whatever the circumstances, we shall never use this atomic energy for evil purposes". If today India is in the proud position of being able to say in the face of the Chinese test explosion that she could have done the same if she wanted to, but has chosen not to, it is due entirely to the unfailing support and wise guidance given by Jawaharlal Nehru to our atomic energy programme.

Frontiers of Indian Planning

"The woods are lovely, dark and deep
But I have promises to keep
And miles to go before I sleep
And miles to go before I sleep".

It may well be assumed that when the late Prime Minister scribbled these lines from Robert Frost on his pad, he was thinking of the journey to the frontiers of the new India which he had promised his countrymen during the struggle for freedom—an India where the crippling hands of poverty have been removed and heads are held high.

It was to redeem the promise made by the leaders of the nation then that the successive Five-Year Plans have been launched.

Breaking stagnation

The first phase of planned development has succeeded in breaking decades of stagnation.

Some of the changes are easy to see—great hydel projects feeding power to industries and cities irrigation system carrying water to fields once dependent upon monsoon, new steel mills going up, new mines being opened, new industries being started. Production from Indian industries has doubled, ports, highways, railroads are crowded with shipments of steel, iron ore, cement and other goods.

Nearly 20 million more children are new in schools; engineering and agricultural colleges and scientific

institutions are bringing new technical knowledge to supplement an ancient learning. Health services have almost conquered malaria, one of India's oldest scourges.

Infant mortality and maternal mortality, for long among the world's highest, are dropping. Life expectancy has risen from 32 to 47 years.

Yet there are "miles to go".....

In a country of so vast a size, with so large a population, diverse in language and customs, and wedded to democratic ways, 13 years of development are but first steps.

The problem of poverty continues to be of massive proportions.

Although *per capita* income had increased by 18 per cent during the first two plans and has been increasing

Jawaharlal Nehru's visit to the Engineering College, Karaikudi in 1959



Nehru - The Apostle of Peace

Prime Minister Nehru, in my view was one of the most perceptive analysts of the threads of human history, and he was a great leader of men because of the fact that he understood the trends of human history. He was not only a great man, but a good man. His extraordinary qualities endeared him not only to the people of India but to people all over the world who had at heart peace, justice and equality for mankind. I think one of the reasons for his greatness was his understanding of the human situation in the shadow of the hydrogen bomb. He was one of the greatest torch-bearers of new concepts, new approaches, and new attitudes towards new problems. He realized more than anybody else, I believe, that the old concepts, old approaches, and even old philosophies, if I may say so, are facing a completely new set of circumstances. Sri Nehru therefore tried to lead humanity from these age-old concepts and age-old approaches to the new concepts and new approaches and new philosophies to be in tune with the needs and circumstances of our times. He was endowed with a very sharp intellect, a quality which is highly prized in western societies. At the same time he was endowed with much wisdom and great moral virtues, qualities which are universally esteemed in the East, in our own part of the world. But his greatness lay in the fact that he was so adaptable, and he was so capable of adjusting himself to new environments and new conditions that he was a tower of strength both in regard to intellectual and moral values.

In the West, if I am correct in my reading of western concepts, the stress is on the intellectual development of man. In the East, traditionally the concept of education is different. There we try to develop the moral and spiritual qualities of men. My feeling is that a purely intellectual development unaccompanied by corresponding moral and spiritual development is

sure to lead humanity from one crisis to another, with a purely moral and spiritual development without a corresponding intellectual development is an anachronism. Sri Nehru realized this basic fact. It is to point to a great man, a great leader of men, who understood this trend of history, who understood the need to harmonize the intellectual qualities of man with the moral and spiritual qualities of men, it was Sri Nehru. I am sure that his life and his work will stand as a beacon-light for many generations to come.

—U. THANT, Secretary-General, United Nations.

A bridge between East and West

Mr. Nehru was a man of many talents. He might have been one of the most important literary figures of his time. As it was he chose to devote his life to his country and people and in so trying he served the world. In a time of peril he has stabilised the relationship between East and West. His dignity when he faces criticism and misunderstanding proves the nobility of his character. I am proud to have known the Prime Minister personally. I can congratulate India on having had so great a world leader to guide her in her age of independence.

—PEARL BUCK, Novelist

His philosophy and Leadership

To think of Nehru is to have in mind the history of modern India and although perhaps he may not so regard it because of an innate modesty on his part, he also expresses—in the leadership he has shown in his country and in Asia itself—the very integrity of concept of the Afro-Asian community.

India is respected in the community of nations not so much because of its ancient and venerable civilisation, although this also must be taken into account in the

respectful attitude of the 20th century world towards India. But were it only for its ancient civilization, India would have occupied merely the same esteem that we hold for, say, Greece, Rome, or Alexandria; some past reality or image or symbol to go back to in times of confusion, but without the capacity to sustain the very confused and tangled demands of industrial life in the 20th century. There is no doubt that these names suggest memorable civilisations; so does the ancient civilization of India.

But India was fortunate for having leaders who sought to establish the continuity of her greatness. History itself is continuous, and when we think of the continuity of the greatness of India, we think also of her great men: Gandhi, Prasad, Tagore, Maulana Azad and Nehru.

Gandhi sought to revive the national spirit of India and made it a great moral force against a modern phenomenon of politics—colonialism. Against the militarism of the West represented by British rule, Gandhi endeavoured to muster the spiritual force of the Indian identity and to rally the Indian people with the consciousness of unity; in the end, the spirit of Gandhi and of the Indian nation prevailed in the midst of the colonial policy of *divide et impera*.

But when we must consider the position of India in contemporary times, we perforce must think of the leadership that Nehru has provided India in the most difficult years not only in its own history but also in that of our own country. Of the national leaders of the world today, his position is most unique. Ours is a deeply political era, but his leadership he seems to suggest philosophical motivations rather than *Realpolitik* demands in his political conduct. He has succeeded in maintaining the important role of India in the world not through military strength or industrial power. He has done it not by expeditious political alignments—which, as a matter of fact, he has shunned—but through the concept of international understanding and the promotion of peace. And in a divided world where loyalty is unfortunately sought and highly rewarded he has bluntly told the leaders of the big powers that the loyalty that is due alone to humanity is that loyalty which answers to the principles of justice, integrity and freedom.

—DR. CARLOS P. ROMULO,
President of the Philippines.

His greatness

It is not often appreciated that through the long years of struggle which occupied the greater part of his life, Nehru had to live under the shadow of potential

ON HIS ARREST IN 1930

Immediately after the launching of the Salt Satyagraha Movement in April 1930, the Government began arresting and imprisoning prominent Congressmen. Sheth Jammalal Bajaj, Manilal Kothari and K. F. Nariman were arrested and convicted. On April 14th Jawaharlal Nehru was arrested and sentenced to six months' simple imprisonment. On his arrest Nehru left the following message for the people "Keep smiling, fight on and get through the job".

imprisonment or brutality. Westerners have not been sufficiently aware that Mr. Nehru spent 14 years in prison, because of his passionate belief in the emancipation of his country from the indignity of foreign subjection and of poverty, ignorance and disease. Fourteen years is an inconceivable time to be separated from one's family and friends when it is in one's own hands to secure release by abandoning the struggle under the pretext of conducting it in a milder manner. In the years subsequent to independence it was an astonishing thing that Nehru was without the faintest suggestion of bitterness towards the nation which had subjected his country and imprisoned him. It is a great tribute to him that he insisted that India should be non-aligned in the insane struggle of power which has pre-occupied the United States and Soviet Russia at the expense of the welfare of mankind. After the struggle for independence had been won, Nehru was hampered by the power of the right wing which increasingly came to dominate the Congress Party. This domination was only held in check only by his own leadership and command over the population of India. The price, however, of having to reconcile the powerful economic forces which made up Congress with his hopes for democratic socialism was the emasculation of the socialist programme. India has a slow growth rate and remain stricken with poverty and disease. Nehru's own efforts to alter this would have succeeded more had his party been forthrightly socialised with an opposition in Parliament representing the very forces which now dominate Congress. I do not believe that his greatness is fully appreciated. But I have every confidence if mankind is allowed to survive he would come to be recognised in a manner adequate to his stature.

—EARL RUSSEL

Nehru Memorial Museum And Exhibition

A rare privilege that awaits now any visitor to New Delhi is the Nehru Memorial Museum and Exhibition which was inaugurated by the President on November 14, Jawaharlal Nehru's 75th birthday, at the "Teen Murti House."

This spacious 35 year-old mansion was originally intended as the residence of the Commander-in-Chief of India. The last Commander-in-Chief who lived in the House was Sir Claude Auchinleck.

Shortly after independence, this imposing structure with its lovely lawns was selected as the House for Prime Minister, Jawaharlal Nehru.

A visitor to the Museum drives along the slightly ascending approach road and alights at the portico of "Teen Murti House". There are qualified Guides posted at the entrance to tell the visitor what he can expect to see in the Museum.

He enters the spacious hall and to his left is the public reception room in which Prime Minister Nehru used to receive the members of the public who thronged to him daily in the morning, some with a complaint to be redressed and many others merely to have his "Darshan" and a word of good cheer from him. The public reception room has been arranged, as many who might have been there before would easily recognise, as it was during the days when it was used by Jawaharlal Nehru. Everything is in its place, excepting that the chair in which he used to sit, will be vacant.

On coming out of the public reception room, visitors will walk across to the green lawns behind the House. There, on the left corner, under a cluster of thick-shading trees is placed, a stone tablet on which is inscribed Jawaharlal Nehru's famous words about himself, "If any people choose to think of me, then I should like them to say: This was the man who, with all his mind and heart, loved India and the Indian people. And they, in turn, loved India and the Indian people. And they, in turn, were indulgent to him and gave him of their love most abundantly and extravagantly." The stone is placed exactly at the site where Jawaharlal used to sit after his dinner and often late in the evening, thinking and contemplating the future he was to build for India. From there the visitor can have

a very good view of the Verandha in the first floor, where Jawaharlal used to sleep during summer.

The visitor then moves on through the back entrance to the Eastern Wing, to those portions of the house where Nehru used to live. The first room, he enters is a study which has been thoughtfully reconstructed exactly as Nehru's office room in the External Affairs Ministry. The same table, the same chair are there. Here also, it is only the chair that is vacant. Seen in the study is a collection of stones and pebbles of odd shape and hue which Jawaharlal Nehru had collected over the years with such loving care and preserved in his study for his use as paper weights. This provides a glimpse of the extent of his love of nature.

Exhibition Hall

From this, he goes up to the first floor; even the landing has been preserved as it was. The first room that the visitor will see is the spacious ball-room. The walls of this room still have the same pictures of Sardar Gujral and Roerich. In this room is organised the exhibition of the various letters of Nehru, manuscripts and other documents in his own hand. There are 50 selected documents exhibited. The first is appropriately a letter written by Nehru in 1903 in Hindi to his mother. This picture post-card from Kashmir starts with salutation for his mother in the following words "Devi Sarup Laxmi". The letters have been arranged in a sequence so as to afford an opportunity to study the development of Nehru's personality. Close observation of the hand-writing also reveals growth. While all the letters are in his childhood

the earlier ones appear to have been modelled on his father's writing. This is gradually absent in the later ones which have a personality of their own.

Letters

Among the many letters that are exhibited there are some which are bound to arrest the eye. One such is a letter written on 28th May 1930 from Naini prison in which one can see almost a whole paragraph crossed out heavily. It is attributed to the censor who was keeping a vigilant eye on the correspondence passing between prisoner Nehru and those outside.

Another letter, the full text of which is fortunately exhibited, is a letter of resignation of his Prime Ministership, written in 1958 while travelling in an aircraft from Coimbatore. Dated 29th April 1958, the letter begins "Some Weeks ago I had stated that I felt rather tired and stale and would like to change". This probably is one of the few letters written by Nehru on one side of the paper and hence it has been possible to exhibit it fully. In the case of all other letters, since they are written on both sides, only such portions, as are of interest, are exhibited. The collection also includes some of the doodlings of Nehru and the notes he used to scribble while attending official meetings. Nehru's last will and testament takes the pride of place in this room.

Panditji the man

As one moves from the ball-room to the adjacent study rooms, one goes from the writings to the man himself. There are exhibited in this room about 150 selected photographs. The central theme of the exhibition is "Panditji the man". Most of the photographs are the familiar ones but what is of special significance is that, as far as possible, original photographs from Nehru's own possession are exhibited. This is clearly seen by the number of battered mounts of some of the photographs. A life-size portrait dominates the entire collection.

Then comes Nehru's study where perhaps he had spent long hours of day and night pouring over official files and dictating notes and orders.

The visitor then moves to two smaller rooms to see a selected collection of presentation objects received by Nehru from various countries which he visited. The



Nehru's visit to the Exhibition at Madurai in 1961

emphasis in exhibiting this collection is to bring out the widespread international relations that Nehru had built up for modern India and the great regard in which India's first Prime Minister was held by the people of many countries. The presentation articles include a number of costumes presented to Nehru such as the costume of USSR. There are a few photographs here also of Nehru with his many hosts in foreign countries.

Bed-room

Finally the visitor goes to Nehru's bed-room. This bed-room is preserved exactly as it was when used by Nehru. The photographs he liked most are exactly where they were before. A painting of the Himalayas which he loved so well hangs over his bed.

The study and the bed-room are preserved as they were on the night of 23rd May 1964 when Nehru worked till well past midnight clearing his desk.

The corridors have book-shelves on either side filled with books. These have a wide range of subjects bearing eloquent testimony to Nehru's love of books and the broad sweep of his reading habits.

Since most of these objects have to be preserved for posterity, special care is being taken to ensure that none of the articles is damaged by ravages of time; for example, the bed-room and study are air-conditioned and humidity is under control with periodic readings being made by specialists in consultation.

Every care has been taken to ensure that all these rooms were as they were during Panditji's life. Certainly many of the visitors who might have had an opportunity of seeing these rooms when Nehru was alive would attach a great sentimental value to things being as they were.

Sea food export from Madras

SRI V. D. SPURGEON
Assistant Director of Fisheries (Information), Madras

The "Fisheries Week" is being celebrated for the first time in Madras State between 23rd and 30th of this month. This article gives an account of the potentialities of marine products of Madras State and its export possibilities.

An Industry's prosperity depends mainly on the wide internal market and external market for its products. The marine industry of Madras State has these two requisites in abundance, and is making steady progress.

The Statistical cell of the Directorate of Fisheries, Madras, along with other studies, took up the assessment of export of fish and fishery products during 1963-64. The facts and figures furnished by the cell speak encouragingly about the sea-food industry's recent trends, especially on the export front.

Madras has a coast line of 997.57 kilometres (619.80 miles) length and the fishable sea spread (taking the maximum distance a boat goes from the shore line as 15 miles on an average) works out to 6,120 square miles. Beyond that, of course, sea is vast and so deep that fishing possibilities lie unlimited, undefined and unexplored between continent to continent.

Increasing demand

Madras State's fishable area is being harvested by a fleet of 27,877 fish crafts and 294,668 fishing gears and 236,653 fishermen throughout the year. The total marine food produced in 1963-64 from 242 fishing centres, is 153,606 m. tonnes, valued at Rs. 1,629.96 lakhs.

Madras exports its sea-food to some Far Eastern and a few Western markets. In the Eastern countries the population increases by leaps and bounds

and their own sea-food production is not able to meet their demands. They look forward to other Asian countries to meet their needs of sea-food. These countries are Burma, Malaysia, Hongkong, Singapore, Indonesia, S. Vietnam, Thailand and Ceylon.

Madras State has taken up this opportunity and established sea-food trade relationships with almost all these countries. Some of the Western countries are also facing sea-food shortage. Among the chief potential markets of West are U.S.A., U.K., West Germany, France and Australia. Madras has started exporting her marine goods to these countries also.

Ceylon is in great need of "sea-food" from Madras. She is our closest neighbour just separated from us by 25 miles channel. Hence shipment of our sea-food involved very little time and money. This is understood fully by the sea-food trade in Madras. In 1963-64 we have shipped to Ceylon 8,787.80 tonnes of sea products involving a turnover of Rs. 1,37,22,211. This is a good export business for the State. The products sent to Ceylon are dried fish, sharkfins, dried prawns, frozen fish, turtle meat, dried turtle meat and live turtles.

The author visited Hongkong and studied its market conditions. For the teeming millions of this prosperous island colony, the indigenous fishing industry is doing its utmost and sea-food of all imaginable kinds are

harvested and distributed efficiently by Government controlled organisations. In spite of this the study revealed a potential market for sea-food of Madras.

Hongkong being a free port receives "sea-food" from many countries including U.S.A. and consumes them partly and re-exports to overseas Chinese in other parts of the globe. Hence there is an ever-increasing demand for foreign "sea-food" in Hongkong.

The Hongkong market prefers fortunately what we do not need in Madras. They are sharkfins, cuttle fish, trepang and the like. These products are shunned by Madras market but liked immensely by Chinese. This factor is availed of by Madras trade and in 1963-64 we have exported 11,137 tonnes of products, valued at Rs. 55,577.00. Out of sharkfins and trepang Chinese prepare delicious soup. A galla dinner for them is not complete without sharkfin soup. An industry to can sharkfin soup for export has been built up. We have still great scope to organise the collection of sharkfins from all fishing villages which may be exported to Hongkong.

Varieties liked abroad.

The author also visited Thailand and Burma, etc., "sea-food" markets and studied their trends. The next best market is Singapore. Singapore being the biggest cosmopolitan metropolis in the east with a sizable Chinese populace "sea-foods" are in great demand. Sharkfins, trepang, fish maws, dried fish, etc., are very popular here. Madras has exported 159.63 tonnes of these stuff in 1963-64 to Singapore, valued at Rs. 7,35,266. The export to Malaysia as a whole in 1963-64 is about 25 tonnes fetching Rs. 1,06,475. About 121.97 tonnes were exported to Indonesia, valued at Rs. 2,30,977.

The six varieties of "sea-food" that are liked by the over seas markets are given below in their order of

importance together with their export figures for 1963-64:—

Variety	Quantity (IN TONNES)	Value (IN RUPEES)
1 Dried fish	8,563.93	1,33,18,553.45
2 Dried prawns and shrimps	445.12	8,77,292.73
3 Sharkfin	158.01	7,42,475.40
4 Frozen prawns and shrimps	16.58	58,056.00
5 Fish maws	15.59	89,880.00
6 Fresh turtle meat ..	10.01	38,238.00

Thus in one year, Madras, exported 9,218.451 tonnes of sea-food to Eastern and Western countries fetching an income of Rs. 1,51,76,290.00.

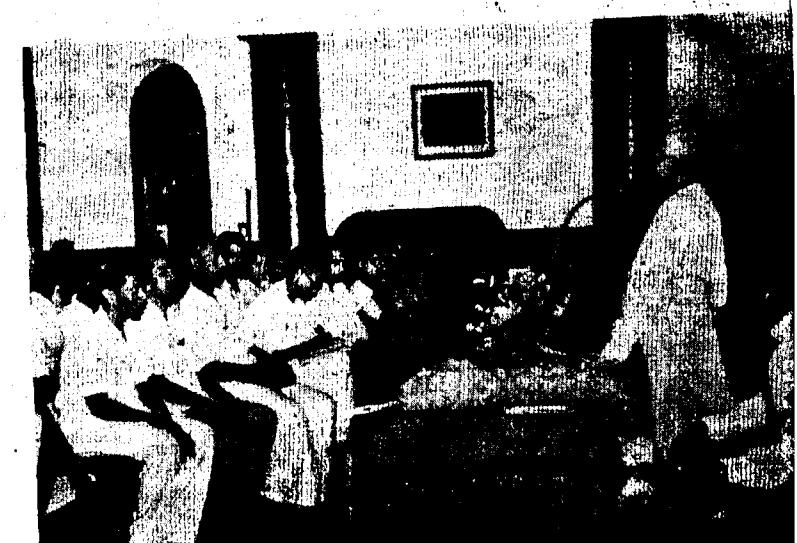
Export promotion

The percentage of "sea-food" exported is only 6 per cent of the State's aggregate production. The export promotion is giving more work to fishermen and others engaged in curing industries and exporting them.

Madras, Tuticorin and Nagapattinam are the three main ports of marine food export business of the State.

Exports of chank fish, porpoise meat, dried holothurian and edible oyster meats have to be examined. At present, all these have no demand in Madras but still not exported so far. Incidentally other articles from Madras sea which are not of food value but are otherwise commercially useful can also be examined for export. They are conch shells that are collected off Tanjavur, Ramanathapuram, Tirunelveli and Kanyakumari districts' coasts in lakhs every year. Shells are already in multifarious usage in industries in Hongkong, Japan, Singapore and Burma. In Florida in U.S.A. sea-shell products come out from factories in never-ending varieties. Hence, the scope for organised large scale export of sea products from Madras to overseas markets in the East as well as far West has to be explored.

Sri M. Bhaktavatsalam, Chief Minister inaugurated the Services Week of the Secretariat Association on 30th March 1965.



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GOVERNMENT OF INDIA, MINISTRY OF FINANCE

DA 64/701



Sri R. Venkataraman, Industries Minister
witnessing some of the exhibits at the
Handloom Exhibition held recently in Madras

Handloom
Exhibition

in

Madras



Chief Minister, Sri M. Bhaktavatsalam
at the Handloom Exhibition

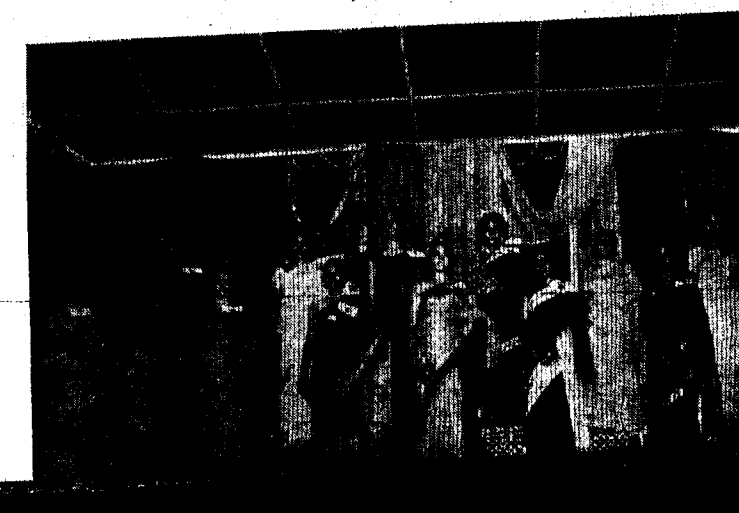


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*Madras
Information*

June '65 - 20 Paise



1. Coskers walk, about 3 miles from the town.
2. Pillar rock, one of the finest pieces of scenery in South India.
3. Sacred Heart College at Shenbaganur (Kodalkanal hills).
4. Kodalkanal lake amidst beautiful mountains.
5. The Solar physics observatory in Kodalkanal's highest point is well worth a visit.
6. Shopping centre of Kodalkanal.

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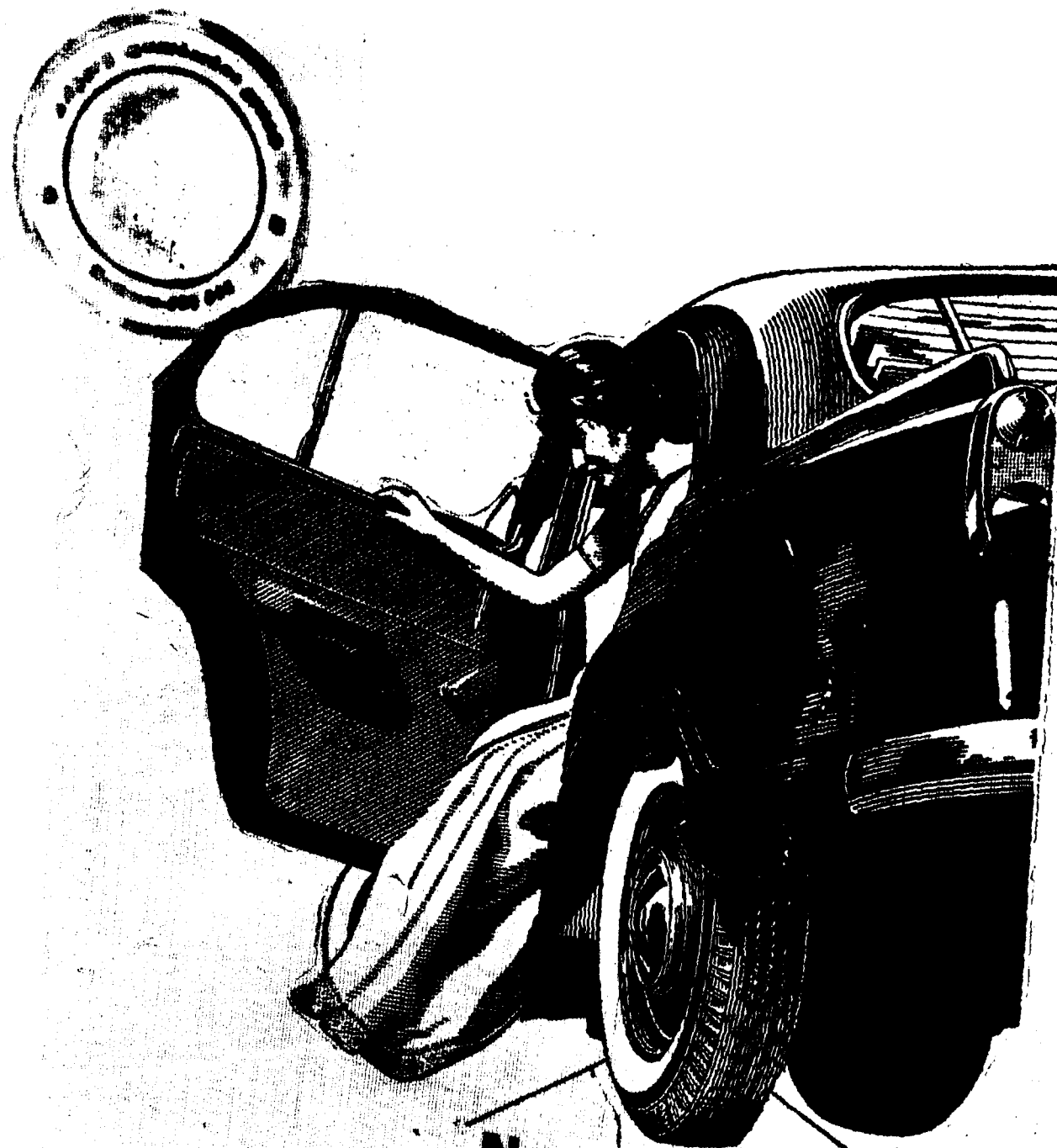
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THIS MONTH'S COVER

Ennore, about 10 miles north of Madras, which has been a fine picnic spot, is now fast developing into a huge industrial complex. An express way has been constructed from the port to Ennore to cope up with the traffic, which will increase in the near future. Already Ennore is served by a double track broad gauge railway line. Trains moving over the double track railway bridge near Ennore in silhouette present an arresting picture. It is also a prominent fishing centre, where an angler will have a good past-time.

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FAST DEVELOPING



In his last budget speech on 1st March, the Chief Minister of Madras stated that Madras is among the few States of India which have recorded a steady progress in industrial development and in fulfilling what was expected of them in regard to mobilization of resources. This satisfactory performance was rendered possible because we have in the last decade built up a sound techno-administrative machinery fully geared to the tasks of development. The Planning Commission which made an assessment of the Third Plan in the State, some time back, has recorded its high appreciation of our efforts and the progress we have been able to register in all key sectors of growth like agriculture, power, industries and transport.

The textile industry was the only fairly developed industry worth mentioning at the beginning of the First Plan period. After Independence, several industries ranging from consumer goods industries to capital goods industries—big and small—have come up both in public as well as in private sectors. We have during the last two plan periods built up a broad-based industrial complex and have also achieved a fair dispersal of industries in different parts of the State.

Picnic spot

Madras City itself has now out grown in size and stature. A ring of industrial belt is now encircling her. Several industrial hamlets have come up. There is Guindy Industrial Estate and Ambathur and Avadi are also fast developing. Ennore is not an exception to this. Ennore hitherto a fine picnic spot about ten miles north of Madras on the shore of the Bay of Bengal and on the Madras-Calcutta railway line is now fast developing into an industrial hamlet.

This small village with its enchanting surroundings has served as a fine picnic spot in the British period. During the pre-independent days, Europeans used to go there to spend their holidays. Still there are several bungalows which were built for their stay on the strip of the land between the sea and the backwaters. The sand expanse of the coast at this point covers an area of about 20,000 acres.

Ennore is a prominent fishing centre where an angler can have much delight. There is a marine biological station at Ennore which carry out fisheries research work. Other such stations are at Krusadai Island, Taticorin and Cape Comorin. The biological station at Ennore also supplies biological specimens to colleges, universities and private institutions throughout the country. Preliminary action is also being taken for building up Freezing Unit at Ennore, during 1965-66.

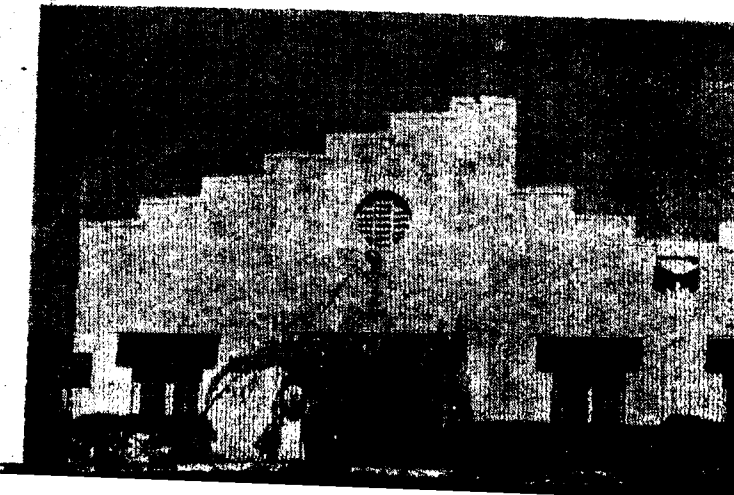
Much of the inland-navigation trade of Madras City passes through the Buckingham Canal which passes by the side of this village. It is a pleasant sight to see several groups of boats passing through the V.W.D. lock of the canal, built about a century ago, throughout the day.

Power station

Everywhere new buildings are now springing up. The whole surrounding is full of life bustling with activities. Besides its traditional occupation of salt manufacture on a big scale, which brought fame to the place during the Salt Satyagraha Movement, several new factories are coming up. Asok Leyland, Ennore Foundries and Fertiliser factory in the private sector have already been established.

The fair measure of success we have achieved in expansion and diversification of industries depends not a little on the energetic implementation of power programmes. As against the Third Plan target of

Front view of the Government Regional Press, Tiruchirappalli, which was recently inaugurated by the Chief Minister.



1,040 MW of power, the Madras State Electricity Board will have an installed capacity of 1,150 MW. With the 400 MW of power to be commissioned at Neyveli the installed capacity in the State will be 1,550 MW as against only 571 MW at the commencement of the Third Plan. Keeping in view the need to maintain a proper balance between hydel and thermal power, we have already got clearance from the Planning Commission for setting up a thermal station with a capacity of 300 MW at Ennore. When completed it will be the third thermal power station in the State, Basin Bridge and Neyveli power stations being the other two. With its completion the Ennore thermal power station will go a long way in easing the power crisis of the industries around Madras.

Oil Refinery

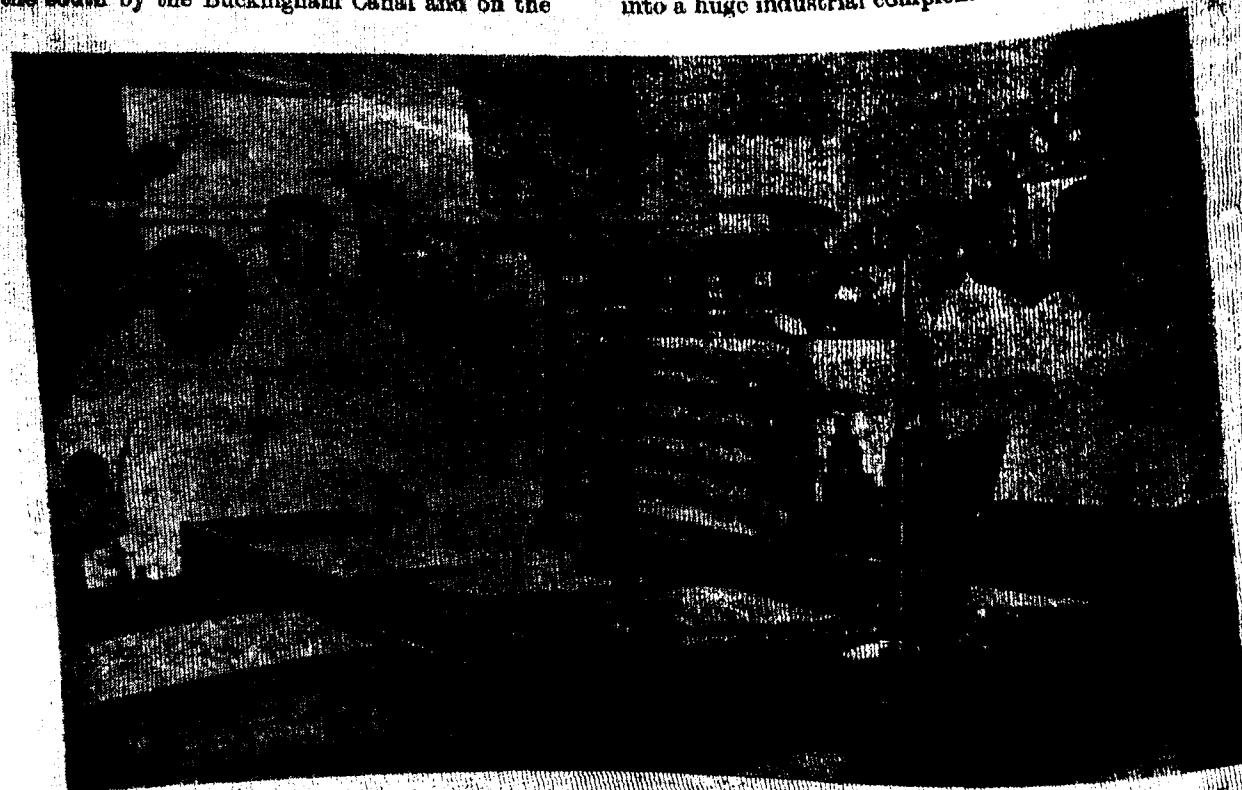
The Government of India also decided to locate a Petroleum Refinery at Ennore with a capacity of 2.5 million tonnes of crude and a fertilizer factory with a capacity of 200,000 tonnes of nitrogen per year. Lands for these projects are under acquisition and the State Government are now doing preliminary investigation for the provision of various facilities like water, railway siding, road, etc.

The site for the Petroleum Refinery will be a 3,000 acre stretch of palm-dotted land lying beyond the Ennore backwaters. It is part of Manali village and is hemmed in on the south by the Buckingham Canal and on the

north by the surplus channel of the Red Hills lake. In a few years this stretch of partly barren land will be transformed into a huge industrial complex. On the site will rise besides the Rs. 20 crores refinery, the country's biggest fertilizer plant costing about Rs. 30 crores and other Petro-chemical units. Construction of the refinery will start towards the end of 1960 and is expected to start production by the end of 1962. The fertilizer factory will take longer time. As regards the Petro-chemical units the proposal is to set up the first two factories to manufacture PVC and methanol and are still in preliminary stage. An American Company will supply and help to erect the refinery. An Iranian Company will supply part of the 1 million tonnes of crude that the refinery will produce each year. Each company will have 13 per cent share of the company's capital.

A good road to transport heavy equipment that comes by ship to the project will have to be built. The plan is to use the express way from the port to Ennore. A three mile long road will be built to the site with a bridge across the Buckingham Canal and a flyover across the rail track. Parallel to this road will be laid a 30-inch pipe that will carry crude to the refinery from the port. This line will cover a distance of ten miles.

Thus in a few years Ennore will be transformed into a huge industrial complex.



Chief Minister who inaugurated the Government Regional Press at Tiruchy is going round the Press.



The Kundah Hydro-Electric Scheme which derives the name from the river Kundah in the Nilgiris is the biggest Hydro-Electric Scheme so far undertaken in Madras State. In token of appreciation and grateful gesture of the assistance received from Canada for the project, all the five power houses of the scheme are named after Canada as Canada Power House I, II, etc. Canada Power Houses, 1, 2 and 5 are already in operation. Canada Power House-3 was recently inaugurated by the Chief Minister of Madras.

The river Kundah has long been recognised as one of the greatest sources of water power in the Nilgiris ranges. Situated in the Western catchments, the river takes shape from its main tributaries Emerald and Avalanche which rise amidst a group of high peaks of over 8,000 feet in altitude, joined by various streams lower down and finally confluences with Bhavani River at an altitude of 1,300 feet. The Kundah Hydro-Electric Scheme is intended to harness the waters of the Kundah river in two phases for the generation of power in five power houses with an installed capacity of 425 MW. Both the phases of the project, received generous aid from the Government of Canada under the Colombo Plan to the tune of 43 million dollars. In token of appreciation and grateful gesture of the assistance received from Canada, all the five power houses of the Scheme are named after Canada. The Canada Power House 3 will have an installed capacity of 120 MW of which the first 60 MW unit has been inaugurated by Sri M. Bhakavatsalam, Chief Minister, recently. This is the fourth power station of the Kundah Hydro-Electric Scheme and the ninth Hydro-Electric Power Station to be added to the Madras Grid. The fifth power house of the scheme, viz., Canada Power House 4 with an installed capacity of a single 50 MW unit, is in an advanced stage of construction and is expected to be commissioned shortly.

The initial phase of the Kundah Hydro-Electric Scheme included in the Second Five-Year Plan was estimated to cost Rs. 354 millions. It provided for the construction of four masonry dams, viz., Upper Bhavani, Avalanche, Emerald and Kundah dams, three tunnels of 8 miles length in rock, 27,500 feet of penstock pipes and two power houses, viz., Canada Power House 1 at Kundah with two generating units of 20 MW each and Canada Power House 2 with four units of 35 MW each. Canadian assistance to the initial phase of the scheme amounted to about 21 million dollars by way of plant and machinery which included gates for the dams, low pressure pipe lines, penstock pipes, valves, generating machinery, steel structures, oil circuit breakers and associated equipment besides material for the 110 and 230 KV transmission lines and equipments for the sub-stations at Thudiyalur, Salem and Koratur. The initial phase of the scheme was inaugurated on the 29th June 1956. The works connected with Canada Power House 1 were completed in a record time of three and a half years and the power house was commissioned into operation in the presence of the then Prime Minister of India, Sri Jawaharlal Nehru, in March 1960. By June 1961 the entire capacity of 180 MW envisaged under the initial phase of the scheme in Canada Power Houses 1 and 2 was in operation.

The total fall in the Kundah River that would be available for power generation is about 6,515 feet of which 3,650 feet was utilized in the initial phase. A scheme for further extensions to the initial phase, utilizing the balance 3,865 feet of head in the Kundah river, was taken up for execution under the Third Five-Year Plan at an estimated cost of Rs.230 millions. The scheme envisages two more power stations down below the Kundah river and another Power House—Canada Power House 5—at the exit of Upper Bhavani Tunnel and additional generators in Canada Power Houses 1 and 2. Canadian assistance to the extension Scheme under the Colombo Plan is about 22 million dollars.

Under the extension scheme, an additional 20 MW unit at Canada Power House 1, an additional 35 MW unit at Canada Power House 2 and the Canada Power House 5 with a 20 MW unit have been commissioned in March, February and October 1964 respectively. The transmission lines and extensions to sub-stations have also been completed. The Kundah Hydro-Electric Scheme is thus operating now with an installed capacity of 255 MW of the three power stations.

Location

Canada Power House 3 is located at Pulikkarai-pallam Valley in the reserve forest area of the Coimbatore district, about 25 miles from Karamadai. The discharge water from the tail race of the Canada Power House 2 will be impounded by a 182 feet high masonry dam built across the Pegumbahalla stream and conducted through a horse-shoe shape tunnel

Grama Sevaks are being given intensive training at the Rural Extension Training Centre, Pattukottai which was inaugurated recently by the Chief Minister.



seven miles long and thence through two penstocks each 3,534 feet long to Canada Power House 3 equipped with two 60 MW vertical impulse turbine sets.

Situated at an elevation of 1,429 feet above M.S.L. the Power House building 222 feet long, 79 feet wide and 49 feet high, is of structural steel frame work with stone masonry walls built to accommodate three generating units ultimately.

The site chosen for the power house based on hydraulic condition, required extensive excavation of about 154 feet depth on all sides which can be said to be one of the deepest so far done in India. The total excavation involved for locating the power house building is about 7.5 Mc. feet out of which 4.3 Mc. feet was in hard rock. Due to good hard rock available no special treatment for foundations was made.

The two turbines installed are of vertical impulse turbines type with 6 jets, rates to develop 86,000 H.P. at a net head of 1,350 feet and a speed of 333.3 R.P.M. The runner supplied for the turbine is 13 tons. Each of 12.5 per cent chrome stainless steel. Each of the two turbines are coupled individually to a 67,500 K.V.A., 11 KV, 18 poles, 0.9 pf. vertical suspension type generators, having the combined thrust and guide bearing on the top bracket. For the first time in the world, generators with only one guide bearing are being used. The starters for the generators were received in two sections partially wound in the factory itself, each section weighing nearly 43 tons.

The generator terminal cubicles, the neutral excitation and voltage regulators cubicles, are all arranged on either side of the respective generators. The relay panels, control desk, L.T., A.C. and D.C. panels have all been erected on the machine hall floor itself, resulting in appreciable savings in the power house building and superstructure. A 220 V. 270 Ah. lead acid battery, has been installed in a separate room on the machine floor.

Three turbine pumps of 1,200 G.P.M. capacity have been installed in the turbine needle floor for supplying the cooling water to the generator air coolers and the bearings of turbines and generators. Separate Booster pumps (3 numbers of 110 G.P.M. capacity) have been provided in the same floor, for handling the cooling water supply of the transformers located in the outdoor yard.

The power generated will be directly stepped from 11 KV to 230 KV by means of two banks of transformers each bank consisting of 3 numbers 22.5 MVA single phase 11/230 KV transformers located in the outdoor yard. The transformers are of water cooled oil forced type (OPW). For the first time in the Madras Grid such direct step up from 11 KV to 230 KV has been adopted here.

The 11 KV cables used for connecting the generator terminals and the transformer are of special Ozone treated Butyl Rubber insulation being used for the first time in the Grid.

Remote Control operation

The outdoor transformer yard is located at a higher level of 107 feet above the machine hall floor (at an elevation of 1,536) thereby avoiding excavation. The structures are of galvanised steel. Six 22.5 MVA 11/230 KV transformers have been erected to step up the generated power for transmission to Thudiyalur via Canada Power House 4 and Canada Power House 2. Two 230 KV single circuit lines one to Canada Power House 4 and the other to Canada Power House 2 take off, from this yard.

Supervisory and telemetering equipments have been installed for the remote operation of this power house over Power line carrier from Canada Power House 2 which is situated 15 miles away. Canada Power House 2 will be the master station from where all the other 4 stations would be remotely controlled, and important values telemetered over power line carrier. Remote operation is expected to result in better co-ordination besides appreciable savings in the operation and maintenance costs.

Power Line Carrier Communication equipments have also been installed in the power house for effective communication.

The tail race water of Canada Power House 3 is led into the Pillur Reservoir across the river Bhavani through a 3,660 feet long channel in deep cutting. The width of the channel is 20 feet with a bed fall of 1 in 350 for distance of 2,200 feet length from the power house and 35 feet with a bed fall of 1 in 500 for the rest of the length, the average depth of cutting being 60 feet. The total quantity of excavation for this tail race channel was about 12,000 units out of which 5,000 units were of hard rock.



Chief Minister receiving the Vice-President of India Dr. Zakir Hussain who paid a visit recently to the State.

An outstanding work

The Kundah Hydro-Electric Project has been recognised as an outstanding work and its overall design and technical excellence have already been commented upon in Engineering Circles. Canada Power House 3 completed just in four years time stands as a living example of Indo-Canadian Friendship and Co-operation and is yet another symbol of the beneficial nature of the Colombo Plan. This power station equipped with the biggest generating units so far installed in the Grid, is an important landmark in the history of Power Generation in the State. Its water conductor system, employs the longest tunnel in Asia, the deepest sugar tank in India and the largest size of penstock and valve in the State. With the commissioning of the first 60 MW set now and followed by the second unit by about July next, the installed capacity in the Madras Grid will increase by another 120 MW. The Kundah Hydro-Electric Project on completion of Canada Power House 4 also, will have a total installed capacity of 425 MW and would help to accelerate the Industrial and Agricultural development of the State.



The Lower Hill with Sri Anjaneya Temple and Kondapalayam Village at its foot.

piece to this impressive mountainscape is provided by the temple rearing its tower majestically on the crest of the huge monolith dominating the range, with another leviathan rock in front serving as a foil.

Sholinghur is a small township on the northern border of the district and of Madras State; and lies midway between Tirupati and Kancheepuram. About four square miles in area, the town has a population of about 11,500 according to the 1961 census. Lying in a rich paddy bowl in mountain girt country, the town once enjoyed a very prosperous dying and weaving industry. To this day, a section of the community is engaged in this industry with varying fortune. The place, however, has enjoyed, from the dawn of South Indian history to modern times, a prominence which does not seem to be borne out by its present humble look and size.

Sholinghur Town

The name "Sholinghur" is the anglicised form of Cholasingapura of Vaishnavite mythology and literature and Cholalingapura of Saivite tradition. It is one of the 108 "Tirupatis" (Holy places) of Vaishnavism. According to tradition, Lord Mahavishnu in his incarnation as Narasimha, gave darshan in *yoga samadhi* on the hill to his devotees, Prahlada, the *sapta rishis*, and the devas for a *ghatika* or 24 minutes. That gave the place its name *Ghatikachala*, and *Tirukkatikai* in Tamil. Another explanation is that the name is derived from "Ghatika," i.e., university or seat of learning, which flourished at this place in the past.

It is said that the Chola King, Aditya, who overthrew the Pallavas and established Chola hegemony over Tondaimandalam, encountered severe reverses in the neighbourhood of Sholinghur during the wars and when he was losing heart, Lord Siva appeared to him in a dream and encouraged him to fight on. He did so with ultimate success and in gratitude built a temple over the Linga which he found at the place and it came

to be known as Cholalingapura. It is interesting to note a similar tradition connected with the temple at Tirumullaivayil, ten miles from Madras City.

Temples of Sholinghur

The temple on the higher hill is dedicated to Lord Yoga Narasimha and his consort, Goddess Amurta-palavalli. The temple is built on a huge boulder on the top of the ridge. To its right is another hill of lower height on which stands the temple of Lord Anjaneya. The deity, in this temple is also in *yoga pose*, and is shown with four arms, the additional ones bearing the Conch (*Sanku*) and the discus (*Chakra*) of Lord Mahavishnu. According to Mythology, Lord Anjaneya was armed with these weapons by Lord Mahavishnu and sent to help King Indradyumana to put down the Kalakeya rakshasas who were terrorising the country around.

In between two hills is the village of Kondapalayam consisting mostly of choultries for pilgrims seeking solace at these shrines. There is a common belief that worship at the shrines, particularly of Lord Anjaneya of the lower Hill, in the prescribed manner helps to cure physical and mental disorders and "barrenness" in women. Large numbers also resort to this shrine for getting rid of evil spirits "possessing" them and on any day the visitor can see the touching spectacle presented by such afflicted women.

Climbing up the hill, particularly the higher one, was an arduous task some years ago. It is about 1,800 feet high and the gigantic boulders and steep slopes made ascent difficult. An easy flight of steps has been now laid with shelters at convenient points for rest, and ascent is now very much less trying. In and around the hill on which the temples stand, are ponds, precipitous rocks, and narrow gorges which provide thrills for the seeker of adventure. The area abounds with monkeys—and the visitor may have to be alert amidst all the amusement he may get.

Lakes and ponds, when they are full, spread their glittering waters in the plains below; but often they go dry when the monsoons fail. Yet there is a perennial tank of fresh water at the point where the road forks out to Kondapalayam and Sholinghur town, just a mile from the town. It is known as "Bhrama Theertham" (holy pond) or *Thakkan Kulam* and on its bank stands a temple dedicated to Lord Varadaraja. In the centre of the town stands the temple of Bhakta Uchita or Thakkan and to its north-east stands the

temple of Lord Cholalingeswara. Sri Swami Doddacharya, the scholar saint who lived here in the 16th century and is revered as a descendant of one of the direct disciples of Sri Ramanuja, is credited with having re-built on fresh plans both these temples with munificent help obtained from the Vijayanagar ruler. It was to give *darshan* to this devotee in his inability to travel to Kancheepuram for the "Garudotsava", that Lord Varadaraja manifested himself in "Garuda vahana", as he was offering morning prayers at the Thakkan Kulam. There are at least 25 other tanks and ponds in the vicinity, some of them located amidst beautiful surroundings deep in the hills which are considered to be of great merit by the devout. To the holiday seeker and lover of nature, these places, so full of quiet and refreshing atmosphere, serve as tonic.

Just a few miles from Sholinghur lies Perunkanchi, once a strong center of Jainism. Relics of Jainism are believed to lie about this place even now.

Historical importance

Sholinghur figured prominently in the wars of the past, especially in the Wars of the East India Company with Hyder Ali of Mysore. In an astounding feat of Military Strategy Hyder Ali tore down from his capital, through Chennamma Pass into the Carnatic, causing consternation to the Company Factors in Fort St. George. The course of the war which followed remained indecisive despite major defeats sustained by both sides, until Hyder's death in 1782.

One of the numerous engagements in the War was fought in September 1781, South of Sholinghur town, below the hills. The English General, Sir Eyre Coote, caused a surprise to Hyder, but Hyder reacted swiftly and in the fighting which ensued was constantly threatening the English ranks, while all the while he kept his eye on "the leading principle of his manoeuvres, never to risk his artillery". He, however, had to sacrifice a good part of his magnificent cavalry; but he succeeded not only in harassing the English but in delaying their march to the relief of beleaguered Vellore. Coote's gain were three cavalry standards and a solitary gun which had got bogged in the field, sodden by overnight rain and his loss about 100 officers and men. But he was in such sore straits for supplies—indeed, he had been so far quite some days—that he wrote from the field of battle that he "would willingly exchange the trophies gained together with the credit for victory for five days' rice". Hyder Ali's loss in men and horses is variously estimated by the several chroniclers, at 1,000 to 5,000.

A modest low-walled rectangular construction at the southern entrance to the town marks the graveyard of Hyder's men.

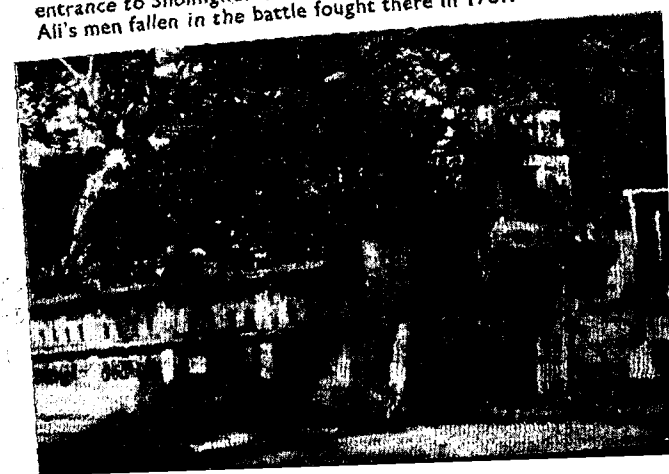
Ranges of hills

The ranges of hills near Sholinghur and in the neighbouring region are remarkable from the geological point of view also. In the Sholinghur area, the hills rise to precipitous cliffs and peaks. One notices in this area as in the adjacent Perumalrajupet and Tirutani hills, rocky ridges and formations known as "trap dykes". Bruce Foote, a pioneer of the Geological Survey of India, more than a century ago, conducted a survey of the entire region and his account is a monumental contribution to the study of geology of this area, as indeed are his accounts of all the areas he surveyed. Trap dykes, in lay language, are "wall like masses of rock projecting beyond the surrounding surface and filling up vertical or inclined fissures in the strata".

The formations in the region of Sholinghur are considered to present features which make them "one of the most remarkable displays of trappean injection known in any country". Some protrusions like those in the neighbourhood of Puttur and Nagari, about 20 miles northeast as the crow flies, display pleasing colours also. Even more striking is the magnetic character attributed to the dykes in the Sholinghur area which is said to be so strong as to affect the needle of the compass markedly. Trap dykes, ordinarily, are not more than a few yards wide; but the dykes in these parts are "not only extremely numerous but are of large size" having a width of some 50 to 100 paces.

Sholinghur is within easy reach of Madras City, just about 70 miles by road. A good bus service connects it with Arkonam Railway Junction, about 17 miles east and with Tiruttani, a little less, to the north-east. The place, surrounded by rocky hills, has generally a dry air even during the rainy months and is quite hot during summer.

A modest low walled rectangular construction at the Southern entrance to Sholinghur Town marks the graveyard of Hyder Ali's men fallen in the battle fought there in 1781.



NEERA CURES EYE DISEASES

It is an established fact that Neera contains vitamins. It is commonly consumed by the rich as well as the poor in rural and urban areas.

Dr. G. Venkataswamy, M.S.D.O., Professor of Ophthalmology, Madurai Medical College, Madurai, treated patients with Neera. This experiment is being continued. The Madras State Palmgur Co-operative Federation has sanctioned a sum of Rs. 5,000 towards the experiment. After conducting the experiment Dr. G. Venkataswamy has come to the following conclusions :

"Identical groups of cases were selected for the purpose of treatment with **Pathaneer** and the Riboflavin deficiency of vitamin B-2. Both groups were similar in age, sex, income, occupation and clinical science and symptoms. After treatment it was found **Pathaneer** was as good as Riboflavin in the treatment of Arianovlavinosis. **Pathaneer** cured the condition more or less in the same duration of Riboflavin.

"In the villages where Neera is produced, diseases due to vitamin B deficiency could be easily treated by it. The Neera is easily available during a particular season. It is cheap, and liked by all. Daily consumption will prevent vitamin deficiency diseases. Consumption of Neera will promote the Cottage Industry in one side and improve the health of the villagers in the other side".

The Madras State Palmgur Co-operative Federation has taken part in the exhibition held at the Centenary Hall of the Madras University from 6th to 9th January 1965 at the time of All-India Ophthalmological Conference. Neera, Candy, Palm Sugar, Palm molasses, Palm Vinegar and Palmgur prepared by the Federation were displayed. The photos of the patients who were treated with neera were displayed. They attracted the doctors who came from all over India. Fresh chilled Neera was distributed to all the doctors by the State Palmgur Federation daily. Doctors who treated Neera have recorded their impressions.

The nutritive contents of **Pathaneer**, Palmgur, Palm sugar were attractively displayed by the State Federation so as to convince the medical professionist that **Pathaneer** is a natural nutritious drink. Dr. G. Venkataswamy, who was incharge of the Exhibition displayed charts describing the experiments and conclusions. In this connection, the Madras State Palmgur Co-operative Federation has published a brochure (viz.), (1) Palmgur Industry—Research, (2) Research on Palmgur with scientific datas, analytical reports, articles from eminent scientists who have worked on Neera. The exhibits and results of the experiment conducted at the various Universities, convinced them that Neera is playing an important role in the consumption schedule of public. It is expected that Neera will shortly find a place in the list of prescriptions of the doctors.

The Madras State Palmgur Co-operative Federation sold frozen neera through the exhibition stall, during the All-India Congress Exhibition held at Madras from 23rd December 1964 to 4th February 1965. The frozen neera tastes good as processed by the Bharatiya Tad Gud Shilpa Bhavan, Dahamu. The high alkality contents of the neera added by Madras tapping artisans seems to be reduced into mild quality and taste, flavour, sweetness is maintained. People who consumed this neera appreciated very much.



A. K. VENKATESAN

Sholinghur is a town of historical as well as tourists importance. It is one of the 108 Tirupathis (holy places) of Vaishnavism. It is here the Hyder Ali of Mysore fought against the East India Company. Sholinghur is situated on the Northern border of Madras State in the North Arcot district midway between Tirupathi and Kancheepuram.

The temple of Sri Yoga Narasingha with his consort Goddess Amruthapalavalli is situated on the higher hill in Sholinghur and the temple of Sri Anjaneya on the lower hills.

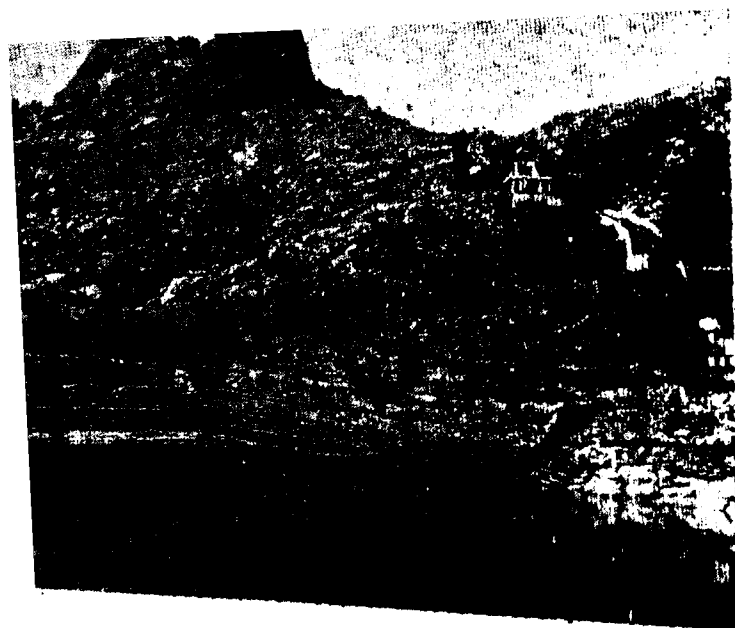
As you travel by rail from Madras to Jalarpet, soon after leaving Madras, you land marks catch the eye by their prominence on the range of hills to the north-west which form spurs of the Eastern Ghats. The first and more prominent one is the Nagalapuram-Nagari range culminating in the unmistakable "Nagari Nose" rising some 2,800 feet above sea level. The second is the Sholinghur range to the west of Arkonam.

efforts at rehabilitation have yet to make an impression. Still the region can hold its claim to being one of the most picturesque parts of North Arcot district and deserve Innes Munro's 180 year old tribute to the area as "one of incomparable beauty". The crowning

A view of Sri Narasingha Temple on the Sholinghur Hill. The steep cliffs and gorges provide thrills to the seeker of adventure.



The countryside around Sholinghur is rocky, with ungle and shrub-covered hills and bold rugged tors. At first sight, it looks barren and unpromising but as you move northward from the railway, you find the landscape becoming picturesque. The valleys and jungles, particularly after rains, look green and pleasing while the hill ranges criss-crossing the country and scattered masses of boulders look like playthings of titans strewn about in some whimsical fit. Here and there on the undulating terrain spread numerous lakes and watersheds, some of them fairly large like the Minnal, Kodakal and Sholinghur lakes. Paddy fields and groves extend around the lakes presenting lovely patterns of colour. Forests in this region have suffered terribly in recent decades and



The Sholinghur Hill Temple with the Theertham sacred pool at its foot.

There is a well equipped Rest House beside the fork of the road near *Thakkan Kualm*, and quite a good number of private rest houses and choultries in Kondapalayam and in the town.

Other attractions

The visitor from town will find much in the place which is not only agreeable but exhilarating. The

mountainscape, a climb uphill at any chosen spot, the general air of restfulness and the natural beauty of the countryside are bound to make an abiding impression. The devout will find additional attractions in the hill shrines and the Temples in the town below. The lover of history will find much to interest him in the environs of the towns so full of interesting places like "Kumpinipet", "Pulivalam", "Banavaram", etc. Being so close to Kancheepuram, the seat of the Pallavas and the heart of Tondaimandalam the place and its neighbourhood, particularly south and southeast of Sholinghur have much to interest the students of archaeology. On occasions cheetahs and other common wild life are found in the hills and more frequently in the hills further north.

It is a good idea that the Madras Government propose to develop this place as a popular resort. Water-supply during summer months may present a problem but possibly subsoil sources may be tapped with advantage, even in the more elevated spots. One, however, hopes that plans for development of the place will be so designed as to maintain intact all that now makes a visit to the ancient place so worthwhile, while providing more amenities and larger avenues for its enjoyment.

MOVEMENT OF COARSE GRAINS

The Government of Madras have authorised the officers specified below to issue permits for the export of coarse grains from any place within their respective jurisdiction to any place outside the State of Madras up to the quantities specified therein.

Taluk Tahsildars may issue permits up to 100 bags of 75 kgs. each of any of the millets subject to the export quota fixed; Deputy Collectors in charge of Divisions up to 250 bags of 75 kgs. each of any of the millets subject to the export quota fixed; Collectors up to 500 tonnes of each of any of the millets subject to the export quota fixed; Commissioner of Civil Supplies, Director of Civil Supplies and Secretary to Commissioner of Civil Supplies without limit subject to the quota to be moved out of the State.

The Government of Madras have authorised the Collectors of all districts, District Revenue Officers, Joint Collector, Coimbatore District, District Supply Officers, Deputy Collectors and the Taluk Tahsildars to issue permits for the transport of coarse grains to or within the border area, within their respective jurisdiction and without any quantitative restriction.

YOUR PROGRESS
DEPENDS ON
YOUR

Savings

S. SRINIVASAN,
Assistant Regional Director,
National Savings, Madurai.

The Panchayat Raj is now with us. Gram Panchayats and Panchayat Unions have assumed full responsibility for promoting social, economical and cultural activities besides intensive agricultural development in their jurisdictions. It is for these bodies to promote planned development by mobilising both physical and financial resources for the well-being of the community they represent. Promotion of thrift and development of the savings habit must, therefore, form part of their major responsibilities.

With the advent of freedom, there is a mass awakening among the people to a new consciousness of their needs and rights. They are rightly demanding more amenities and better living conditions. Our Five-Year Plans have been conceived and are being implemented to achieve these and many other objectives. Every one of us is a beneficiary of the plans and every one has a stake in it. It is, therefore, imperative that we must practise thrift and invest our savings in the country's development. This can be done only with an abiding faith in our future and by dedicating ourselves to this task with a zeal. The Five-Year Plans are thus tied up with our aspirations and hopes for the future and their successful implementation is the responsibility of every citizen.

Savings Committees.

A small savings movement is essential in an under-developed country, because it builds up an atmosphere of thrift and enables more and more people to participate in the nation-building projects. The question is now to create this atmosphere. Generally an official agency, however efficient, cannot succeed in this, for obvious reasons. People with experience of public life have, therefore, to be persuaded to come forward and apply their experience for the success of the movement. In other words, it is necessary to combine the officially trained mind with the non-official approach.

We, in Madras State, have made some leeway in this direction by mobilising the support of the representatives of the people (viz., Gram Panchayats and Panchayat Unions) for the intensification of the Scheme in rural areas. Savings Committees at Gram Panchayat level are being organised with the President of Panchayat as the Chairman and the village level worker of the group as the ex-officio secretary. Not less than three to four members representing various interests like members of the Village co-operative, members of the Village Volunteer force, members of Madar Sangham, School teachers and Branch Postmasters are nominated to these committees. The Committee meets once a month and discusses ways and means to educate the people in the benefits flowing from the scheme. The Extension Officer in each Panchayat Union has been entrusted with the work of ensuring that the Gram Panchayat savings committees meet at least once a month.

At the Panchayat Union level, a powerful non-official committee has been organised with the Chairman of the Panchayat Union Council as President, and the Commissioner of the Panchayat Union as the ex-officio secretary. Not less than six members are selected from

Chief Minister addressing the representatives of the Chambers of Commerce and Trade Union Leaders on the "Promotion of Small Savings".





Srimachi Gnanasundaram Bhaktavatsalam distributing uniforms to children at the School Improvement Conference held recently at St. Gabriel's High School, Madras.

different interests, viz., teachers, advocates, social workers, people connected with Sarvodaya movement, Bharat Sewak Samaj, and selected Panchayat Presidents from that Union.

Role of the Committees.

All these committees are non-statutory bodies with powers to co-opt any number of members if, in the opinion of the committee, such addition will be in the interest of the savings movement. These Panchayat Union level committees meet once a month along with the monthly Council meeting of the Union to review the work of each Panchayat Level Committee under that Union. Each Gram Panchayat

has been given a financial target on the basis of population and potentiality. The Government of Madras have fixed a target of Rs. 2 per head per year for collection towards small savings in each Panchayat Union. In addition, the Government have suggested that the subject "Small Savings" should invariably be included in the agenda and discussed at Panchayat Union Councils and District Development Council meetings. Thus, the savings movement is generated from the village level through the Panchayat administration.

Once in two months, the District Development Council—a statutory body with the District Collector as the Chairman and all the Chairmen of the Panchayat Unions in the districts, M.L.As., M.P.s., Municipal Chairmen and District Officers, connected with the developmental schemes, as members—review the progress of all activities including small savings. At the District Development Council every Panchayat Union Chairman is asked to report on the progress in his Union in intensifying the savings movement and to offer suggestions, if any, to improve publicity and progress of collection for small savings securities on the basis of the target fixed. In addition, we are appointing non-official agents at the rate of five agents for each Panchayat Union. These agents, with the active support and assistance of the Gram Panchayat committees, are asked to canvass for subscription for small savings from every household in their area concerned.

Thus, the non-official machinery from village level onwards has been geared up to mobilise the savings of the community with the help of the authorised agents.

Observation tower at Vedanthangal Bird Sanctuary was recently inaugurated by the Co-operation Minister Sri N. S. S. Manradar.



MADURAI THIRUVAPPADAI KOIL CO-OPERATIVE SOCIETY



The Madurai Tiruvappadayarkoil Hand Pounding Co-operative Society, Limited IND. 131, Sellur, was registered under the Madras Co-operative Societies Act VI of 1932 on 28th June 1957 and started on its work on 23rd August 1957. The society was organised exclusively for the uplift of the denotified tribes who are the members of the society. At the time of starting there were 37 members mostly women and as they could not subscribe more than Rs. 37 in total as their share capital, the Government helped them by disbursing Rs. 50 each as share capital loan. In addition, a working capital loan of Rs. 10,000 and Reserve Fund Subsidy of Rs. 2,000 were also sanctioned to the society to

commence business activities. The society commenced production on 21st November 1957, providing employment to eight of its worker members. The number of worker members gradually increased and now there are fifty families of ex-criminal tribes who are getting employment in the Society.

The society is supplying hand-pounded rice to the public, Government Institutions like Government Hospitals, Jails and Hostels. The statistics furnished below show the progress and achievement of the society over the years.

Year.	Number of members.	Number of members provided employment.	Production. (IN RUPEES)	Sales. (IN RUPEES)	Wages Paid. (IN RUPEES)	Profit (+) or Loss (-). (IN RUPEES)
1957-58	37	8	6,748	7,600	615	675 (+)
1958-59	43	18	31,350	37,100	2,900	2,500 (+)
1959-60	35	22	28,200	43,700	4,300	2,876 (+)
1960-61	46	28	46,470	57,200	2,900	1,053 (-)
1961-62	62	31	48,315	60,000	6,000	94 (+)
1962-63	69	30	46,000	52,300	6,200	1,588 (+)
1963-64	75	40			5,400	1,600 (+)

The society is also dehussing paddy received from private persons and receiving wages for it. Many paddy owners utilise this society for dehussing paddy for their house consumption. This is the only society in the State which is selling "Ag Mark" hand-pounded rice.

During 1960-61, the society started a Model Production Centre with financial assistance of Rs. 4,000 as grant and Rs. 5,000 as loan received from the Government under this scheme, 45 worker members were given training in modern method of boiling, drying and

producing hand-pounded rice by emery chakki. The special features of this scheme are popularised in the exhibitions held in and around Madurai City.

A Gramodyog Sales Depot (A) Type was functioning in the society for the publicity of village industries products and the depot is now being run departmentally with separate establishment.

As more and more members from ex-Criminal tribes joined the society to avail themselves of the opportunities given by the Government, a special



Sri K. Kamaraj, All-India Congress President inaugurated the Silver Jubilee celebrations of the Ammapet Handloom Weavers' Co-operative Production and Sales Society on 4th May 1965 at Ammapet, Salem district.

Sri K. Kamaraj is seen presenting a diamond ring to Sri Mariappan, President of the Society, in appreciation of his service to the Society.

training scheme was started during 1963-64. About 45 new members in three batches were given training about the various simplified methods of production of hand-pounded rice. A grant of Rs. 843.75 was received

from the Khadi and Village Industries Board and the amount has been utilised as stipend to the trainee-cum-worker member during the period of training.

The society had purchased a site to the extent of 96 cents in Nagamalai Pudukottai (6 miles from Madurai, on the Madurai-Usilampatty Road) for Rs. 3,356. Sri U. N. Dhebar, Chairman, Khadi and Village Industries Commission was pleased to lay the foundation stone for the buildings of the society on this site on 26th March 1964. The society is taking steps to construct godown, office, drying yard, etc., on the site. Necessary financial assistance has been provided by the State Khadi and Village Industries Board for the above purposes.

In the present days of rising prices, the members of the society have fully realised that it is only the co-operative societies which can help the poor people and much benefit can be achieved by co-operative effort in uplifting their economic condition. They are adopting the Gandhian way of life. They are all united and fully co-operative. The management of the society is vested in a Board of seven Directors. Four of the Directors are women. The Board of Directors are elected by the members. The society is one of the best working societies in the Madurai district.

IMPROVEMENT OF STARCH INDUSTRY

The Government of India (Department of Industry) have constituted a committee to assess the present production of starch and recommend to Government the use of indigenous raw materials other than maize for the starch industry. The Committee has been asked to assess the production possibility of raw materials and the requirement of starch for the various purposes such as, textile, glucose, export, paper industry, etc. The Committee has also been asked to suggest measures needed to put the tapioca industry on sound basis including the bye-product utilization.

The Committee has ten members. The Director of Industries and Commerce, Madras, is the Chairman of the Committee.

-HIGH PRESSURE BOILER PLANT AT TIRUCHI-

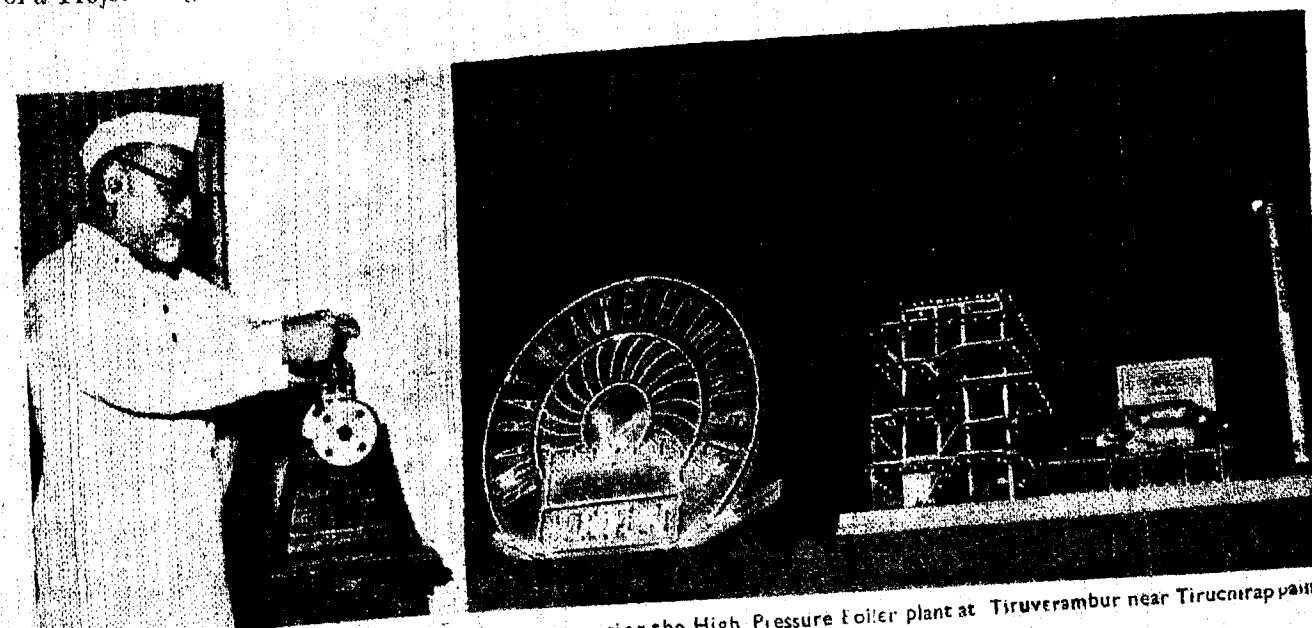
Despite a delay of some six months in commencing the construction work, the Tiruchi High Pressure Boiler Plant is being completed in all respects three months ahead of schedule. The plant is one of the biggest production units in India.

The Government of India approved the location of the High Pressure Boiler Plant as a Unit of Bharat Heavy Electricals, Limited, for the manufacture of High Pressure Boilers at Tiruverambur, Tiruchirappalli, after the site was jointly inspected by a team of Indian and Czechoslovakian experts in March 1961. The main considerations which influenced the selection of this site were availability of extensive vacant level ground (3,000 to 4,000 acres) belonging to Government, good soil, low sub-soil water level, abundant water-supply, good road and rail communications, and availability of power.

This Boiler Plant Unit started its activities at Tiruchirappalli on September 16, 1961, with the appointment of a Project Engineer.

Pending preparation of the Detailed Project Report and the sanction of the Government, work connected with acquisition of the required land, survey and investigation of water-supply, railway sidings and road facilities was done.

An agreement had been entered with Technoexport (an organization of the Government of Czechoslovakia) regarding the preparation of the Detailed Project Report in June 1961. In the preparation of this report, a team of Indian Engineers was associated with the experts of the Czechoslovak Design Organization. This association helped the Indian Engineers in the planning and execution of the actual construction work.



Dr. Zakir Husain, Vice-President of India, is inaugurating the High Pressure Boiler plant at Tiruverambur near Tiruchirappalli.

SALIENT FEATURES

- * Work commenced on 16th September 1961.
- * Total outlay of the Project is will be about Rs. 23.5 crores.
- * Foreign Exchange component in the capital cost of the Project will be about Rs. 9 crores.
- * In terms of money the annual production capacity is estimated at Rs. 22 crores.
- * At full production the plant will help to save foreign exchange to the tune of Rs. 10.15 crores annually.
- * Despite six months delay in the commencement of work it will be completed in all respects three months ahead of schedule nine months quicker than the estimated period.

Psychometric tests have been introduced as a regular feature in requirement for all categories so that wastage during training will be kept to the minimum. When the main bulk of our recruitment has been met, the recruitment of artisan trainees will be tapered down to cater to our normal wastage requirements and other training course introduced, e.g., promotion courses, refresher courses, subordinate supervisory training, etc.

Graduate Engineer training to provide the necessary officer cadre has already been started and will be expanded as required.

To meet the immediate requirement of technical officers for production as well as Design, Graduate

Engineers with varied degrees of experience were selected and sent to Czechoslovakia for specialised training for periods varying between six months and 2½ years. Those meant for production jobs are taking up positions. Those sent for Design work are nearing completion of their training but will stay on in Czechoslovakia for a few more months in order to be associated in the preparation of Design and Production documentation for the first boilers and fittings.

In order to train our workmen on the specialised and sophisticated machines and in the different special processes, Craft Instructors from the Training Centre were hand-picked and sent to Czechoslovakia for training. On their return, they are training skilled workmen on the Shop floor. These Instructors will then take up positions of Foremen and Assistant Foremen in the factory.

A small indigenous development cell has been set up and is collecting information on indigenous availability of boughtout components like gear boxes, couplings, steel and iron castings, forgings, etc., consumable raw materials like electrodes and fluxes, welding wires and lubricants. After making sure that the indigenous supply will satisfy our requirements, the cell passes on the information to the Stores and Purchase departments, so that the indigenous element in the purchases will be maximised.

Costs

The Government, when accepting the Project Report in May 1963, approved of an outlay of Rs. 181.4 millions

for the factory. The foreign exchange content was to be 51.2 millions. The breakup of the outlay was as follows :—

	RS. IN MILLIONS.
Civil Services Buildings ..	70.7
Power and Gas Services ..	17.7
Machinery and Equipment ..	93.0
Total ..	181.4

In addition, the training centre with its hostels were to cost Rs. 9 millions and the township of 3,000 houses Rs. 42 millions.

Of the above, the cumulative expenditure up to March end this year is about Rs. 151 millions representing ¾ of the estimates. There are some costly machines yet to be received (not required immediately for

production) like roll plate, bending machines, large-size lathes and furnaces for the manufacture of Boiler drums. A number of quarters are yet to be completed in the township, and these will account for a major portion of the balance of the estimate.

The foreign exchange expenditure is likely to be Rs. 53 millions as against Rs. 51.2 millions provided for. The excess is mainly due to having to provide for release of foreign exchange to indigenous supplies of overhead cranes and other items, who had to import a few components from abroad. On the other hand, in spite of increase in Customs duty from 10 per cent to 26½ per cent on imported items, the overall expenditure is not expected to exceed the original estimate of Rs. 232.4 millions by more than Rs. 14 millions. This has been possible only due to a continued watch and immediate alterations being carried out in Designs and original proposals, as construction progressed.

FIRST OF ITS KIND

Dr. Zakir Hussain, Vice-President of India inaugurated the High Pressure Boiler Plant near Tiruchirappalli on 1st May. In his inaugural address he said that I need hardly mention to you what a serious obstacle our dependence on imports for electrical equipment has been, a large proportion of the machinery and equipment required to be imported year after year involving substantial outgo of foreign exchange. (With an ever increasing demand for power in this country we cannot obviously afford to rely on imports for all time. Indeed, we need to conserve foreign exchange for other pressing requirements. It is against this background that we have decided to embark upon Heavy Electrical industries for manufacturing boilers, steam and hydraulic turbines and other heavy electrical equipment.) In addition to what are already being manufactured in this country, a beginning has been made in Bhopal in the public sector. Bharat Heavy Electricals have on hand three projects. All these are going to make significant contributions to achieve a substantial degree of self-sufficiency in the matter of heavy electrical equipment requirements of the country.

(The High Pressure Boiler Project at Tiruchirappalli is the first of its kind in the public sector. This will supplement the indigenous production from the A.V.B. factory at Durgapur which was set up in 1962. These high pressure boilers are an essential part of thermal power generating equipment and in terms of value account for about half the equipment requirement for a power house. I am glad that an important step in the right direction has been taken to augment the supply of boilers as a part of the overall programme for self-sufficiency.) I am also glad to learn that the site at Tiruchirappalli has been developed to take care of further expansion of the plant.



Dr. Susila Nyyar, Union Minister for Health at the 10th Anniversary Celebrations of the Cancer Institute, Adyar.

Thus between May and August 1962 preliminary work of levelling of factory area, water-supply arrangements and structural design for the factory was facilitated. Also, preliminary arrangements for the procurements of structural steel, preparation of inventory lists, track materials for railway siding, etc., could be made. The Project Report plans were used for purposes of calling of tenders thereby saving a lot of time. Actual work was started in the factory area at the end of May 1963, when the Government approved the Project Report.

Main Factory Blocks

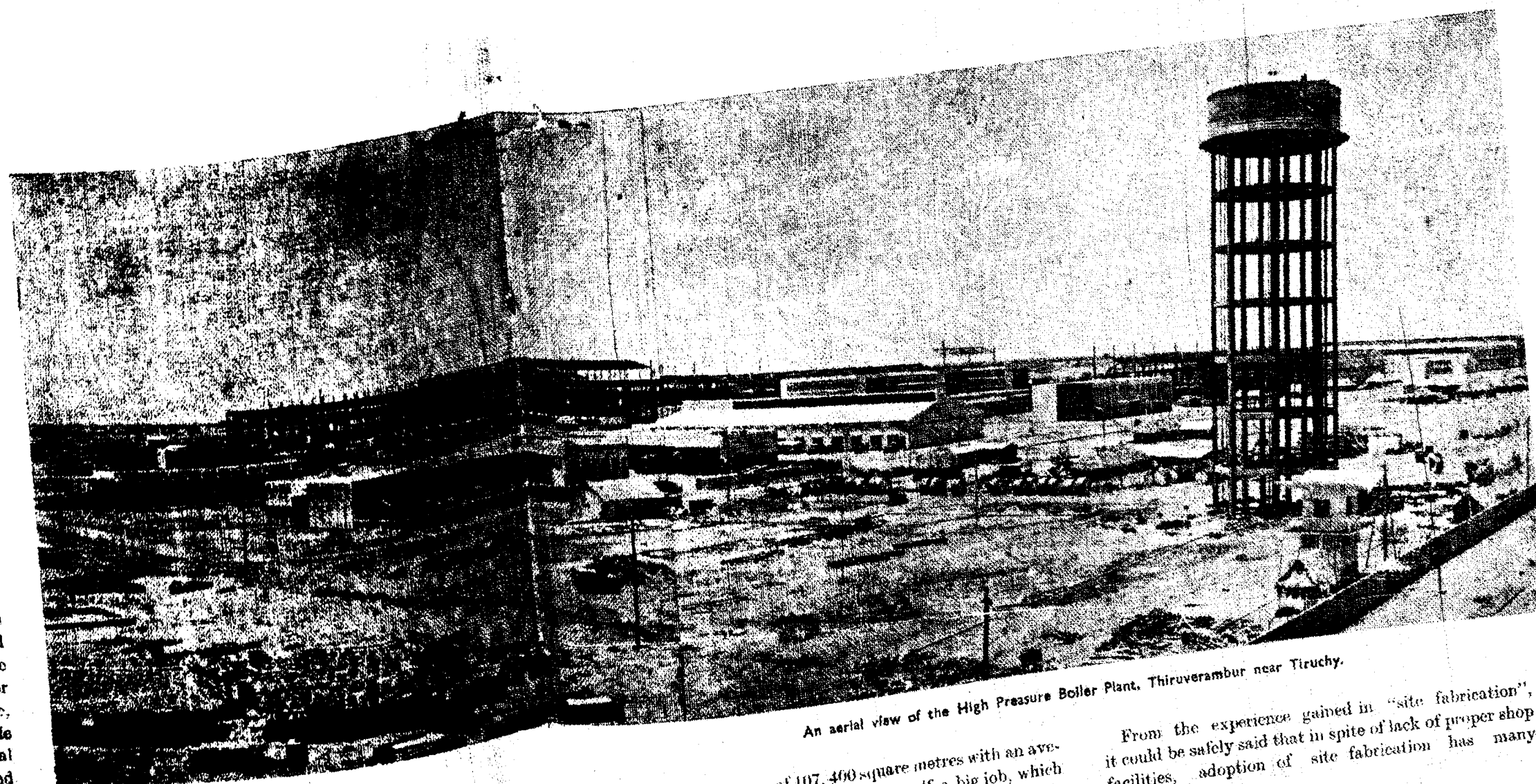
The main three production shops in the factory are : (1) Boiler Production Shop ; (2) Mechanical and Maintenance Shop ; and (3) Boiler Fittings Production Shop.

The floor area of the three Factory Blocks put together works out to 107,400 square metres. Besides these, there are ancillary buildings like Design and Administrative office blocks of each of the three factory blocks, Carpentry Shop, Fire Station, Boiler Fittings Test Station, Oxygen House, Acetylene House, Producer-Gas station, Compressor Station, Inflammable Store, Central Mechanical, Chemical and Metallurgical Laboratory, Administrative office, Canteens and Security office.

One of the special features of the layout is the provision of a sub-way under railway sidings connecting

THINGS TO BE PRODUCED

The Tiruchy High Pressure Boiler Plant, to begin with, is designed to produce 700-850 MW of high pressure boilers and 10 to 12 package boiler units for production of process steam, used in Rice Mills and other industries and has a surplus capacity of about 2,600 tonnes of high pressure valves, drums, receptiles, etc., required for various industries including Chemical Plants. The Plant will manufacture high pressure boilers with a total capacity of 750 MW per year, boiler fittings up to 1,800 tonnes annually and 10 package boiler units. Its contribution towards power generation during the Fourth Plan period is likely to be 8 boiler units of 60 MW and 7 boiler units of 100 MW. The first two units of 60 MW of the Plant have been assigned for the Ennore Thermal Power House near Madras.



An aerial view of the High Pressure Boiler Plant, Thiruverambur near Tiruchy.

office block and shop building of the Boiler Production Shop. All the workers and other staff will use this sub-way for going to the Boiler Production Shop.

Each of the three factory blocks have their own power sub-stations, the Boiler Production Shop alone having five sub-stations for itself, in addition to the main entrance sub-station to the factory.

The Boiler Production Shop has a floor area of 81,900 square metres and 8,000 tonnes of fabricated structural steel. There will be 47 overhead cranes, the heaviest being of 120 tonnes capacity. Heavy duty concrete flooring with an average thickness of about 35 centimetres had to be provided to meet the production requirements.

Special Features

A special feature in the construction of the factory blocks was the taking up the flooring work before the erection of the structural steel. The work of factory

flooring to the tune of 107,400 square metres with an average thickness of 25 centimetres is itself a big job, which would have taken a lot of time to complete. To save time, the work of factory flooring was taken up as soon as column foundations were completed and without waiting for the erection of the structural work. The machine foundation drawings were available so that side where foundation work was also done side by side as soon as each bay is roofed, it was possible to take up the work of erection of machines. For other machines, pockets were left in the flooring. By this unorthodox procedure valuable time almost a year in the factory construction period was saved.

An important aspect of the steel fabrication work was that a major portion of the structural steel required was fabricated at site by different contractors. Out of the 11,000 tonnes of steel, nearly 7,000 tonnes of steel was fabricated at site. As a result, there has been saving in freight charges of fabricated materials and in transit time, avoidance of damages to the fabricated structures in transit, better co-ordination between fabrication and erection and better progress in erection work.

From the experience gained in "site fabrication", it could be safely said that in spite of lack of proper shop facilities, adoption of site fabrication has many advantages.

Training Centre

Since the considerable number of skilled workmen in the different trades needed for the factory cannot be found from the open market within a short period, approval was given by the Government for setting up of a Training Centre. The Training Centre consisting of a building for theoretical instructions, a Workshop and two hostels to accommodate 400 trainees was inaugurated in July 1963. Recruitment of trainees has been staggered to take place every three months, so that availability of skilled men on the Shop floor will be progressive in step with the demands of production.

In order to build up the requirement quickly, the Training Centre will be worked in two shifts so that 800 persons at a time can be trained. Of these, 400 will stay in the hostels and the other 400 will be in Staff quarters at two per room.

COLLECTORS' CONFERENCE AT OOTY



Chief Minister Sri M. Shaktavatsalam (top) addressing the Collectors' Conference held last month at Ooty.

A FEAT IN ENGINEERING SKILL

SRI K. B. MATHUR,
Chairman, Bharat Heavy Electricals, Ltd.

In this article, the Chairman of the Bharat Heavy Electricals, Sri K. B. Mathur, deals with the complexities of production planning of the High Pressure Boiler Plant at Tiruchirappalli which was inaugurated by the Vice-President of India on May 1.

A remarkable advance in the productive potential of heavy electrical equipment will be witnessed during the current year—the closing period of the Third Plan. One by one the offsprings of Bharat Heavy Electricals will go into the production stage, geared to make their contribution to the industrial growth of the country. The first in this chain is the High Pressure Boiler Plant at Tiruchirappalli.

What planning for production has preceded and what will be succeeded is indeed an absorbing topic of considerable interest. From the inception, the central objective is production, as it constitutes the basis for the design and equipment of an industrial unit. It engages attention continuously, while the construction work is in progress. The pattern of demand is assessed and the training programme of engineers and technicians is modelled accordingly. Technical acumen being deficient, proper training has considerable significance. For higher training, a number of engineers and technicians were deputed to the Consultants Workshops in Czechoslovakia, supplemented by the institution of a Technical Training Centre at the plant site for building up a force of technicians qualified for the impending task.

Design Work

A tentative programme for manufacture was prepared well in advance, so that the design work could proceed. In the case of high pressure boilers, water and fuel

analysis of samples which will be used, the site atmospheric conditions, the pressure, temperature and quantity of steam required are the basic desiderata for design work. A general indication of these was furnished by the Central Water and Power Commission, but specific details for the first two units of 60 M.Ws. which will be installed at the Ennore Power House in Madras, became available only recently. Promptly, fuel tests were arranged in boilers installed at Bhilai and the results together with the other data have been communicated to the Consultants. The detailed design of the combustion chamber and ancillary components will now be adapted to suit the specifications and the working drawings of each component, which constitute the basis for production, will only be available progressively in stages. Meanwhile, the design documentation for valves and fittings of a general purpose character as also those for jigs, tools and fixtures, required for processing the various components, assemblies and sub-assemblies, has been secured.

In the initial stages, difficult manufacturing techniques cannot be acquired. Therefore, a number of components have to be imported. As fresh knowledge is acquired, the element of import goes down. The Consultants require timely information of such supply for incorporation in their own Production Plan. Requirements for the Fourth Plan have been finalised and ordered.



Sri R. Venkataraman recently inaugurated Regional Engineering College at Thiruvaramburi near Tiruchirappalli.

Production Planning

Production Planning in a large manufacturing unit is a fine art. Balanced production, economy, efficiency and speed are the key notes. Manufacturing processes have to be simplified, integrated and harmonised with the machine loadings with a view to attaining optimum results.

Time Cycles

Production planning, therefore, is based on a realistic assessment of the time cycle of each operation for each item of manufacture. Some of the components pass through a number of operations and on different machines. Multiple operation machines in this context, have some significance. Simultaneous operations, on these, however, require a degree of foresight and pre-planning. Further, repetitive manufacture which saves tooling delays is to be aimed at.

The Consultants have their own norms of time cycles built up through years of experience. These will be adapted to our changing experience in line with the varying labour productivity. Production techniques and technology also keep changing with modern equipment and scientific developments and the norms, therefore, are adjusted accordingly. It is an essential function of production planners to continuously look for cheaper and quicker processes as also devise ways and means for maximising the use of indigenous materials in conjunction with their technical and scientific wings. They should also discover imbalances and cushions and endeavour to adjust the former and find suitable output for the latter. When problems of development, replacement or addition of equipment arise, they should be capable of advising the management as to the best solution.

Production Planners, should therefore, acquaint themselves with the various manufacturing processes involved in the output of each component and their time cycles. Equipped with this knowledge they

should attempt production and process planning in the form of graphs or charts built into an integrated pattern so as to secure optimum results. This is not a simple task particularly in a new undertaking where the productivity levels vary from worker to worker. The longest time cycle for a completed component or assembly is the basic determinant, with which all other manufacture should be synchronised. The sequence in which each component will be needed, its exact time interval in the complete production cycle of the unit, so that it may be ready at the appropriate time, is a matter of vital importance for continuous undisturbed production cycle. Some of the components, particularly those of a repetitive character, are stocked in advance in numbers consistent with the long term manufacturing schedule.

Once these charts have been prepared, they are translated into day to day loading charts of each machine employed for composite manufacture. Time allowance for tooling, maintenance, outages, etc., must be adequately provided for in this planning. Excessive loading or imbalanced loading of machines is then suitably adjusted and a realistic programme thus evolved.

The production Plan also provides a clue as to the requirement of materials, market purchases of components, etc. The production purchase section should normally determine their course of action on the basis of this data. In the initial stage, however, we have to rely upon the details of material requirements and their specifications furnished by the Consultants. It is, however, necessary that a machinery should be set from the inception for material procurement on the basis of a close scientific analysis of the detailed production planning with a view to keeping down inventories. Besides, the normal delivery period, adequate time allowance for securing Development Wing clearance for foreign exchange and import permit, however, should be kept in view. In respect of indigenous materials and components, unless the party concerned is well established, careful enquiries should be made in regard to the credentials of new comers.

Technical Wing

Then again, the Technical Wing should keep track of every manufacturing cycle in the factory and its supporting material and components, so that any setback or its likelihood may be provided for in forward planning, lest the entire machinery may get clogged and the Production Plan thrown out of gear. A degree of vigilance is needed on this matter.

It should be appreciated that thousands of working drawing and an equivalent processing features are involved in the manufacture of a composite like a high pressure boiler, turbine or generator. Each component has its own time cycle, its own sequence for use in assembly and what complicates the position for us is the variation in time cycle for the same operation from worker to worker. Productivity techniques should, therefore be freely used, so as to attain a measure of stability at the earliest.

In this environment, a most wide awake, experienced and dynamic team of planners is needed. Initially, it should be supplemented by seasoned men drawn from the Consultants. Much can, however be achieved by an intelligent application of knowledge already acquired and I wish that this nerve centre of production may be assigned to men of vision, courage and determination.

Team Spirit

While all this is of considerable value, the welding of workers into a composite team and securing their goodwill and co-operation is vital. How this is to be done is again a managerial skill. There are well-defined centres of activity, each one being a composite team. Select the most influential in each team to captain it. Take him in confidence and let him be the spear-head for action in his team. Engender a spirit of competition backed by suitable incentives. What motivates a man in a complex society is indeed

an enigma, but one thing is certain that genuineness, fairness, open mindedness, tempered with firmness and magnanimity cannot fail to pay dividends.

This then is the drill which each one of our Projects will have to go through. Next in the chain is the Heavy Electricals Plant at Hyderabad which is likely to be inaugurated in August next, followed by the Heavy Electric Equipment Plant at Hardwar.

The High Pressure Boiler Plant at Tiruchirappalli and the Heavy Power Equipment Plant at Hyderabad will be abiding monuments of Indo-Czech Collaboration. Likewise the Heavy Electrical Equipment Plant at Hardwar will be an added glory to the living monuments of Indo-Soviet Collaboration.

Close on the heels of the Hardwar unit, the Switch-Gear Factory at Hyderabad which is being set up with collaboration of Sweden is likely to materialise by March, 1966.

This will close the Third Plan contributions of the Bharat Heavy Electricals to the industrial potential of their country. It is our earnest endeavour that these plants where crores of national funds are being invested may turn out to be emblems of optimum productivity, efficiency and economy—a task to which every worker should address himself with dedication.

The Pamban Bridge has been reconstructed and opened for traffic in record time which was washed away by the Cyclone, which hit the Rameswaram Island some months back.



BOAT PAGEANT AND REGETTA AT OOTY



The Tableaux which won the first prize in the boat pageant organised by the Ooty Boat Race Committee at Ooty last month.



Chief Minister giving away prize to the best decorated



Some of the tableaux which participated in the procession.



Sri M. A. Manickavelu, Chairman, Legislative Council, distributing prizes to the winners.

Educating the masses in Fisheries

By V. D. SPURGEON,
Assistant Director of Fisheries (Information), Madras.

Fish as food and fishing as an occupation for man are known from time immemorial. But the value of fish in dietetics, fish oil in therapeutics, fish trade in the nation's economy, use of tiny fish in controlling water carried diseases, etc., are not adequately known to masses. The utilisation of modern motorised fishing boats, modern synthetic twine fishing nets, scientific preservation of fish and the various other preservation and the tinning methods too are not fully realised by the general public. The value of the multifarious bye-products from fish that are useful for cattle, poultry and plants, the costly produce from the sea like pearl, conch, coral, ambergris, cuttle fish bone, Agar-agar, sea-weeds, etc., too are not yet fully known to the public. Still more the immense scope of co-operative enterprises in fishing and in marketing them are not fully grasped by the fisherfolk. There is therefore great need to popularise fish and its use among the public.

It is impossible to personally contact everyone and tell about all these things. Nor the public will be willing to stop and listen to our prosaic-platform lectures on these matters. Other methods such as audio-visual education should be taken up. The Fisheries Department is alive to this and is doing its best.

The Fisheries department has an education-cum-propaganda unit to evolve methods that quicken the pace of fisheries education among the people. The Fisheries Education Unit is busy throughout the year evolving most appropriate and effective means for the dissemination of Fisheries knowledge.

It is realised that the masses are reluctant to learn about fisheries through books and leaflets. Therefore it became necessary for the Propaganda-cum-Extension branch of the department to take to sugar-coated subtle methods. In such methods, the necessary knowledge, ideas and instructions are made enjoyable to the audience. While enjoying the fun, frolics, music, plays, etc., the reluctant and uninformed masses

can be made unconsciously to swallow the necessary information, instruction and knowledge through such shows.

These methods of education come under the caption "Audio-Visual Method of Education".



Nylon twines are being distributed by the Fisheries Department to fishermen affected by the Cyclone which ravaged the Rameswaram island recently.



Boat Building Yard at Kasimedu, Tondiarpet, was inaugurated, by the Chief Minister. Sri G. Bhuvaneswari, Information and Publicity Minister in-charge of Fisheries presided over the function. The latter is addressing the gathering.

In the Audio Visual Method the vast audience are made to see, hear and touch. Young and old, uninformed and intelligent all alike are eager to understand new things by seeing and hearing through the Audio-Visual Method. The various Audio - Visual Methods of instruction which are of educative value are:

- 1 Shows—Temporary—Exhibition.
Permanent—Museum, Aquarium, Sea-aquarium.
- 2 Films.
- 3 Tableaux.
- 4 Puppet plays.
- 5 Songs—Gramophone record—Vocal or Tapes recorded.
- 6 Dialogue-cum-dance recitals.
- 7 Radio talks and taperecorded speeches.

These shows are of two kinds: (1) permanent and (2) occasional. Permanent educative shows are the Museum and Aquarium. The fisheries Department at present has regional museums in the office of the Assistant Directors of Fisheries and in Fisheries Research Stations at Krusadai Island, Tuticorin, Cape Comorin, Bhavanisagar, Ootacamund, Madras and Ennore.

There is a permanent aquarium of educative value in Marina, Madras. In the Western countries great emphasis is laid on Museums and are kept in all the cities. Similarly, aquariums spring up all over the globe. The

sea-aquarium of Miami beach in Florida, U.S.A., is the only one of its kind, of educative value to the public about fisheries.

While museums, Aquariums, Sea-aquariums are permanently set up aids for mass education under audio-visual programmes, "Exhibitions" serve as periodical temporary educative shows. To museums and aquariums comparatively fewer number of people go as pastime. But it is in exhibitions one finds enthusiastic gathering in large numbers in a merry mood to see and hear and study things. Therefore, exhibitions form the major plank of audiovisual education programmes in the mass propaganda and instructions on Fisheries.

Exhibition

Realising the paramount importance of the exhibitions as mass medium of education the Audio-Visual Unit of Fisheries Department participates in all the exhibitions of the State. Exhibition teaching methods are radically opposed to Text-book approach. Exhibition is "enjoy while you learn" method. By seeing, hearing and touching people learn things easily. Therefore mass education through exhibitions is accepted as one of the best methods known. Fisheries Department pavilion at the exhibition organised by the All-India Khadi and Village Industries Board at Teynampet Congress grounds from 23rd December 1964 to 4th February 1965 attracted a large number of people and every one of them appreciated it.

The salient features of the pavilion that appealed to mass are given below.

The first and foremost thing that attracted the attention of the crowd was the "Frontage" of the pavilion. For the vast crowd who are offered all sorts of attractions within the exhibition precincts, the frontage should have a compelling force and attraction revealing all at once about the pavilion to the public. Every pavilion there attempted only towards this end. But the Fisheries Pavilion was unique in that achieved great success in educating the masses in fisheries.

The pavilion was given a matter of fact frontage with a monster fish in mould and a green electrically operated flickering eye against a background of boat, net, mast and sail. The colours on the frontage were sea-blue and sea-green.

In the open space in front of the "stall" a live sea-turtle from Rameswaram was put on show in an artistic cement cistern. The turtle was made attractive for children also by giving different colour oil paint for different pieces of carapace. The turtle was docile and lent itself for handling and playing. The school children were thrilled to see it. The blind children from Teynampet School for the Blind asked me to hold the turtle afloat and everyone often touched its back shield or flipper or snout and jumped with joy. The mass enquired incidentally all about turtle's use.

Various shows

The front space had a big boat mounted on a platform exhibiting modern motorised boats given to fishermen by the Department. On it a wax-model "fisherman" was made to pose with his traditional palmyrah hat and net. The inquisitive public peited paper and paper balls on him to find out whether he is a wax model or real man. By such pranks and fun people learnt all about modern fishing craft, gear and fisherman's prosperity.

The open air front space was filled to capacity in the evenings and at night by crowds who thronged to see film shows. The films were not projected on a cloth screen as in other stalls but on a small ground glass screen imbedded in the frontage of the stall. The projector and the place from which it was projected were not seen and known to the people. They were all hidden inside the stall. The crowd could see only the pictures moving and talking. One among the crowd remarked that it was like television. The films were first projected on to a mirror inside the stall and was reflected on the

imbedded glass screen. The result was of a terrific mass appeal. It was for the first time shown like that. It was unique. Films were shown continuously without a moment break with 2 projectors alternatively.

On Holidays and Sundays there were record rush to Fisheries Pavilion. On these days three Puppet Shows were shown. Between each puppet play, film shows were shown as usual. Thus film shows and puppet shows were conducted non-stop from 6-30 p.m. to 10 p.m. on holidays engaging terrific crowds with extraordinary effect.

The action of the puppets with sweet songs as prelude and interlude, with crisp dialogues about fisheries was splendid. The Health Department's staff who were trained in this art were performing the puppet shows for the Fisheries Department. The tape-recorded dialogues, songs, etc., gave the effect of puppet themselves talking and singing about Fish and its usage.

Interior arrangement

Much attention was paid equally for interior arrangements and decorations. The display of exhibits was in small compartments, galleries and on tables. There were 4 compartments measuring 4' x 4' x 4' at a height of 2½' from the floor for the visitors to see easily. These compartments were covered on three sides with paintings of boats, nets, fish and sea-bottom. In these compartments, models of nets, models of fishing crafts, model of Ooty Boat House, miniature of motors and fishery implements and bottled specimens were displayed.

In the gallery type of arrangement sea shells were displayed. All South Indian Marine Shells and dainty articles of commerce made out of myriads of marine shells were put on show. To this wing of fancy articles of shells, there was record crowd to buy every day.

The Mermaid doll seated on a sea rock after the Copenhagen model of International fame was electrically operated to move her hand as if playing on a violin. Huge crowds at the Fisheries Pavilion at the Exhibition held recently at the Teynampet Congress grounds.





Marine Shell Products, displayed in the Fisheries Pavilion at the exhibition held at the Teynampet Congress grounds.

Tape recorded music was used giving the effect of Mermaid doll herself singing while playing on the violin and thus it attracted huge crowds.

The doll set amidst a battery of aquarium jars filled with fascinating live ornamental coloured varieties of fishes gave the effect of miniature sea.

There was a live pen in which fish destroying birds and live turtle were on show for public to see so that they will keep them off from pisciculture project areas. There were actual electrically operated models of boat and pearl diving operations. The visitors were also invited to write their comments, recommendations, critical suggestions, etc., in a visitor's Register.

There was an enquiry counter where the public could make enquiries, elicit information and place orders for fish for their table, fish for keeping down mosquitoes, breeding, books and literature on fisheries, shell grit for poultry, fish meal for cattle, fish for cooking, etc.

For educating public in general the "Fisheries week" was planned and celebrated in May last for the first time in the city and throughout the state by the audio visual unit of the Fisheries Department.

ASSISTANCE FOR SANSKRIT DEVELOPMENT

The Union Ministry of Education invite applications from Voluntary Sanskrit Organizations/Institutions/Pathshalas, etc., for financial assistance during the year 1965-66 for the following purposes:—

1. Promotion of Sanskrit (Voluntary Sanskrit Organizations).
2. Publication of manuscripts/books relating to Sanskrit.
3. Sanskrit Journals.

Government of India also purchase a number of copies of books on Sanskrit of outstanding merit for free distribution to Voluntary Sanskrit Organizations.

Applications for assistance to Voluntary Sanskrit Organizations/Institutions are to be submitted through the State Government concerned, while applications under the other items may be sent direct.

Applications in the prescribed *pro forma* duly completed must reach the Ministry of Education on or before 31st August 1965.

Requests for application forms and rules and regulations should be addressed to Section Officer, Room No. 72, 'M' Block, Central Secretariat, New Delhi-2, mentioning clearly the object for which the form is required.

LIVING IN HARMONY

A little more than five miles from Kumbakonam, an important town in Thanjavur district of Madras State, is the small village Govindakudi with a population of over three thousand. About two-thirds of them are Hindus and nearly a thousand Muslims. Living together for years in great harmony without even so much as thinking that they belong to two distinct religious communities, untouched by the diverse pulls and pressures of modern living, including its political compulsions, these people have been able to show the way to peaceful religious co-existence. It is not that they lack amenities of modern life; these are provided in a modest way in the scheme of rapid rural development. There are good roads in and around the village, electricity and water. But these are merely secondary supports for the spirit of communal harmony that pervades the whole atmosphere. In the context of the present events in the west on the border, perhaps it is worthwhile drawing inspiration from the worthy example of Govindakudi.

The centre and symbol of this great experiment in harmonious living together is a small beautiful mosque which Dr. Zakir Husain, the Vice-President, declared open on last April 30th. Among the few mosques that are seen in the villages around—the Govindakudi shrine has special significance. This is the latest among those to be constructed but what is interesting about this is that of the sum of about 2½ lakhs which it cost, a considerable portion has come as contributions and donations from non-Muslims, particularly Hindus, and our Indian brethren abroad in places like Ceylon and Malaysia. In the very building of it, everybody in the village—irrespective of his caste, creed or religion—has put his shoulder to the wheel and made contributions in material and labour.

There was an old mosque here about 200 years old. As it was in an extremely dilapidated condition, the villagers decided in 1954 to construct a new one in the place of the old. Arrangements were made from that year onwards and the actual work on construction commenced in 1957. The mosque occupies a total ground area of about 5,700 square feet, with a prayer hall of nearly 1,500 square feet; each of the two minarets is 55 feet from the ground.

Govindakudi is a place of importance to the Hindus also, known in the legends as Gomukteswaram and

Gobhaktiswaram. The place is associated with the salvation of *Kamadhenu* (the Divine Cow of Plenty), who through a lapse of memory failed to turn up at a great penance performed by Sage Vasishta. For this default, the animal had to practice severe austerities and perform penance before Lord Siva blessed it with release from the sin. A temple near about has for its presiding deity Lord Siva, named locally as Gomukteswara (the Lord who gave salvation to the Divine Cow).

According to historical accounts, Govindakudi is called after one of the local philanthropists and administrators of the Nayaka rule in the first two or three decades of the 17th century, Govinda Dikshita. Of all eminent men of this period, Govinda Dikshita was considered "unquestionably the most eminent". He rose from the position of the Court Priest to that of the Minister by sheer ability.

It is of interest to note that the day following the inauguration of the mosque by the Vice-President, is an important day for the temple. Special religious significance attaches to the New Moon Day which occurs towards the end of April or early in May (corresponding to the Tamil month of Chaitra).

A view of the mosque at Govindakudi about five miles from Kumbakonam (Madras State) which was declared open by the Vice-President, Dr. Zakir Hussain on April 30, 1965.



THE army CADET COLLEGE

It is said of Napoleon's Army that every soldier carried the Field Marshal's baton in his knapsack. This meant that given the time, the opportunity and the training every soldier could blossom into an efficient Army officer. This is being done at the Army Cadet College in Poona. Here selected Other Ranks of the Army undergo intensive training for entry into the Indian Military Academy and then into the coveted ranks of Army Officers.

In the pre-war days, military training was imparted at the Kitchner College, Nowgong (Madhya Pradesh). Therefore it was only fitting that the Army Cadet College was opened at Nowgong in 1960. Initially the capacity of the college was 45 cadets but within three years it reached the target of 230. Selected other ranks of the Army were trained at the college for one year after which they were screened by the Services Selection Board. The successful cadets then entered the Indian Military Academy, Dehra Dun, for pre-commission training.

After the emergency, an intensive effort was made to tap all the available resources and select the best talent for filling the officer cadre in the Armed Forces. Naturally the training programme of the Army Cadet College was also changed to make it more broad-based so that the jawans got greater opportunity to join the officer cadre. This was not only to their advantage but also of benefit to the country. In the light of experience and considering the future requirements, the aim and scope of training at this institution was modified.

It was decided to increase the strength of the college gradually to 650. Recently the strength has been finalised at 480. All cadets before joining the college have now to appear before the Services Selection Board. This prior screening eliminates wastage inherent in the previous system under which the cadets appeared before the Board only after completion of training at the college. The duration of training was increased from one year to eighteen months. The entry into the college was made bi-annual, in January and July, to coincide with the entry into the Indian Military Academy. The college was shifted last year to Poona.

The minimum educational qualification for entry into the college continued to be matriculation or its equivalent. But it was decided to accept candidates in possession of the Army First Class Certificate of Education with First Class English Certificate. They, however, have to put in six months of extra training and have to pass the Army Special Certificate of Education before starting the normal eighteen months' course at the Army Cadet College. The age-limits for entry were revised and jawans now being admitted are

between 19½ and 24 years of age. The revision gave greater opportunities to the jawans, ensured the best selection and cut down wastage.

Curriculum

The training programme at the college is divided into three terms of six months each. At the end of each term the cadets have a vacation. They also have a three-day break in the middle of each term. The curriculum includes English, Hindi, Science, Mathematics, Geography, History, General Knowledge and Current Affairs and Citizenship. After physical training and drill, Academic classes begin every morning and continue till the lunch hour. The afternoons are devoted to hobbies or tutorial classes. The service subjects taught at the college are map reading, physical

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training, drill, military writing and public speaking, outdoor work and camps. They are also trained in general behaviour, mess etiquette and dress, so that they know the correct dress and behaviour for various occasions.

Apart from the above training, great emphasis is laid on the development of the cadets' personality and infusing in them qualities of leadership, courage, character and a high sense of duty, loyalty, integrity and discipline. The training curriculum at the college has been re-orientated with emphasis on outward bound training. The cadets undertake rafting, bridging, climbing and go on hikes where they live in the open camps for several days entirely on their own so as to instil in them a love of adventure, the ability to improvise



Great emphasis is being laid on outward bound training at the Army Cadet College in Poona, where selected jawans are trained to become officers. Photograph shows a group of Cadets resting near bivouacs made by them with ground sheets and sticks for staying in the open.

and a habit of taking correct decisions quickly. This outward bound training toughens the cadets and is of particular importance in the context of the military life to-day when officers and men of our Army have to live and work in the forward areas in the Himalayas at high altitudes and in bitter cold.

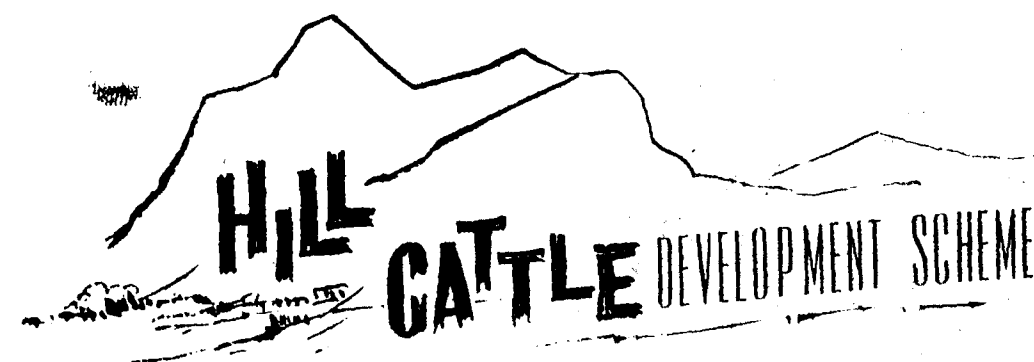
The college also encourages extra-curricular activities to add lustre to the personality of the cadet, widen his horizon and to provide him with useful

hobbies. They are taken on visits to historical places, are encouraged to join the hobby clubs—of which the college has more than a dozen—to participate in sports and tournaments and in the social activities at the college.

At the end of his training the cadet has to pass an external examination in Academies and prove himself worthy of joining the Indian Military Academy, Dehra Dun, for further pre-commission training.



Cadets are seen here in full kit crossing a bridge made of sticks and ropes built by them across a stream.



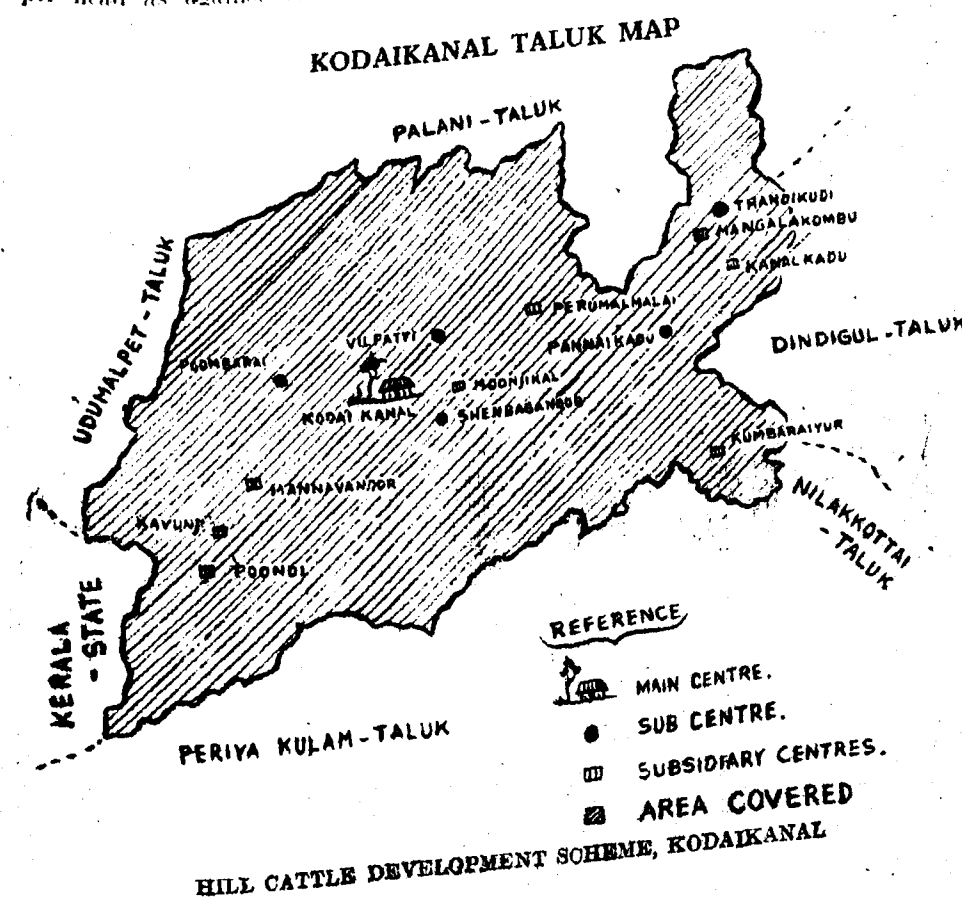
DR. I. D. MANTRAMURTI, G.M.V.C., B.V.Sc.,
Director of Animal Husbandry, Madras.

A hill cattle development scheme was inaugurated in July 1963 in the Kodaikanal taluk of the Madurai district with a view to increase milk production in this area by developing good breeds of milk cattle. The whole taluk has now been covered by the scheme.

Of the basic nutritional needs of mankind, milk occupies a very important place, but in Madras State the per capita consumption is only about three ounces per head as against the minimum necessity of ten

ounces. It is still less in the hilly regions of the South like Kodaikanal. The main reason for this condition is that the milk yields of the cows and buffaloes in these areas are very low. The hill cattle do not belong to any descriptive milch breed.

Scientific methods are not followed in these regions in breeding, feeding and management of these animals. They are maintained more for manure and labour than for milk. The number of cows and she-buffaloes maintained for production of milk only is low when compared to the other regions of this State and so the total milk produced is also low. The heavy rainfall, high altitude and climatic conditions prevailing in these regions also attribute to the low production and intake of milk. Calcium deficiency is commonly noticed in these hilly regions and this causes the animal to become weaker and produce less. The demand for milk is also great in these regions.



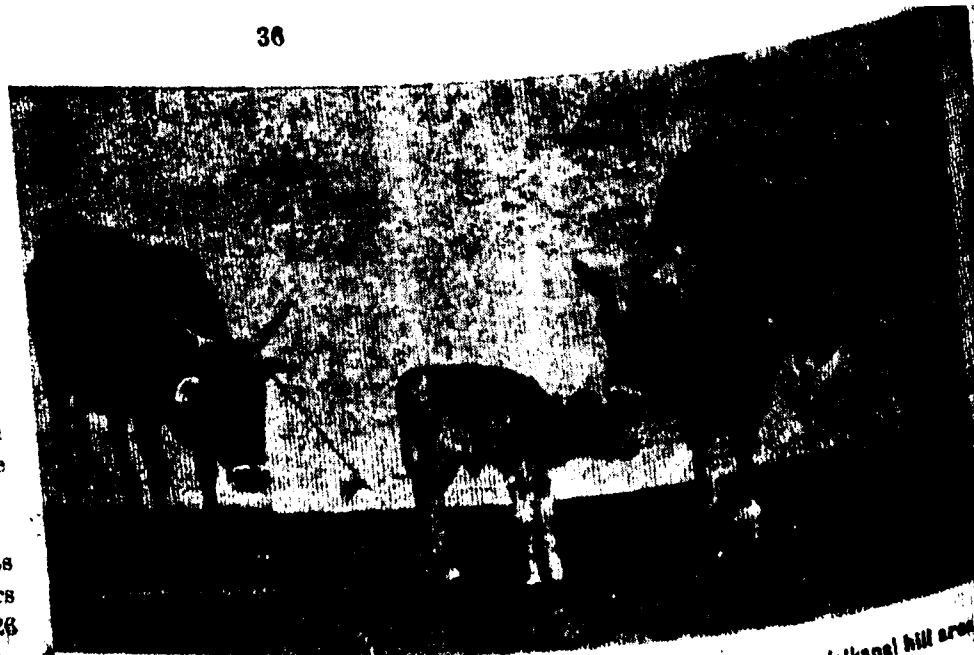
To counteract this tendency and to bring about an increase in the milk production in the hilly region by using superior milch breeds like Jersey which thrive well in the prevailing conditions, the Government of India has formulated a scheme and among the centres selected Kodaikanal of Madurai district is one where the scheme is run with 100 per cent aid from the Central Government.

This scheme which was started in July 1963 covers an area consisting of 5,326 breedable age cows of cross-bred and non-descript type in Kodaikanal taluk. Five sub-centres and eight subsidiary centres are located under this scheme in the following places with the Main Centre at Kodaikanal. The Main Centre is at present located in the Veterinary Hospital, Kodaikanal. Buildings for the scheme are coming up and are expected to be completed within a year.

Name of the sub-centres.	Name of the subsidiary centres.
(1)	(2)
1 Shenbaganur ..	1 Perumalmalai.
2 Pannaikadu ..	2 Moonjikal.
3 Thandikudi	3 Kumbaraiyur.
4 Poombarai ..	4 Mangalakombu.
5 Vilpatty ..	5 Kanalkadu.
	6 Kavunji.
	7 Poondi.
	8 Mannavanur.

Two Jersey Bulls are in the Main Centre at Kodaikanal. To improve the buffaloes which are 873 (breedable age) in number two Murrah Buffalo Bulls are also located at the Main Centre, Kodaikanal, at State cost.

Previously semen collected at the Main Centre, Kodaikanal, was distributed to the sub-centres on every third day through messengers. After the receipt of Jeep during September 1964, it is being distributed effectively through this quick conveyance. There are five refrigerators, one in each of the above five sub-centres



Superior milch breeds are being used to develop good milking cows in the Kodaikanal hill area.

for storing semen. From here semen is sent to the various subsidiary centres through messengers every day in thermos flasks after examination.

There is one Veterinary Assistant Surgeon with one Livestock Assistant at the Main Centre, Kodaikanal, and two Livestock Assistants at each of the sub-centres. Five messengers located in the five sub-centres attend to the transport of semen besides attending to sub-centres whenever it is possible.

The staff posted here have visited all the villages and completed the survey work. Preventive inoculation and tattooing work have been undertaken. 3,484 animals were protected during 1963-64 against Black quarter and Haemorrhagic Septicaemia, the two common diseases that affect animals every year. During 1963, 315 Scrub Bulls have also been castrated. These institutions besides doing breeding work act as first aid centres and all minor ailments are attended to.

There is poor response in the villages due to illiteracy and the time honoured custom of keeping cattle mainly for manure purposes. That is now being changed slowly but steadily by propaganda and persuasion by the Staff of the Animal Husbandry Department, Madurai. Some calves have come up already to the Jersey Bull during August 1964. It is hoped that they will take it up gradually and produce good milking cows within a couple of years when Kodaikanal Hills can become a good milk pocket and export milk to big cities like Madurai and Madras.

OUR TROOPS DEFENDING KUTCH BORDER



Above.—Our jawans during a lull somewhere on the Kutch border are cleaning their weapons.

Left.—The American 106-mm recoilless guns mounted on a jeep (top left) and an American 45-ton Patton tank (bottom right) used by Pakistani forces in the fighting in Kutch.

Below.—Two Pakistani Patton tanks photographed by Flying officer U. Barbara of the I.A.F., on Indian territory in Kutch area.

Bottom.—Our jawans on patrol negotiating a sandy stretch.



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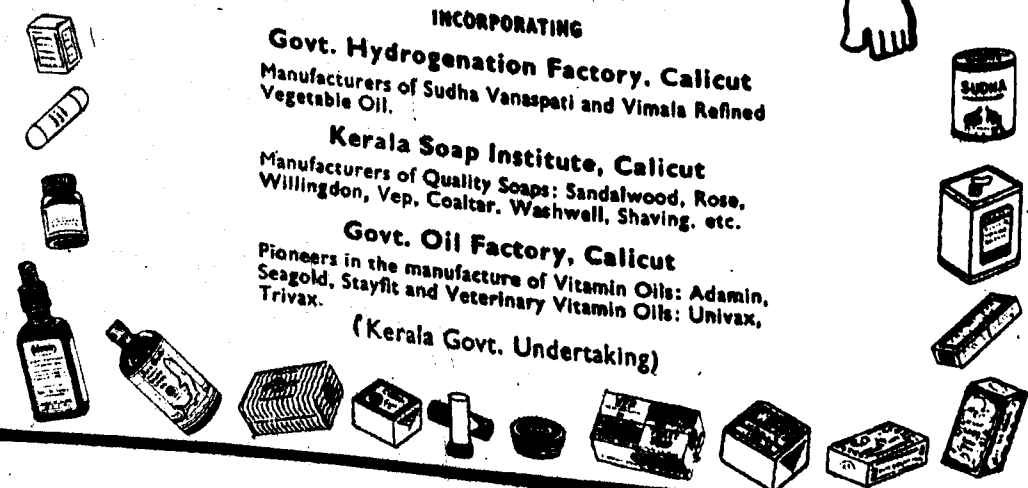
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Govt. Hydrogenation Factory, Calicut
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Kerala Soap Institute, Calicut
Manufacturers of Quality Soaps: Sandalwood, Rose,
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Govt. Oil Factory, Calicut
Pioneers in the manufacture of Vitamin Oils: Adamin,
Seagold, Stayfit and Veterinary Vitamin Oils: Univax,
Trivax.

(Kerala Govt. Undertaking)



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Madras Information

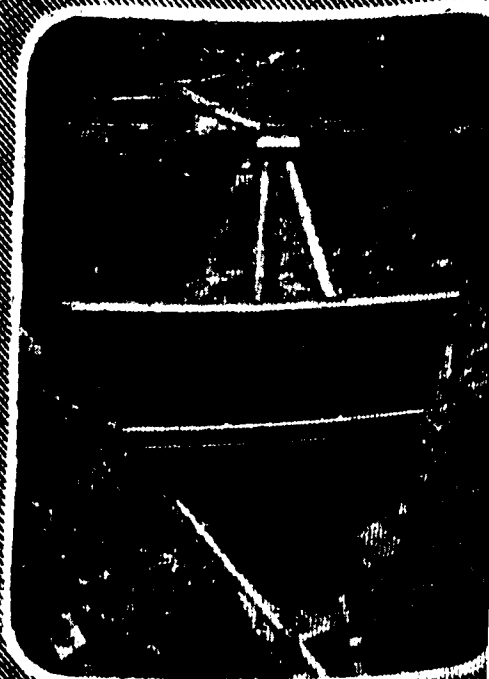
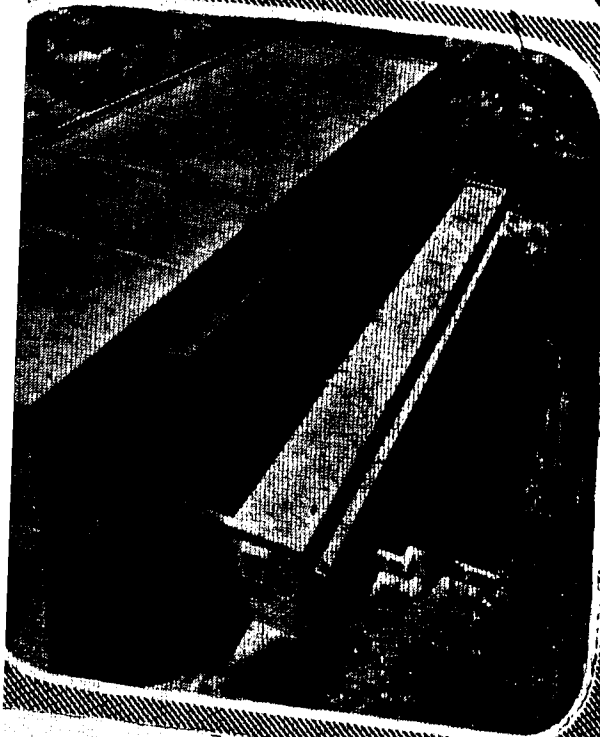
July 1905

PRICE 20



CANADA POWER

HOUSE III



CANADA POWER HOUSE III
The Kundah Hydro-Electric Scheme is the biggest of its kind so far undertaken in Tamilnad. The Project has received generous aid from the Canadian Government. In appreciation of the aid all the five power houses of the scheme are named after Canada. The Canada Power House III was inaugurated by the Chief Minister of Madras in last May. (1) Side view of the Canada Power House III of the Kundah Project. (2) Front view of the Canada Power House III with the penstocks in the background. (3) The Power House Station. (4) Distribution line. (5) Chief Minister inaugurating the Canada Power House III in May 1965.



MADRAS Information

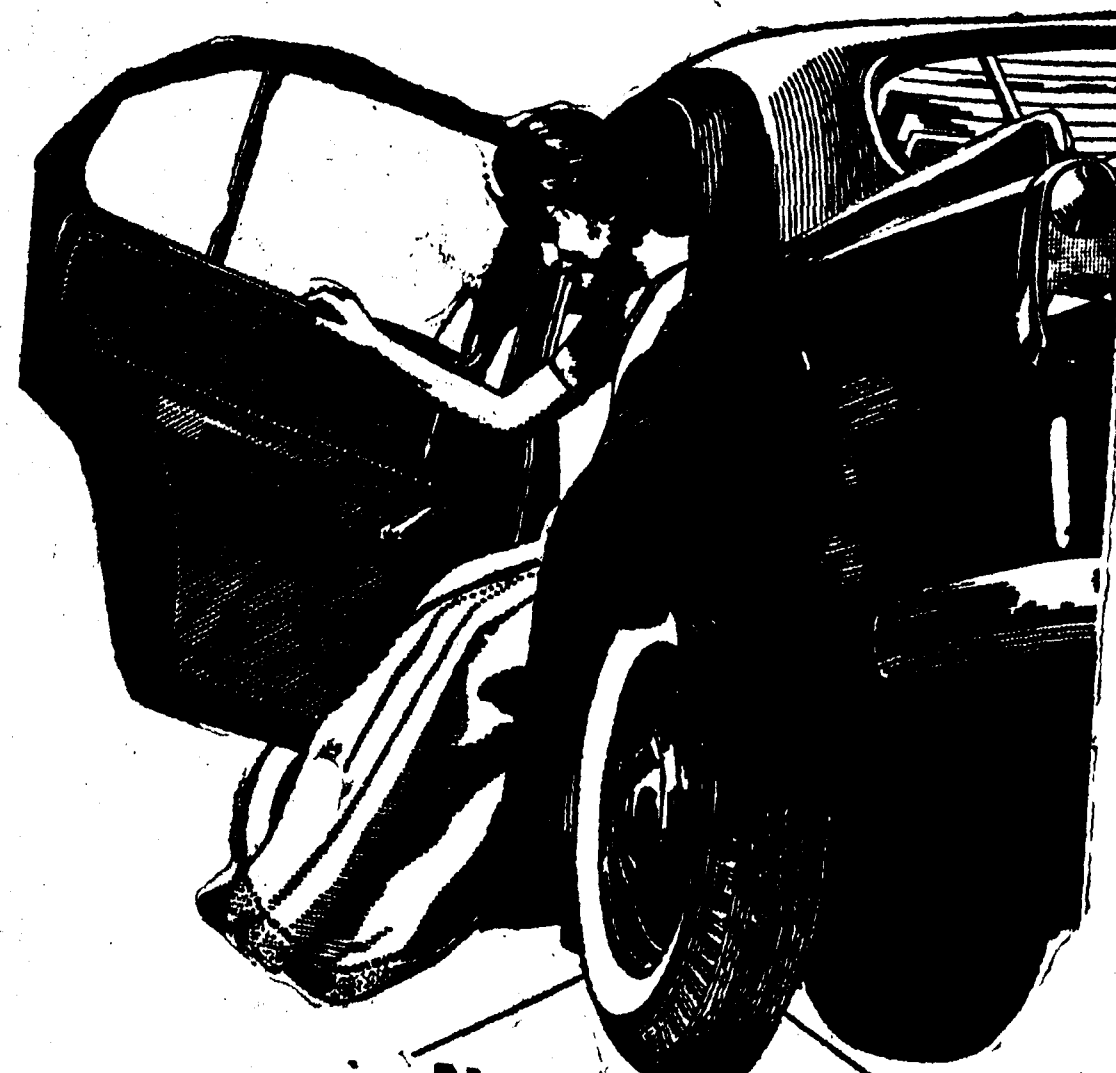
Vol. XIX JULY 1965 No. 7

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THIS MONTH'S COVER:

With the onset of the first rains in July, the sowing season commences in Madras State. It is the period when the seeds are sown in the prepared soil and the seedlings are transplanted. It is also the season when saplings of fruit-bearing and other trees are planted. India celebrates this season as Vanamahotsava. Here are three little ones participating in this festival.



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ESTD 1929

The Need for the Promotion of Small Savings

SRI M. BHAKTAVATSALAM,
Chief Minister.

The Chief Minister of Madras sometime back convened a meeting of the representatives of the Chambers of Commerce, Trade Union leaders and the members of the State Advisory Board and City Savings Committee and made an appeal to them to help to promote Small Savings in the State.

The Small Savings movement plays an important part in mobilisation of resources for economic development. Our State has been able to record significant progress in several sectors in the last decade. This tempo of progress has been well maintained in the current Plan period and the outlay on the Plan is now expected to exceed appreciably the original Plan provision of Rs. 291 crores. We have been able to fulfil a larger Plan without any increase in Central assistance and this has been possible because we have done better than expected in regard to mobilisation of resources for the Plan. Apart from the buoyancy of taxes at the existing rates we have secured larger resources than targetted under additional taxation, open market borrowings and miscellaneous capital receipts.

There is however one important head under which our performance has fallen short of original anticipations, and that is Small Savings. In our forecast of resources for the Third Five-Year Plan, we had taken credit for Rs. 20 crores as our share of Small Savings collections, and as the State's share is generally two-thirds of the total collections, this meant an overall collection of Rs. 30 crores or a little under Rs. 10 per capita for the five-year period. This was by no means an ambitious or unrealistic target. During the last two years, we have set up a special machinery for attending to the work relating to Small Savings and a measure of

progress has been recorded. Even so, by the end of 1964-65 our share of Small Savings collections aggregates only to about Rs. 13 crores. Even though it will not be possible for us to make up for the shortfall in full in the remaining year of the Plan. We should redouble our efforts and try to bridge the gap to the maximum possible extent. When many other States like Maharashtra, West Bengal, Uttar Pradesh and Bihar have done well in this field, there is no reason why we should not also succeed if we make determined efforts and bring to bear on this task the same spirit of dedication and devotion which we have displayed in other spheres of activity.

Our efforts

It is because I felt that influential sections of organised public opinion like Chambers of Commerce, Trade Unions, etc. have got a great part to play in making such an effort that I have thought fit to discuss with them and make a formal appeal for their co-operation in tapping the vast potential for Small Savings, particularly in the City.

In 1962 we had, through a special meeting of the City Savings Advisory Committee, made a strong appeal to the Industrialists of the Madras City to encourage Pay Roll Savings Scheme among their employees. But the Scheme has not made any considerable headway

RURAL DEBENTURES

The Madras Co-operative Central Land Mortgage Bank Limited, is floating Rural Debentures. The debentures will be available in the denomination of Rs. 100 and above. At present the debentures will be issued up to a total value of Rs. 9,50,000. The amount is repayable after 7 years. The debentures will carry an interest of Rs. 6.25 per cent per annum payable in two instalments. The interests will be calculated every six months and the interest warrants will be sent to the subscribers on the 1st October and 1st April every year.

The Government of Madras guarantees the repayment of the principal and the interest raised through these debentures. Loans also will be given to the subscribers on these debentures. The debenture is transferable. The fee for transfer is only 25 Paise per debenture up to a maximum of Rs. 2.50.

The application forms for subscriptions for these debentures may be had from the Primary Land Mortgage Banks or in any other Co-operative Bank of the respective area.

among labour, either in Madras City or other centres of industrial importance like Madurai and Coimbatore. The organised industrial labour has been among the important beneficiaries of our economic plans. It may not be seriously controverted that the level of wages in industry has registered an impressive increase in recent years. It should be the endeavour of those interested in labour to divert a portion at least of this increased earnings for investment in one or other of the many forms of Small Savings. It is only through inculcating in labour the systematic habit of thrift that we can bring about a permanent improvement in their economic status. I would therefore appeal to the representatives of the Chambers of Commerce assembled here to help us to form Pay Roll Savings Groups in factories and other organisations with which they are connected. I would also request you to impress on your members the need to activate such groups where they exist, with a view to obtain full coverage. It is only through such well-organised Pay Roll Savings Groups that we can step up the investments in Small Savings. Though Pay Roll Savings Groups have been started in many establishments they are by and large not being maintained because of ineffective follow-up work.

I have also a special request to make to my friends from the Trade Union Movement. They may have differences of opinion about the adequacy of particular level of wages. There is always scope for improvement in a dynamic economy. But the trade union leaders will agree with me that whatever be the level of wages, it is in the interests of labour to save a little, and save systematically, out of their income. It is only through such regular savings that our labourers can move up in the social ladder and the Pay Roll Savings Scheme is the best and most convenient method of such regular savings. It is also bound to be the most acceptable form of Small Savings as the amount is deducted at source and labour will not feel the privation to the same extent as under other form of savings. The promotion of the Pay Roll Savings Movement among their constituents should therefore rank high among the various constructive activities of the trade unions. Labour leadership in Madras is always progressive and constructive in its approach and I would request them to give a lead in this matter. I would also like to reiterate a request which I have made on a number of other occasions in the past, namely, that a portion of the lump-sum payments made to labour in the form of bonus should be invested wisely. Our efforts so far to secure such diversion of even small amount out of the bonus amounts paid have not been very successful. This again is a programme in which the management, trade union leaders and officers of the Labour department should all co-operate and secure results. We had in 1960-61 sold prize bonds on a large scale among industrial labour with the co-operation of management and trade union leaders. These prize bonds have fallen due for repayment on 1st April 1965 and the least we should do is to try to get a significant portion of the amounts falling due for repayment re-invested in other forms of Small Savings Securities.

Popularising Savings Habit

I would also request the management to use their influence among the staffs under their control and popularise the Cumulative Time Deposit Scheme among them. This scheme will serve the needs of middle-class salary earners admirably. The Cumulative Time Deposit Scheme opened after April 1965 will earn tax-free bonus at maturity in addition to maturity value. Cumulative Time Deposit rules have been amended providing for a bonus of Rs. 15 for 5-year accounts with a monthly deposit of Rs. 10, Rs. 50 for 10-year accounts and Rs. 100 for 15-year accounts with proportionate bonus for accounts of other denominations. As you are aware, contributions to 10-year and 15-year accounts will, besides, earn relief

under Income-tax in the same manner as contributions to Provident Fund and Life Insurance.

We have not so far made an organised approach to self-employed persons. A mail campaign has been organised for appealing to people in professions like doctors, lawyers and engineers and there has been some response. But we have yet to tackle the self-employed persons in business in a big way and it is here that the influential members of the Savings Committee—and office-bearers of the Chambers of Commerce—could be of considerable help. The Chambers of Commerce could help by convening special meetings and sending out circulars to other members engaged in various trades, bringing to their notice the facilities available under the Cumulative Time Deposit Scheme. The new National Savings Certificates offer fairly attractive terms. The new series of National Savings Certificates which will be put into effect in June 1965 in denominations of 10 rupees, 100 rupees and 1,000 rupees, with a maturity period of ten years offer a reasonable return which work out to 8 per cent per annum simple interest or 6.65 per cent per annum compound interest. These certificates should be particularly attractive to those who are not liable to income-tax.

Social purpose

While Small Savings are intended primarily for the low-income and middle income groups, its appeal to people in the high income group is also not insignificant. The bulk investments which could be secured from this class can be of great help in reaching the targets under

Small Savings. I understand that in some other States the bulk investments from this class of people have contributed not a little to the success of the Small Savings campaigns. At any rate people in this group, whether they are businessmen or industrialists or belonging to learned professions should give a lead to the rest of the society by lending their support to various forms of Small Savings.

The choice as to how much he should save for the family ultimately rests with the individual. But we cannot ignore that in our planned economy such individual decisions of Small Savings also serve a social purpose. No patriotic individual can ignore this social aspect of savings in deciding how much he should save out of this income—be it large or small. It is only through large outlays on developmental programmes that we can strengthen and diversify our economy and bring about a significant improvement in the living standards of the people. But unless these large investments are matched by adequate savings we will generate inflationary forces in our economy. A large Plan therefore necessarily entails increased savings. The Fourth Plan being a bigger plan—being in fact bigger than the three preceeding Plans put together—calls for substantial step-up in savings. The efforts we put in for promotion of savings in the current year which marks the climax of the Third Plan are of great importance, because it is on the results achieved in the current Plan that we can confidently plan for bigger developmental programmes in the Fourth Plan period.

VANAMAHOTSAVA CELEBRATIONS IN 1965

The sixteenth Vanamahotsava is being celebrated from the first week of July 1965, as was done in previous years. The Vanamahotsava this year is being conducted with greater zeal and enthusiasm than in the past as a national endeavour to plant new trees, where trees were not planted in previous years. The first week of July 1965 will be treated as the National Tree Planting Week, although tree planting should be continued to the end of October 1965. The week commencing from 2nd October 1965 will be celebrated as a "Special Week" for planting in areas, where seasonal conditions are favourable for such work.

DEVELOPMENT OF FARM AND FUEL FORESTRY

The deficiency of Madras State in forest resources is fairly well recognised. The area under forests being only 17 per cent of the total land area falls short of the optimum requirement of 33 per cent. In the plans for development of forestry, we have therefore kept in view the need to redress this serious imbalance in land use and have endeavoured to extend forest activity in areas even outside the reserve forests by including schemes for farm forestry and for planting of river and canal banks.

The total expenditure on forest development in the First Plan was Rs. 24.41 lakhs. Attention was concentrated during this period largely on restoration of panchayat reserve forests and assumption of management of ex-zamin forests. A beginning was also made with programmes for economic plantations of soft-woods wattle and blue gum.

With an outlay of Rs. 72 lakhs, the Second Plan aimed at a little more intensified development. Among the more notable achievements during this period was the raising of an extent in wattle of over 20,000 acres, of teak over 9,650 acres and of soft woods over an extent of about 8,000 acres.

This emphasis on augmenting supplies from forests of raw materials required for industries has been continued during the Third Plan period.

The scheme for Development of Farm Forestry (Creation of Village Forests) is one of the "Forestry Schemes", undertaken by the Forest Department at a cost of Rs. 75 lakhs under the Third Five-Year Plan. The object of the scheme is to afforest all available Government poramboke lands in compact blocks in and around villages suitable for forest-cum-pasture development. These village forests will meet the fuel, fodder and manure requirements of the villages, apart from the fallow lands from the ravages of soil erosion.

The Chief Conservator of Forests has submitted proposals for the continuance of the scheme during 1965-66.

The Government have examined the proposals and sanctioned the implementation of the scheme for Development of Farm Forestry over 8,000 acres during 1965-66 under the Third Five-Year Plan by the Forest Department. Sanction is accorded to the incurring of an expenditure not exceeding Rs. 5.35 lakhs towards "Works" under this scheme during 1965-66. The details of the area proposed to be planted are given below.

Chingleput 1,000 acres, Cuddalore South 700, Cuddalore North 700, Vellore East 500, Vellore West 500, Salem North 500, Salem South 800, Madurai South 400, Madurai North 400, Ramanathapuram 800, Tirunelveli South 400, Tirunelveli North 400, Coimbatore South 200, Coimbatore Central 100, Tiruchirappalli 200, Coimbatore North 200 and Nilgiris 200 acres.

The question of overcoming the shortage on the supply of firewood, especially in the City of Madras, was considered by the Government. The Chief Conservator submitted a project for raising fast growing species. The project envisages the raising of fuel trees mainly Eucalyptus hybrid and casuarina, in the districts of Chingleput, South Arcot and North Arcot over about 1,37,157 acres of regular forest areas vesting in the Forest Department including the ex-zamin forests, which, at present, carry only a scrub forest of no commercial value and do not even serve as grazing grounds with adequate pasturages.

The Government have examined the Chief Conservator's proposals and have sanctioned the implementation of the scheme for raising fuel forests of fast growing species over 4,000 acres during 1965-66. Sanction is accorded to the incurring of an expenditure not exceeding Rs. 5,28,000 towards works, under the scheme during 1965-66.

On the whole, the progress of schemes under this head of development is very satisfactory. As against a Plan provision of Rs. 212 lakhs, it is now anticipated that the outlay over the Plan period will aggregate to Rs. 259 lakhs representing an increase of nearly 20 per cent over the targetted provision.

PROGRESS OF PUBLIC HEALTH MEASURES

The Public Health Department has been implementing important National Schemes such as National Malaria Eradication Programme and the National Smallpox Eradication Programme. Out of the 31 and odd units functioning under the National Malaria Eradication Programme, 15 Unit areas have entered into the maintenance phase last year. The Government of India have ordered that the maintenance phase of the National Malaria Eradication Programme has to be implemented through the agency of the Primary Health Centres. Consequently Government have approved the proposal of the Director of Public Health for the opening of 120 new Primary Health Centres in areas entering into maintenance phase. The Districts of Ramanathapuram, Kanyakumari, Tirunelveli, Madurai, Tiruchirappalli, Thanjavur and portions of Chingleput and South Arcot are covered under this programme. Out of the 120 Primary Health Centres, 5 Centres have already been opened and are functioning and it is expected that the remaining Primary Health Centres would be opened under this programme during the course of the current year. The Government of India Assessment team has certified that another 9-1/2 units will enter maintenance phase shortly and therefore more Primary Health Centres will have to be opened.

Various schemes

Another important phase of developmental activity is the "Family Planning Programme". This programme has been intensified in the Primary Health Centres. The Government have sanctioned a male nurse for the Family Planning Programme in the Primary Health Centres under the crash programme. But due to dearth of candidates for the post of male nurse it is proposed to employ auxiliary nurse mid-wives in Primary Health Centres.

The scheme "Immunisation of Pre-school Children with triple vaccine" has been launched with effect

from 1st October 1964. This scheme is considered essential for the reason that pre-school children should not fall victims to the three diseases viz., Whooping cough, Tetanus and Diptheria. The scheme is now in progress in Primary Health Centres and so far 11,000 children have been immunised.

A scheme of "School Medical Inspection" has also been sanctioned by Government for implementation during 1965-66. Under this scheme, it is proposed to institute medical examination of pupils in the Secondary and Elementary Schools. A total of 24,000 school children are expected to be covered during the current year.

Occupational hazards

In August 1961, the Government constituted Environmental Sanitation and Health Education Committee to consider ways and means of implementing the recommendations of the Expert Committees (viz., Tannery Committee, Hotel-Sanitation Committee) to study the industrial and occupational hazards and their elimination and to plan for research to deal with educational aspects of the problem.

The members of the Committee visited a number of different industries in the State such as tanneries, cotton ginning, spinning and weaving mills, cement factories, chemical manufacturing establishments, fertilisers factories, sago industries, rayon factories, glass works and made on the spot critical study of the occupational health hazards in these industries, the sanitary conditions within the factory and its surroundings. The report of the Committee is awaited. The Government have issued instructions that in respect of selection of sites for major public sector undertakings, a representative from the Public Health Department should be associated with the selection so that there are no risks to the local inhabitants from the health point of view.

Excerpts from the speech of the Minister for Public Health, Srimathi Jothi Vencatachellum, at the meeting of the Public Health Board held on 24th May 1965.

of view. As regards private sector projects, the Government have instructed that the Chief Inspector of Factories, should consult the representative of the Director of Public Health before according approval to plans of factories.

Food adulteration prevention

At present the provision of the Prevention of Food Adulteration Act are being implemented in 271 Local Bodies in the State. The total number of samples taken under the Act by way of checking Food Adulteration is about 25,000 per year. The District Health Officers have also been appointed as Special Food Inspectors for taking samples from the sources of manufacture and to analyse them.

Towards improving the Laboratory facilities for food analysis in the State, a food analysis branch is proposed to be established in the Principle Laboratory at Coimbatore, the building for which is now under construction. A provision of Rs. 3 lakhs has been made in the current year's budget towards purchase of equipment, etc. Besides, Government have also under

consideration, proposals for starting a separate State Food Laboratory at Madras and District Food Analysis Laboratories at Madurai and Thanjavur under the Fourth Plan. With the establishment of the additional laboratories it will be possible to increase the number of samples taken under the Act to one lakh per year.

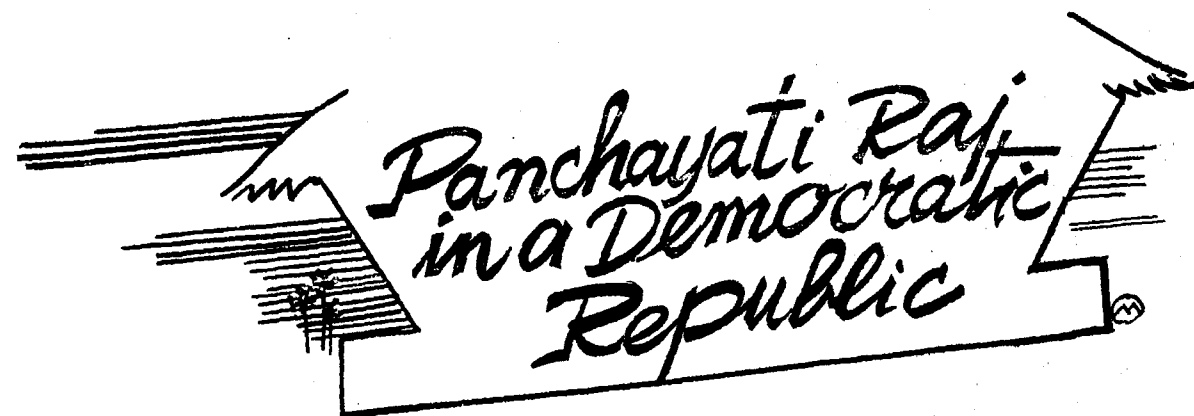
With a view to improving the accuracy of the vital statistics, a four-point scheme for the improvement and strengthening of the machinery for the registration of vital statistics has been introduced in the State. This is a centrally sponsored scheme with 75 per cent Central Assistance. Under the aid from Ford Foundation, Government of India have supplied free of cost necessary machinery for the mechanical compilation of vital statistics at State headquarters.

A provision of Rs. 10 lakhs has been made under Third Five-Year Plan for the provision of sanitary facilities in 500 schools at the rate of 100 schools per year and so far the scheme has been sanctioned for implementation in 100 schools.

Community Canning and Preservation Centre

The Government of India, Department of Food, have established a demonstration-cum-Canning Centre for the preservation of Fruits and Vegetables at 6, Ramachandra Iyer street (Ground Floor), Madras-17, for the benefit of the people to help them to stimulate in preserving the seasonal fruits and vegetables and conserve the processed foods when needed.

The Centre, amongst other activities, will also conduct short-term course classes, free of charge, on home-scale methods of fruits and vegetable preservation for the benefit of the house-wife and other interested ladies. Fruits and vegetables could also be got processed, by an individual, from this centre by paying only a nominal processing charge. For further detailed particulars about the functioning of this centre, the Deputy Technical Adviser, Office of the Regional Director (Food), Southern Region, 123, Mount Road, Madras-6 or the Food and Nutrition Extension Officer at the Canning and Preservation Centre may be referred.



SRI V. S. SUBBIAH, I.A.S.,
Collector, South Arcot.

"This is a great step. This means the dawn of real Swaraj for the village people, for they would now be masters of their own house, having the power to decide the methods of their development and to carry out their decisions. The Government would be there only to advise and assist them."

So expressed our late beloved Prime Minister Jawaharlal Nehru while inaugurating the Shadnagar Panchayat Union in Andhra Pradesh.

Panchayat as a unit of administration is not a political novelty in India. Literary and historical evidences are before us that Village Panchayats of purely democratic set up, have functioned in this country, centuries back, as efficient organs and units of the Government of the day. If inspite of this heritage, those institutions have not flourished and have not come to stay, as a part of our constitutional set up, it was solely due to the ever changing political pattern, frequent fragmentation of Kingdoms and utter lack of unified and integrated administration for the whole country. When British Raj was established in this country, it did not make any attempt to revive the old Panchayat system and it was but natural that the British being foreign did not countenance the creation of effective autonomous self governing institutions, wielding powers and exercising control over the day-to-day affairs of the people.

Gandhiji's Village Panchayat

It should be remembered that Gandhiji's entrance into Indian Politics marks an epoch and his personality dominated the Indian scene for about three decades, till his unexpected death in 1948. During this time, his activities were varied and even in his fight for India's

freedom, he put forward constructive ideas. His portrayal of Village Panchayat appeared in 1942 in 'The Harijan'. He said, My idea of Village Swaraj is that it is a complete republic, independent of its neighbours for its vital wants, and yet inter-dependent for many others in which dependence is a necessity. Thus 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, playground for adults and children. Then if more land is available it will grow useful money crops, excluding Ganja, Tobacco, Opium and the like. The village will maintain a village theatre, school and a public hall. It will have its own water works ensuring clean supply. This can be done through controlled wells and tanks. Education will be compulsory up to the final basic course. As far as possible every activity will be conducted on the Co-operative basis. There will be no castes such as we have today with their graded untouchability. Non-violence with its technique of Satyagraha and Non-Cooperation will be the sanction of the Village Community. My purpose is to present an outline of village Government. Here there is perfect democracy based upon individual freedom. The individual is the architect of his own Government. The law of non-violence rules him and his Government. He and his village are able to defy the might of a world. For the law governing every villager is that he will suffer death in the defence of his and his village's honour."

Thus said Gandhiji as early as 1942 on the immutable establishment of the Panchayati Raj throughout the country, envisaging the integrated human growth and

development. It is a signal contribution of India's heritage that only that growth survives and that developmental activity has a lasting value in which the process develops all the aspects of human existence and works from within. In this process the individual citizen has to be provided with opportunities to evolve himself through his own selected mediums in the social, economic and political fields. In a vast country like India, it is obvious it would not be possible for the State to efficiently fulfil this function and hence the great emphasis on the Village Panchayat wherein the individual while fulfilling duty to his country can also have an opportunity to evolve himself which is the essential and fundamental thing that is required for a democracy. Village has been the base of our Society and its economy, and Village Panchayat has been its medium through ages. Similarly the process of social integration can be achieved and its progress enhanced only if it is at once accompanied by a process of social and psychological integration.

From ancient times

These basic approaches have always been present in the minds of the great Indian thinkers from ancient time and so the country has been able to maintain its cultural integrity and polity, despite its many vicissitudes. It is obvious that the British who ruled last attempted a cultural conquest as had never been done before, and as a part of this attempt they destroyed the Village Panchayat System.

The Village Panchayat, as envisaged, is not merely a decentralised basis for administration. It is a medium through which the Indian people in the rural areas can express themselves on the administrative, social and economic problems of the country and evolve an integrated Indian Community through a process of emotional integration. It is not only that every citizen of the country in the rural areas should actively associate himself with the governance of the country through Village Panchayat but he should be given an opportunity and facility to express himself through the system and in the process to develop himself as a worthy citizen of a great democratic republic.

Soul of democracy

The soul of democracy is not merely mechanical rule of a numerical majority but it is the medium for transmitting a sense of participation in the process of evolution of the Society the governance of the country and its development. It is this feeling which can be the hard rock on which the structure of democracy will find a social base. So long as that feeling is missing, then,

whatever the quantum of physical participation of the people, in the administration or developmental activities, the experiments in democracy will not take roots.

Gandhiji's dream of Panchayati Raj has become a reality when the constitution was framed for India, and in the Directive Principles of State Policy, Article 40 was enshrined in the Constitution which reads:

"The State shall take steps to organise Village Panchayats, and endow them with such powers and authority, as may be necessary, to enable them to function as units of self-government".

And the mighty growth of the Panchayati Raj throughout the length and breadth of the country is the outcome of this Article 40 in the Indian Constitution. Now that the Village Panchayats have become the units of the Democratic Society in India, the needs of the village, which are wholly local in character, can be effectively and expeditiously met. The Village Panchayat can understand the local problems, offer solutions without delay, muster effectively local resources and canalise it properly for the benefit of the local area.

Remodelling village life

Life in the Indian village which suffered continued neglect for a long time, administratively as well as socially, has been brought down to a very low level of despair and degradation. Of all the thinkers it is Gandhiji who saw this with clear perception and gave the blue print for the village reconstruction and without the Panchayati Raj the reconstruction as envisaged by him is not at all possible. A thorough overhaul of all aspects of village life at all levels, social, educational, hygienic, cultural and above all economic and setting up of better standards, creation of new perspectives and outlook of modern life with its advances in Science and technology so that each village may play its rightful role as a useful unit of the Government so that each villager may look upon himself as an useful member of the society, is not all dreams of Utopia but imminent needs of a Sovereign Democratic Republic constituted by a free people.

Centuries of neglect and foreign domination have deprived the villager of his rights as a citizen to participate in the Government of the day. It is only a revolution that can infuse in him the spirit of citizenship and the rights that have accrued to him. And the Panchayati Raj is a silent revolution in this great country—a revolution from brown bureaucracy to benevolent democracy and a smooth change over of power from official to non-official hands and in short it boils

down to the citizen ruling himself for his own sake. Social scientists will say that this is a natural evolution of any Government and that any good Government must resolve itself into this, if it is to stay. No Government will be worth its name unless the voice of its people is heard or echoed in all its councils, be it the smallest unit in the village or the Sovereign Parliament at the Centre.

Powers, functions and duties

The powers, functions and duties of the Panchayat are comprehensive and cover all aspects of village life, carefully calculated to promote the health, comfort or convenience of all the inhabitants of the village. The

constitution of the Panchayati Raj is federal in nature just like the federal structure of the Union and the States, so that the entire pattern may be essentially federal, right from the smallest unit of administration. Each unit of this structure is autonomous, exercising independent powers in its own field of administration and do not function as mere agencies of one another. The fact that all these units are elective bodies, returning representatives of the people by popular vote makes the picture complete. Each one of this units of our Republic is a vital link, serving useful purposes from its position of strength. The links have to be firm and stand united to keep up the glory of the Indian Constitution and its administration.

The Directorate of Public Instruction Bifurcated

During the period of the three Five-Year Plans there has been phenomenal growth of education in the State. The Education budget, which was Rs. 11 crores in 1957-58, the first complete year after the Re-organisation of the State increased to 14 crores in 1960-61 and is now of the order of Rs. 35 crores. All areas with a population of 300 and above have been covered with elementary schools. Secondary Schools have come up even in remote areas and their number which was about 1,400 at the end of the Second Plan is now 2,500. The number of Arts Colleges that existed at the end of the Second Plan was 79 out of which 13 are Government Colleges. Very shortly the total number of Arts Colleges will exceed 100 including the 7 Government Colleges which are proposed to be opened this year. There are 18 Training Colleges out of which 7 are managed by Government.

The rapid expansion of educational facilities has increased the work and responsibility of the Education Department and especially of the Director who is also the Commissioner for Government Examinations and the Director of Public Libraries. There have, therefore, been suggestions from various quarters including members of the Legislature and others that the Department should be bifurcated and constituted into separate directorates for secondary education (including elementary education) and higher education.

After a careful review of the foregoing considerations, Government have decided that the Education Department should be strengthened immediately so that it could function more effectively and in a better manner to cope with the various problems created by the rapid growth and the further expansion envisaged in the Fourth Plan. They accordingly direct that the Directorate of Public Instruction be bifurcated and constituted into two separate Directorates, viz., Directorate of Higher Education and Directorate of Secondary Education. The Director of Higher Education will also be the Director of Public Libraries. The Director of Secondary Education will deal with Secondary Education as well as Elementary Education and will also be the Commissioner for Government Examinations. He will also be in-charge of approval of Text-Books.

Sri N. D. Sundaravadivelu, Director of Public Instruction, is transferred and posted as Director of Higher Education.

Dr. M. D. Paul, on deputation to Government of India is promoted to act as Director of Secondary Education without prejudice to the present appointment.

Sri V. T. Titus, Joint Director of Public Instruction (Text-Books), is promoted temporarily to act as Director of Secondary Education.

District Gazetteers according to necessity. The alphabetical volumes of the series were not to be re-issued, but there would instead be a comprehensive all-India index of the District Gazetteers. The preparation of the State Gazetteer was to be considered after the work on the District Gazetteers was completed. The whole of the Gazetteer work was to be 'planned as a single co-ordinated unit, with a uniformity of form, content and standard, but providing room for variations and additions to meet local or special needs.'

The revised version of the *Imperial Gazetteer of India* is entitled "*The Gazetteer of India: Indian Union*". It will be published in 4 volumes, viz., Volume I: "*The Country and the people*," Volume II: "*History and Culture*", Volume III: "*Economic Structure and activities*" and Volume IV: "*Administration and Public Welfare*." Volume I is in the press and will be published shortly. It has been originally proposed to publish it by the end of 1960, but since the Gazetteers are revised only after long periods, it was decided to defer publication in order to incorporate the results of the 1961 Decennial Census. A major portion of Volume II has also been written. It is my earnest hope that this will become a standard history of India and recognised as such by scholars throughout the world. We propose to issue later an abridged edition of about 300 pages which would be useful for students. The plans of volumes III and IV have been drawn up and contributors appointed; a few chapters have already been received.

Now I would like to say a few words about the District Gazetteers. The revision of more than 300 Gazetteers is a stupendous task, but without a thorough

revision of the District Gazetteers, the picture painted by the Indian Gazetteers would necessarily remain sketchy and inadequate.

I am glad to note that almost all the State Governments and Union Territories have adopted the scheme and taken up the work in earnest. The results achieved so far have been uneven as different State Governments started work at different times. Seventy-two District Gazetteers have been compiled, of which 36 have already been published and the rest are awaiting publication.

New Gazetteers

Before I conclude, I would repeat that the new Gazetteers are intended to educate not only the administrators but the people in whose hands power ultimately rests. They must be true to facts but at the same time reflect the thoughts, ideals and aspirations of independent India. In a vast country like India, inhabited by people of different languages, customs and creeds, it is essential that members of each community should learn to know and respect the life and culture of other regions and other communities. The Gazetteers must from their very nature provide all with the knowledge of this rich variety.

At the same time, they must bring out the basic similarities underlying outer differences. Social, economic and political inequalities have been the chief causes of India's misfortunes in the past. These can be removed only through national planning guided by the principles of secularism, democracy and socialism. The Gazetteers have an important role in educating public opinion and thus strengthening the foundations of our national life.

[Courtesy: All India Radio.]

PUNISHMENT FOR CORRUPTION

During the quarter ended 31st March 1965, on charges of Corruption, one Deputy Commercial Tax Officer, one Assistant Commercial Tax Officer, one Revenue Inspector and one Lower Division Clerk in the Revenue Department were convicted for one year R.I.

An Indian Administrative Service Officer, one Assistant Public Prosecutor, three Sub-Inspectors of Police, one Head-Constable and one Police Constable were dismissed from service. One Officiating Deputy Superintendent of Police was removed from service. One Police Constable and a Peon in the Registration Department were compulsorily retired from service. The pay of a Sub-Inspector of Police was reduced by two stages. The increment of a Forester was stopped for a period of two years.

Gandhi Memorial Leprosy Foundation's Work

The Gandhi Memorial Leprosy Foundation, leprosy section of the Gandhi Samarak Nidhi till 1962 but an independent society since then registered under the Societies Registration Act, is engaged in carrying on field experiments to find out solutions to various facets of anti-leprosy work. The foundation was established in 1952 and has now completed 12 years of work. It is running leprosy control units at nine places in eight States of India, health education units at 11 places in 10 States of India, two training centres, one of its own and another in collaboration with a State Government, a Mass Education and Treatment Centre, a Chemoprophylaxis Project and a Referral Centre. The Foundation is publishing educational material on leprosy and is also running an Exhibition Unit. The headquarters of the Foundation is situated on the outskirts of Wardha town in Maharashtra State.

The Foundation is carrying on some activities in this State, a brief report of which is given below:

Health Education Unit

The Foundation has, since 1961, Leprosy Control Work for the urban areas which differs from the rural in some respects. In urban areas, the people being sophisticated do not like to be examined but being literate, can understand the early signs of the disease and can be relied upon for referring any suspicious skin patches to their private physician. Facilities for treatment are available in urban areas. Private Practitioners, if properly persuaded to treat leprosy patients, and to keep an eye on leprosy lesions while examining their patients, can not only detect early cases but also treat many of them. This programme of urban work with an emphasis on education is launched by the Foundation in 11 health education units in ten States of India.

One of such health education units is located in this State at Tiruchirappalli in Tiruchirappalli district.

The Unit was started in October 1962 and is under the charge of a leprosy trained Para Medical Officer. The Health Education Unit is carrying on educational work in the following six towns:

- Tiruchirappalli,
- Srirangam,
- Lalgudi,
- Kulithalai,
- Pudukkottai and
- Ariyapur.

The Para Medical Officer has helped in the establishment of health associations at Srirangam, Lalgudi and Pudukkottai; where these associations are carrying on health education work in the respective towns with the help of voluntary workers.

The Para Medical Officer established contacts with leading persons, heads of educational and social institutions and private and public medical practitioners at the following towns. He enlisted the co-operation of the social workers who voluntarily offered to do health education work and trained them in leprosy. The number of so trained voluntary social workers is given against the names of each town:

(a) Srirangam	..	17
(b) Lalgudi	..	12
(c) Pudukkottai	..	15
(d) Tiruchirappalli	..	23

The voluntary social workers are educating the urban people in respect of early signs and symptoms of leprosy and the importance of early treatment through group meetings, house contacts; supported by printed educational material in local language. The Para Medical Officer is also making use of the press, cinema-slides, exhibition, etc., in educating the people.



A new approach to INDIAN GAZETTEERS

PROFESSOR HUMAYUN KABIR,
Union Minister for Petroleum and Chemicals.

You may naturally ask what are the gazetteers? A gazetteer literally means a geographical index or a geographical dictionary. Its scope is, however, much wider. It presents, within a limited range and in a readable manner, a comprehensive view of a country and its people. It describes the physical features of a region, relates its history and discusses the social, political and economic life of the people inhabiting it. It thus serves as a guide to the administrator, a reference book for the general public and a source of information for the specialist.

azetteer literature in India, as elsewhere, began with travellers' accounts. Examples of such literature in India are the accounts of Megasthenes, Fa-Hien, Hsien Tsang, Al-Biruni, Ibn Battuta and others. Kautilya's *Arthashastra* also provides valuable statistical information about India in the Mauryan Age.

One of these works can however be strictly regarded as a gazetteer. The nearest approach to a gazetteer in the modern sense is Abul Fazl's *Ain-i-Akbari*. Sir William Hunter, the Editor of the first two editions of *Imperial Gazetteer of India*, stated that he had taken him two works as model when he planned the gazetteers, viz., Abul Fazl's *Ain-i-Akbari* and the *Itinerary Survey of Egypt*, conducted by the French Government in the first quarter of the 19th Century.

First Gazetteer

azetteer literature gained in volume and variety during the early British period. Exigencies of administration compelled the British to undertake the compilation of surveys—general, military, revenue and statistical—in different parts of the country under official and semi-official auspices. To these were added accounts of foreign travellers which are soon followed by regular gazetteers by private authors.

Walter Hamilton's *East India Gazetteer* was first published in 1815. Edward Thornton published his *Gazetteer* in 1844 and both ran into many editions. Till the publication of the first edition of the *Imperial Gazetteer of India* in 1881, Thornton's was the best known work on India for both the specialist and the general reader.

In addition to these general accounts, the preparation of *District Statistical Accounts* was taken in hand even before the Great Revolt of 1857. It was, however, in 1867 that Richard Temple took the lead in the compilation of the *District Gazetteers* of the Central Provinces. A large number of *District Manuals* and *Gazetteers* followed in rapid succession, but the efforts of the Provincial Governments were unco-ordinated and, therefore, not fully satisfactory.

The credit for planning the series entitled '*Imperial Gazetteer of India*' must go to Sir William Hunter. In 1869 he submitted to the Government of India a plan for the compilation of the gazetteers which was approved in 1871. The first edition of the *Imperial Gazetteer of India* was published in nine volumes in 1881. Fresh material was added and its revised edition was brought

out in 1885-87 in 14 volumes. The general article on India received high praise and was published as a separate volume entitled '*The Indian Empire*'.

Lord Curzon has been criticised for many of his political acts, but no one can deny his role in encouraging intellectual and cultural activities. It was mainly due to his interest that the *Imperial Gazetteer* was revised and published in 1907-1909 in 26 volumes. The first 4 volumes were the revised and enlarged version of '*The Indian Empire*' by Sir William Hunter. The next 20 constituted the alphabetical series and the last 2 the index and the atlas. Though produced over 50 years ago, this *Gazetteer* has continued till today to be the most dependable source of information for administrators, scholars and the public on all matters relating to life in India.

Period of change

More than half a century has passed since the publication of the revised edition of the *Imperial Gazetteer*. This period has seen more revolutionary changes than perhaps any comparable period in human history. Old Imperial systems have disappeared. Science and technology have led to economic and social developments that were unimaginable 50 years ago. A new sense of nationalism is sweeping throughout the world. Along with growing nationalism has come growing awareness of international obligations. Against this background of a changing world the whole fabric of Indian life has changed beyond recognition.

India today is free. With political independence has come a new social and economic awakening. Small towns have become thriving cities. New industrial centres have been established in remote regions. Education is spreading throughout the land and changing traditional beliefs. The national struggle which ultimately led to independence, the industrial developments since the First World War, the enormous expansion of education and the spread of democracy and egalitarian ideals have led to vast changes in the mental and moral attitude of the people.

Our perspective today is much wider than it was half a century ago. We have also much greater information regarding the growth of population and the life and livelihood of the people. This demands radical revisions in our account of the social and political life of the country. Even the chapters on geology written by some of the most competent experts of the time need to be revised and brought up to date in the light of the enormous expansion in our knowledge about the physical characteristics of the earth.

The changes mentioned above relate to questions of fact. Perhaps of even greater importance is the question of a new approach. The earlier Indian *Gazetteers* were written primarily for the use of British administrators. Today, the *Gazetteers* have to serve an entire people. Under modern Indian conditions, the administrators are not a few hand-picked men of proven ability but millions drawn from every strata of society. In 1869, Hunter had written to the Viceroy of the day, "Nothing, nothing is more costly to a Government than ignorance." This is a truth which applies with even greater force to the civilians of today. Administration fifty years ago was mainly a question of maintaining law and order. Today, it touches every aspect of life and there is real risk that administrators may lose themselves in the vast expanse of the bureaucratic machinery which has developed as a result of the ever increasing responsibilities of Government.

The need for revising the *Gazetteers* was widely felt after the achievement of independence. The credit for taking the first step goes to Bombay which started the work of revision in 1949 and published a volume on Poona in 1954. West Bengal issued *District Census Handbooks* with lengthy introductions furnishing information that is normally included in *Gazetteers*. Bihar undertook the work in 1952 and published two *District Gazetteers* on Gaya and Hazaribagh in 1957. Madras began in 1954 and brought out the volume on Thanjavur in 1957. Rajasthan and Uttar Pradesh entered the field in 1953 and 1957 respectively. Since then, most State Governments have set up units for the revision of the *District Gazetteers*.

The Gazetteer of India

The lead taken by the State Governments deserved the highest praise but there was a risk that unco-ordinated and independent efforts by the different States might lead to results not commensurate with the effort. The *Gazetteers* are most useful when they follow a uniform pattern so that people from different parts of the country or outside can find out the information they seek without undue waste of time and energy.

Accordingly, at a conference of representatives of the State Governments and of the various Ministries of the Government of India held in July 1955 it was decided that the old '*Indian Empire*' volumes were to be revised, rewritten and amplified under the authority of the Central Government, while the State Governments would undertake the revision of new compilation of

Job study

The Foundation has taken up a study of existing jobs in Public sector industries to find out which jobs are suitable for leprosy patient. There are many jobs in existing industries and establishments, where leprosy patients can be employed. If these jobs are properly studied and those suitable for rehabilitation of leprosy patients selected, the data can be made available to the Government which can consider suitable steps for rehabilitation of leprosy patients in some of these jobs. The Foundation has trained one of its senior Para Medical Officers in evaluation of jobs and this Officer has been carrying on studies of existing jobs in Public sector industries all over India.

This study has been carried out in the following industries in this State:

- (a) Hindustan Teleprinters, Madras.
- (b) Neyveli Lignite Corporation, Neyveli.
- (c) Government Footwear Production Centre, Madras.
- (d) Integral Coach Factory, Madras.

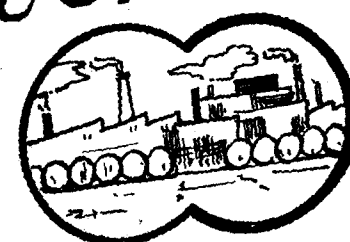
All these industries together have about 227 jobs of different types and the number of workers engaged in these jobs is about 29,000. A preliminary analysis of the data available from these industries has revealed that above 40 jobs with an employment potential of over 17,000 can be done by a leprosy patient also.

SMALL SAVINGS PROMOTION

The Minister for Industries, Sri R. Venkataraman, inaugurated the formation of the large sized Pay Roll Savings group in the Office of the Imperial Chemical Industries, Madras, on 25th June 1965. He praised the work of Sri Kanniah, Vice-President of the Social Club for his strenuous efforts in forming a very good Pay Roll Savings group. He complimented Sri B. K. P. Rao, the Manager, on his efforts to persuade the staff to join Small Savings that serves the individual, the community and the nation together. He felt that the community savings was several times more valuable than raising of funds through loans and under taxes. Savings of the community was a potential resource for the country's developmental programme. He urged that factories and offices in City shall emulate the example of Imperial Chemical Industries and form savings group in their own offices. The Minister felt that he was proud of an organisation that embarked on Savings programme.

Sri B. K. P. Rao, handed over a cheque for Rs. 2,170 representing the Small Savings collections from the staff of the Imperial Chemical Industries for the month of May 1965, along with 173 applications. He stressed the need to stand by the country's needs at the time of emergency. He expressed that Small Savings helped a good cause, while helping the investor at the same time.

Indian International Trade and Industries Fair at —MADRAS—



The All-India Manufacturers' Organization, through the Industrial Foundation, a registered Society sponsored to perpetuate the memory of the late Dr. (Sir) M. Visveswarayya, the founder President of the All-India Manufacturers' Organization is organizing "The Indian International Trade and Industries Fair" at Madras. The fair will be conducted from the last week of December 1966 to the end of January 1967. The venue of the fair will be near Villivakkam, Madras. The site admeasuring about 500 acres lies between the New Avadi Road on the North and Poonamallee High Road on the South and is located about 3 miles from the heart of the City. This will be more than twice the size of any other international exhibitions held in India at any time.

The Government of India and the Government of Madras have very kindly agreed to extend to the All-India Manufacturers' Organization, which is the sponsoring body, all assistance and support in this task.

First of its kind

The fair is the first International Trade Fair to be held in our Country and possibly bigger than any other Fair held so far in Asia and Europe next only to the New York Fair currently going on. It will not just be an exhibition of goods produced in India and other foreign countries, but will be a Trade Fair, where trade negotiations can be held and bargain struck. India is planning in a big way to enter the world export trade in non-traditional items of export. India is importing in an increasing measure capital goods and other raw materials necessary for the manufacture of various items of consumer goods for local consumption as also for export. The Trade Fair will, therefore, provide a centre for the exchange of goods and services. (It will also give an opportunity to Indians and Foreigners to get an idea

of what India has to offer to the outside world and what she needs in return from the other countries for the development of her own economy.)

(The fair authorities expect about 40 countries to participate in the Fair. In addition to Government of India, the State Governments, and all the public and private sector units are also expected to participate. About 4 million visitors are expected to visit the Fair.)

Facilities

It is expected that about 5 millions sq. ft. of space will be available for the display of goods. As at any other International Trade Fair, participants may buy the number of sq. ft. of space they need and build their own pavillions. They may also hire out from the Fair authorities covered space at rates to be fixed depending on type of accommodation and facilities.

For display purposes the Fair will be divided into a number of sections each section displaying a particular line of manufactured goods. This is intended to help the visitor immediately to locate sections that interest him most.

The Fair ground will be served by a net work of well-laid roads, and there will be at least four main entrances. Facilities such as:—

Clean and well organized Restaurants to suit the tastes and requirements of the large number of visitors and participants from all over the world; amusement Parks and Fountains; open air theatres for holding cultural shows—cinema shows, circus, etc., taxi stands, parking lots for cars, ambulance and hospital facilities, railway siding (broad gauge) which will connect the Perambur Railway Station as well as the Harbour, etc., will be available.

A number of taxis will be made available at the site. Arrangements also will be made for running of the State Transport buses from different parts of the City.

The International House located in the centre of the grounds will provide—Conference Hall, Trade Negotiation Rooms, Banking Service, Interpreters' and Stenography Service, Telephone Booths, Post and Telegraph Office Counters, Air and Rail Booking Offices, Cafeteria and Cocktail Bar. Hotels will be built for the convenience of those who wish to stay at the site itself.

Representatives of the State Trading Corporation, Indian Investment Centre, Reserve Bank, Chief Controller of Imports and Exports, Customs Authorities, etc., also will be stationed at the site for rendering on the spot advice, etc.

The aim

At a time when the Government of India as well as the industrial and business community is straining every nerve to promote exports on non-traditional items, which consist mainly of manufacture goods, an International Fair like this would serve the highly important objective of promoting our exports. The emphasis will be on concluding deals during the duration of the Fair between Indian producers and foreign buyers, as is done in all international trade fairs all over the world. This will be a special and unique feature of this Fair, because, up to now, the emphasis has been mainly on showing to the world what India can produce. But this time, we have now to go a step further to sell to the world what we produce.

At the same time, it has to be realised that international trade is a two-way traffic and when we try to promote our export we should also give every opportunity to manufacturers abroad not only to display their products to the potential Indian buyers, but also to be able to sell their products to us. India needs hundreds of crores worth of capital equipment and industrial material every year. The Government of India have very kindly permitted the disposal by sale of capital goods and semi-capital goods imported into the country, for display and publicity in the Fair, against normal valid import licence, subject to the other normal Rules and Regulations of the Government of India. It is needless to point out that it will be possible for foreign manufacturers of capital and semi-capital goods to show to their potential customers in India by their display at the Fair superiority and the

competitive capacity of their machine and to book orders against valid import licences.

In the light of the growing industrial potential of our country, it is the common desire of the industrialists and of the Government of India that progressively larger proportion of capital goods imports from abroad should be manufactured in the country. It will be the special effort of the Organization to persuade foreign manufacturers, who participate in the Fair, to utilise the Industrial potential of India to work for them and to manufacture and to supply to them certain parts of their equipment which India can manufacture to their required standards at competitive prices, with their help just as at present, in most of the Western countries most of the large manufacturers get various parts of their equipment made by other manufacturers in their own country or outside their country. In this case, items like engineering goods and chemical equipment, tools, jigs and fixtures, gray and malleable iron goods, etc., offer great scope for arrangements of this nature to be made to the mutual benefit of the Indian and foreign manufacturers.

A place of Trade Meet

Another important feature that the organizers desire to incorporate in the Fair is a regular "Trade Meet" between buyers and sellers and conclusion of mutual business. If need be, to accommodate foreign buyers, official translators, interpreters and guides are intended to be provided. It is also intended to provide a special informative service of how a foreign buyer can meet a manufacturer or an exporter. All these services will be without cost. In this task, the assistance of every important Association of Manufacturers and Traders will be sought to represent each individual group of industry. The Fair will become a place for meetings and seminars for discussing subjects that affect our international trade, e.g., productivity, implementation of standards, etc.

It is also intended by using the good offices of the Ministry of Commerce, Ministry of Industry, and the Ministry of External Affairs to invite Buyers Delegation from countries with whom we have good international trade relations.

The Fair will surely place India on the map of Industrial World and serve to demonstrate what the Democratic Government with the backing of its people can do to raise the standard of living of its people through democratic means.

Andaman Islands : A Paradise for Holiday Makers

Studded like glittering emeralds in the deep blue waters of the Bay of Bengal, the Andaman and Nicobar islands enchant the visitor by their picturesque panorama, pastoral beauty and grand vistas.

About 250 miles from the mainland the Andaman and Nicobar islands consists of a chain of 223 islands. Of these, 204 islands spread over 200 miles belong to the Andaman group. Port Blair, the headquarters, is about 780 miles from Calcutta and 740 miles from Madras.

With a coastline deeply indented and fringed by strips of golden and sometimes silvery sand, the Andaman islands are veritable paradise for holiday-makers with their green undulating mountains and valleys, secluded bays and blue lagoons, dense forests resounding to the scamper of spotted deer and chirping birds.

Until a few years ago, the facilities for visiting the islands were limited. The sea voyage from Madras or Calcutta took three days. But with the introduction of a regular weekly air-service from Calcutta to Port Blair, except during the monsoon, the time taken for the trip has been cut down to a few hours.

With Independence, a new era has begun in the annals of the Andaman and Nicobar islands. Today, the islands can boast of all-round development. During the last decade, a crisscross network of over 100 miles of roads lined with coconut trees and at places running along the sea, has been laid in the islands. At present a trunk road, 210 miles long, is being built. It will

connect the north, middle and south Andaman islands. The rapidly growing road transport system is keeping pace with increasing population. But water craft still remains the predominant mode of inter-island communication. Three new vessels will soon be added to the ferry fleet.

In Port Blair, a new tourist guest house is nearing completion. Perched on a hill, it commands a superb view of the surf-bound sea and the verdant hills around. One wing of the guest house will have accommodation with cooking facilities for families while the other will be reserved for single visitors. Plans for a spacious lounge, a dining hall with beautiful woodwork, lands and gardens hold promise of making it an ideal tourist guest house. Facilities for accommodating visitors already exist at beauty-spots, like Carby's Cove, an ideal lagoon for boating and fishing, five miles from Port Blair. On the Ross Island, facing Port Blair, a zoological garden with an aviary is coming up.

The islands get both the south-west and north-east monsoons, the average rainfall being more than 290 cms. Tempered by pleasant sea breeze, the mercury does not cross the 100° F mark during the summer and falls to about 60° F during the winter. The ideal season for visitors, however, is between January and March, when after the rains the islands bask in glorious sunshine.

For visitors to the islands, multi-coloured corals and rare shells make precious souvenirs. Skilled hand convert rare shells into bric-a-brac and the islands, fine woodwork can vie with any in the world.

Plan Needs Your Savings

METRIC SYSTEM - THE ONLY LEGAL SYSTEM

Metric System is the only Legal System

buy always in

Kilograms

Metres

Litres



METRIC SYSTEM - THE ONLY LEGAL SYSTEM

Warehousing IN INDIA

SRI C. S. RAMACHANDRAN, I.C.S.,
Managing Director, Central Warehousing Corporation.

With the overall shortage of foodgrains in our country and the consequent need to import large quantities year after year, scientific storage has assumed added significance.

A rough estimate places the annual loss of foodgrains during storage at about five per cent and if we were to save even half of it we would have practically solved the problem of shortage.

Warehousing facilities in India were given a concrete shape by linking credit with agricultural marketing in the year 1956 with the enactment of the Agricultural Produce (Development and Warehousing) Corporations Act, 1956, as a result of the recommendations of the All-India Rural Credit Survey Committee, appointed by the Government of India on the suggestion of the Reserve Bank of India. This act provided for establishment of—

- (i) a National Co-operative Development and Warehousing Board,
- (ii) a Central Warehousing Corporation and
- (iii) a State Warehousing Corporation in every State except the State of Jammu and Kashmir.

Though the Central Warehousing Corporation was constituted by the Government in March 1957, it actually started functioning in July of that year; the State Warehousing Corporations were organized during the period, July 1957 to August 1958.

The areas of operation have been defined as centres of all-India importance for the Central Warehousing Corpo-

ration and those of the State and/or District importance for the State Warehousing Corporations. It has also been envisaged that special problems, such as provision for specialised storage, storage for export and inter-State purposes should be the special concern of the Central Warehousing Corporation.

In the year 1962, the Agricultural Produce (Development and Warehousing) Corporations Act, 1956 was replaced by the National Co-operative Development Corporation Act, 1962 and the Warehousing Corporations Act, 1962. The Warehousing Corporations Act, 1962 came into force on the 18th March 1963 when the Central Warehousing Corporation was formally re-established under this Act.

Functions

The functions of the Central Warehousing Corporation and the State Warehousing Corporations remained, by and large, the same under the new Act but the scope of activities was enlarged by the inclusion of 'Notified Commodities' (commodities which the Government may declare by a notification in the official Gazette by the powers vested in Parliament by virtue of Entry 33 in list III of

the Seventh schedule of the Constitution) such as cement, Steel, textiles, leather and rubber goods, coir and coir goods, etc.

The functions of the Corporation, as provided in the new Act, are: (a) acquire and build godowns and warehouses at suitable places in India as it thinks fit; (b) run warehouses for storage of agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities offered by individuals, Co-operatives and other institutions, (c) arrange facilities for transport of agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities, (d) subscribe to the share capital of the State Warehousing Corporations, (e) act as agent of the Government for the purposes of purchase, sale, storage and distribution of agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities, and (f) carry out such other functions as may be prescribed.

Working of a Warehouse

The warehouses of the Central and State Warehousing Corporations work under the respective Warehousing Acts passed by the centre and the different States. These warehouses are licenced under the provisions of the Act.

A depositor is required to bring his produce to the warehouse for storage. The goods, on receipt, are weighed. A representative sample is taken from the stock for ascertaining the quality and evaluation of grade standard. A sealed sample is given to the depositor and two such sealed samples are kept in the Warehouse for comparison with the stocks at any stage. A Warehouse Receipt, which is a negotiable instrument under the Warehousing Act, is issued to the depositor in token of the goods received in the warehouse for storage. The receipt contain particulars regarding the quantity and quality of the goods tendered for storage together with a certificate of insuring the same.

The Warehouse Receipt is accepted by the State Bank of India and other scheduled banks, and the goods, though actually stored in the warehouse, can be pledged with the bank on the production of the Warehouse Receipt. The banks advance loan up to 75 per cent of the value of the goods and the interest charged by them is one to one and half per cent less than what is usually charged by them. The grades of the produce mentioned in the Warehouse Receipt are generally recognized by the trade throughout the country. A depositor can easily sell his goods on the basis of these Warehouse Receipts whenever the rates are favourable to him. Since the

produce is stored in a scientific manner there is very little deterioration and as such these fetch better price than those stored in private godowns.

Some of the important benefits of storing produce in a warehouse are:—

- (a) elimination of loss from damage and deterioration due to insect pests and moisture,
- (b) avoidance of distress sale by pledging the goods with the banks and obtaining advance to meet the immediate requirements,
- (c) the Warehouse Receipt being transferable, the ownership of the goods can be changed without the actual movement of the produce,
- (d) provides safety through insurance against fire flood and theft,
- (e) helps evolution and adoption of grades and standards for various commodities, and
- (f) regulates the flow of goods into the market and thus ensure a better price to the producer and an equated and less erratic price to the consumer.

Storage charges at Central Warehouses have been fixed as low as economically possible. The charges vary from commodity to commodity but on an average 18 to 24 Paise per standard bag per month is charged for most of the commodities. Storage charges are chargeable in full for the first month and for subsequent period is payable on weekly basis. The facility of a rebate is allowed to Co-operative Societies. The depositor can draw part delivery of his deposits according to his needs. Recently, storage charges on a weekly basis have also been introduced to facilitate short-term deposits.

Scientific storage

With the overall shortage of foodgrains in the country and the consequent need to import grains year after year, scientific storage by the Central and State Warehousing Corporations has assumed added significance. It is not only necessary to produce the maximum but also to conserve what is produced. A rough estimate places the annual losses of grains during storage at about 5 per cent and if the Corporations are able to save even half of it they would have practically solved the question of foodgrains shortages. This loss in terms of weight comes to about four million tonnes.

Besides foodgrains, considerable loss is caused in the storage of other commodities such as oil-seeds, spices like chillies, turmeric, coriander, ginger, pepper, fenugreek, cumin, aniseed, cardamom, fibres like cotton, etc.

CENTRAL WAREHOUSES IN MADRAS

- 1 MADRAS GOVERNMENT GODOWN, No. 56, BASIN BRIDGE ROAD, MINT, MADRAS.
- 2 COIMBATORE G-VENNAL NAIDU ST., FORT, COIMBATORE.
- 3 VIRUDHUNAGAR VIRUDHUNAGAR.
- 4 KUMRAKONAM BEHIND (B.D.O. OFFICE), NEEDAMANGALAM ROAD, KUMBAKONAM.

jute, oil-cakes, fertilizers, oils, copra, arceanut, cashew-nut, tamarind, fruits, vegetables, rubber, leather, textiles, paper and cement. Most of these commodities are very valuable to our National economy besides some of these being foreign exchange earners. It is of utmost importance that these commodities are stored on scientific lines and saved from deterioration.

A wide range of 110 agricultural commodities are stored in warehouses including notified commodities such as iron and steel, insecticides, fungicides, weedicides, rubber, cement, leather, coir, etc. Another Bill has been introduced in the Parliament to further enhance the scope of activities of the Corporations which will enable them to store commodities like lac, tobacco, wool, etc., requiring specialized storage.

The methods adopted for preservation are those which the F.A.O. and Ford Foundation have testified to be efficacious. Many agriculturists have found that the foodgrains stored in the warehouses fetch higher prices than those kept in their private old-fashioned storerooms because of efficient preservation.

Generally, the agricultural commodities are stored either in bulk or in bags and the types of storage structures vary from region to region depending upon climatic conditions and the nature of the commodities.

Setting up of Warehouses

As a rule, warehouses are, in the first instance, set up in hired accommodation for gauging the storage potential of that particular centre and only when it is found to have sufficient potential as to make it a viable unit, the corporations' own construction is undertaken. It has not been so far possible to accelerate the pace of construction due to general scarcity of building materials, difficulties in acquisition of suitable sites, non-availability

of scientifically designed warehouses, etc. Despite these handicaps the work of construction of warehouses has progressed side by side with opening of centres in hired accommodation and by the end of March 1963, the Central Warehousing Corporation owned a constructed capacity of 46,600 tons. By the end of 1963-64, 19 centres were completed raising the constructed capacity to 92,135 tons and construction at 14 more centres including a cold storage at Calcutta was in progress. By 1965-66, the number of constructed warehouses will go up to 36 with a total capacity of 168,900 tons and by the end of the Fourth Plan, the Corporation hopes to complete construction of 86 units with a capacity of 368,900 tons.

Different spices pose special problems for storage where great care and skill is required. Spices, if the produce is not dry, deteriorate rapidly while in storage due to development of fungus. These generally require to be stored in separate rooms.

To overcome storage losses, specialized storage structures are being designed on scientific lines for spices like turmeric, etc. The establishment of such structures is being considered for centres like Calicut, Cochin, Alleppey, Quilon, Virudhunagar, Mangalore, Nizamabad and for other places which are centres of spice production/storage. Such structures are already functioning at Sangli and Mangalore.

Training of Technical Staff

The responsibility of proper grading, storage and preservation of these commodities for sufficiently long time and of their return to the owner in the same quality and quantity, devolves on the field staff manning the warehouses. As such, intensive theoretical and practical training for them is essential. One of the major difficulties confronting the programme of expansion of the warehousing scheme is the paucity of properly trained technical staff. The Central Warehousing Corporation is organizing training courses at regular intervals every year, and even sometimes more than one course a year, for imparting training to the candidates selected by the Central and State Warehousing Corporations.

Since its establishment in 1957, the Central Warehousing Corporation has held eleven such Training Courses and trained 827 candidates. In addition to the regular Training Courses conducted on an all-India basis, Regional Refresher Courses are also arranged to keep the field staff well-versed with the latest developments in the fields of their activities. So far, five Regional Refresher Courses have been held.

The Training Courses are primarily conducted for Inspection and Storage Officers, Warehousemen and Technical Assistant-cum-Graders recruited by the Central and State Warehousing Corporations. However, a limited number of candidates from co-operatives, commercial institutions, trade and private individuals are also accepted. In order to maintain high standards in field work, the candidates admitted to these courses are Graduates in Agriculture, Zoology, Chemistry, Commerce or Economics.

Progress

Warehousing is a new venture, launched hardly seven years back, and it will necessarily be some time before its impact can be felt on the rural economy of a vast country like India. Beginning with just seven warehouses in 1958, the Central Warehousing Corporation has now 86 warehouses in different parts of the country while the State Warehousing Corporations have established 525 centres during this period.

In terms of storage capacity, the Central Warehousing Corporation started with 7,000 tons which increased

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to 80,000 tons by the end of the Second Five-Year Plan and is 2½ lakhs tons at present. The deposits by the end of 1963 had increased to 135,000 tons. This is reinforced by another 4 lakhs tons capacity in the warehouses set up by the 14 State Warehousing Corporations.

Farmers have also to be educated in pooling their resources for scientific storage and sale at proper time through the co-operative marketing societies. Since suitable storage accommodation at present available with any recognized agency in this country is still very limited, there is a great scope for storage of agricultural produce on scientific lines in godowns and other constructions of the Central and State Warehousing Corporations to avoid wastage, which is till to the tune of about four million tons in this country.

The Warehousing Corporations are also proposing to give every assistance to the Food Corporation of India in the matter of storage of foodgrains likely to be procured by them, and a plan of expansion of such facilities specifically to meet their requirements is now under active implementation.

INSTALLATION OF WIRELESS TRANSMITTERS

The need for wireless sets for voice operation at important places in the State particularly the East-Coast to facilitate efficient and quick means of communication in times of floods and cyclone emergencies had been keenly felt during the 1961 floods in Thanjavur district. The utility of wireless sets has been amply demonstrated by the availability of one at Dhanushkodi during the recent cyclone in December 1964. The question of installation of wireless transmitters and transreceivers to serve as efficient and quick means of communication in times of floods, cyclone, etc., has therefore been re-examined. It is considered that the system of wireless transmitters operating from the coastal belt during the North-East Monsoon and from the strategic points in the Cauvery and Bhavani Irrigation Systems during the South-West Monsoon will be of great advantage, as it would help and guide intelligent anticipation of calamities and facilitate preventive measures to be taken quickly.

The Government have accordingly sanctioned the purchase and installation of seven wireless transmitters and transreceivers at important places in the State at an estimated cost of Rs. 49,000 non-recurring and Rs. 20,720 recurring for operation and maintenance by the Police Department, in the interests of efficient and quick means of communication in times of flood and cyclone emergencies.

Aluminium utensils manufacture

The following is a Model Scheme for the manufacture of aluminium utensils.

Spinning machines and motors can be purchased from Messrs. Eswaran Industries, 14-A, T.H. Road, Madras-19 and other items can be purchased from hardware merchants.

Cost of raw materials.

(A and B quality aluminium metal to be used.)

	Rs.		Rs.
Buildings rent (approximately) ..	75	50 kg. circles at Rs. 5-50 per kg. ..	275
	per mensem	Labour charges at Rs. 0-50 per kg. ..	25
		Total ..	Rs. 300

Machinery

	Approximate Cost in Rs.
One Motor 5 h.p. (with shorter and switch).	900
Three spinning lathes	1,350
Three counter shafts	450
Three ball-bearing with pedestal	150
One 2" bright shaft 15' 0"	120
Three 16 dia slit fully	60
One 18 dia. slit fully	37-50
Canvas belts 2", 50 feet	20-00
3½" or 4", 20 feet	200-00
Six sets of yeast from dies	200-00
Weights scale (50 kilo.) made of MSWCP.	25-00
Pressing Tools	

Erection charges

Materials 200	500-00
Labour 300	
Total ..	Rs. 4,012-50
	or 4,000-00

Aluminium disc can be had from—
Jeevanlal & Sons, Mint street, Madras.
Ganjetic Co., Madras-1.
Santhosha Nadar and Sons, Madras-1.
Sunbeam Metals, Madras-19.
Ramakrishna Rolling Mills, Madras-19.

Labour and other charges

	Rs. P.
Spinners 3 on Rs. 3 on contract basis ..	9 00
Feeders 3 on 50 P. (boys) on contract basis ..	1 50
Polisher 1 on Rs. 1-50 on contract basis ..	1 50
Polish (Boys) 2 on 75 P. on contract basis ..	1 50
Emery paper, map, gunny electricity ..	3 37
Total ..	316 87
Sale of articles at Rs. 6-50 per kg. ..	325 00

Further details can be had from the Rural Industrialization Officer, Chepauk, Madras-5.

Grow One More Habit: The Savings Habit

EMERGING PATTERN

New sights, new sounds, new joys and new hopes—these are the features of the evolving industrial economy in the State.

In and around the cities and towns in the State, factories, big and small, are rearing up their head, their tall chimneys emitting clouds of smoke. The air is full of din and bustle—the factory sirens wailing, the workers rushing to and from the factories and the workshops resounding with the noise of running machines.

The industrial horizon is broadening, the hopes of more employment are running high and the joy in participating in these developments that change the content and goal of life is visible on the faces of workers and peasants.

The Plan is responsible for this emerging economic pattern. Hence the enthusiasm of the people for implementing Plan Schemes.

ISSUED BY
THE DIRECTOR OF INFORMATION AND PUBLICITY
GOVERNMENT OF MADRAS

Leisure time Activities of Teenagers AND University Students

Educational Institutions viz., schools or colleges are an integral part of the way of life of a people. They drew their urges, ideals, inspiration, objectives and modes as well as their sustenance from them and in their turn contribute to the growth and development of the Nation by extending the frontiers of knowledge, by preserving its social heritage and cultural tradition. The social role of Educational Institutions as centres of citizenship training and as places where the youth get their primary social re-orientation, responsibilities and social adjustment is now fully appreciated in all progressive countries.

The function of the school is no longer limited to academic instruction but extends to training for social citizenship as well. As such not only the internal curricula of the schools and colleges are considered important but also the day to day conduct of the students outside the class room, their pastime pursuits, their leisure time activities, interest and goals are of interest not only to the educationists but also the society at large.

The changing social conditions have made leisure a factor of growing importance. People in every trade and profession ask and have more and more of it and the students are no exception to it. Leisure is essential and important not only for physical and mental relaxation and recreation but also as a means of giving expression to and developing the creative aptitudes of individuals. But at the same time if leisure is not properly used in well directed channels, it would lead to social disorganization, wastage of human resources, both physical and mental, and youth will drift into vagrancy and indiscipline and habitual criminality in later life. Hence the urgency and importance of the plans and programmes to utilize the available leisure-time in an individualized constructive and socially beneficial manner.

Objective

The Public Co-operation Division of the Planning Commission and the Madras State Government entrusted the Indian Conference of Social Work (Madras Branch)

with the Research Project on a "Study of Leisure Time Activities and Needs of Teenagers and University Students in Madras City."

The aim of the study is to find out how far the modern educational methods are preparing the individuals inside and outside class room for effective social adjustment, by providing for their specific needs, congenial to their development at their teenage period. The study is devoted to assessing the leisure time needs of the students in Madras City and to finding out the right information about the facilities for the teen-agers as they exist in schools and colleges for the right type of his leisure-time activities and to see how far these facilities are beneficially utilised by the teenagers.

The objectives of the study can be classified into three heads:—

1. The assessment of the leisure-time actually at the disposal of the students and a study of their activities during such leisure time.

2. A correct finding on the present facilities and programme for the teenagers in educational institutions and outside for such study.

3. A drawing up of a constructive programme so that the energy of the youth may be well directed as to conduce towards national development.

The sphere of enquiry covered all the educational institutions in the two Revenue Divisions of the Madras City, which provides High School and non-professional University education. For the purpose of the study of the meaning of the word teenager had been functionally broadened to include individuals coming under the age group of thirteen to twenty-one. It thus practically embraces adolescence and very early adulthood of the conventional classification. This widening was because of the understanding that the individual's personality is moulded greatly in the School and College society and that it is the period during which the individual gradually attains maturity. As this age group is formed mostly in the VIII, IX and X standards in the Schools and P.U.C. and Degree Classes in the colleges only students of the above classes were taken for consideration for interview. In regard to leisure, it was decided that it should cover all free-time which the youngster has at his disposal.

Facilities

The question has been raised concerning the way the teenagers spend their leisure time inside as well as outside their school hours, i.e., what they do when they are free from any regular compulsory activity, curricular or extra-curricular, set for them as part of their educational programme. To the education reformer and the sociologist this is of importance particularly in a developing country. This enquiry tries to find out how the teenagers in schools and colleges in the Madras City spend their leisure when they are free from the guidance of their teachers and what their needs are if this time is to be profitably utilised. A student in spite of the load of the regular curricular work and the compulsory extra-curricular activities, still has considerable free time left that could be used at his free will. But he is not profitably able to utilise it because of the lack of proper facilities, opportunity and guidance. The absence of facilities to utilise such leisure-time in proper directions affords scope for the teenager to direct his energies in undesirable and unwelcome channels. Workers dealing with the problem of student indiscipline find that it is closely related to misdirected leisure.

The majority of the teenagers are day-scholars and of the day scholars the biggest single group consists of those who live with their own parents. Eighty-eight per cent of the day-scholars live with their own parents,

eight per cent live with their guardians, two per cent live with their relatives, one per cent in private hostels and the same per cent live with their friends. This distribution shows the need to direct more attention to the homes and no facilities available near about such homes.

This naturally leads us to parental and neighbourhood responsibility so that such facilities for the teenagers outside their class hours are provided. But the impression gathered by the research team is that the parents show that it is the responsibility of the educational institutions to guide and look after the activities of their students inside as well as outside school hours, while the attitude of the institutional authorities, as expressed by them before the interviewers, indicates that their thinking is the other way round. They believe that their responsibility is confined to the premises of their institutions and does not extend outside.

The residential factor seems to have a positive significance in regard to the leisure time and to leisure time activities and needs of the teenagers. The availability of leisure time is also directly related to the distance he has to cover to reach institutions where he studies, and also the conveyance he makes use of to cover the same.

Again facilities are definitely more in the hostels for the inmates to spend their leisure time in a constructively recreative manner than in the residential areas. Sixty-seven per cent of the day-scholars showed that they do not have facilities of any sort in or around their residences available to them whereas hostels managed by schools and colleges have a modicum of facilities for the inmates for recreational activity.

Leisure time available

The data pertaining to leisure time is very interesting and informative. The average amount of leisure which a teenage boy has during a working day is 3.8 hours and which a girl has that day is 2.9 hours. The average amount of leisure available to the teenager boy during the holiday is 6.2 hours and the same for the girl is 4.3 hours.

Leisure time is more during holidays than on working days and students in hostels and those living close to school or college have more such time. While the bulk have between two to four hours on working days and three to five hours on holidays only 4 per cent and 7 per cent of them answered respectively that they have no leisure time at all on working days and holidays, as they are fully engaged in their scholastic and household duties and in going to and returning from school.

Even in institutions where play-ground is available there is no positive relationship between the population of the students and the play-ground the institutions has.

In the city the general acute pressure on space is reflected also in this but it has also a historical aspect as schools and colleges have started in buildings in streets to meet the clamant demand for academic institutions and thinking. This was merely confined in many cases to the provision of class rooms. The conditions now prescribed by the Department of Education and the University had not been then formulated. Also even now school and college managements and teachers and parents generally are so obsessed with results in examinations and the public grade them only on the basis of such results that these 'needs' of teenagers are more deemed as 'refinements and luxuries rather than essentials'.

Participation in games

The institutional heads agree that the student participation in games is not encouraging on the whole. And the table shown below points out the reason stated for such non-participation on the part of the students:—

	Institution.	Percentage.
1 Lack of facilities	24	26
2 Distance	11	13
3 Lack of interest	4	4
4 Medical reasons	6	6
5 Discouragement by the institutions as they affect the studies.	1	1
6 Lack of interest and facilities.	3	3
7 Lack of interest and discouragement.	6	6
8 Distance and discouragement.	2	2
9 Distance and lack of facilities.	16	17
10 All reasons	7	7
11 Other reasons	1	1
12 No response	13	14
	94	100

Another interesting finding in this respect is that the majority of the teenagers prefer to play in the school or college ground rather than go to other grounds or associations or clubs. It is so particularly in the case of girls as they do not like to go to outside clubs or associations.

The average leisure time available for the boys as pointed above is more than that of the girls both on working days and holidays. This appears to be due to the fact that the girls living in homes have a greater number of regular responsibilities in the homes than the boys have.

A number of interviewees said that on holidays they do not have much to do and that they just do not do anything at all. More girls said so than boys and this was to be expected as their games and other extra-curricular activities are limited to the school compound and few of them may go out to outside clubs or associations for such activities as the boys can do. So on the holidays they do not have much facilities for the available free time excepting domestic chores which the majority of them expressed as their routine duty.

The general picture gained from these observations is that the teenagers have a definite quantity of leisure time averaging in a year 1,010 hours for girls and a 1,390 hours for boys during the school going months besides roughly a full two months of vacation. This is quite a sizable part of waking hours as to need well directed attention from the parents, the academic authority and the State as by any computation it is more than the part actively spent for studies.

Games and leisure time

Games and physical training form an integrated aspect of our modern educational system. These play an important role in building the personality of the individual not only physically but culturally and emotionally as well. A student learns to accept success and failure as incidental to all effort and also acquires a special toleration and appreciation of the other man's faculty and point of view. Games form one of the most popular leisure hour activity of teenagers as it provides controlled and well directed scope for utilisation and release of abundant energy of youth.

Facilities for games activities provided by the institutions are far from adequate to meet the needs of the students and the heads of the institutions themselves are aware of this fact and have said so.

Reasons for inadequacy of facilities given by the institutions are:—

Reason.	Number of institutions.	Percentage.
1 Space	27	42
2 Finance	4	6
3 Personnel	1	2
4 Finance and Personnel	3	5
5 Finance and Space	16	25
6 Personnel and Space	4	6
7 All	9	14
	64	100

Students play in school grounds not only because they form part of their curriculum but also because they do not have facilities for games outside. This is more so with girls. Seventy-one per cent of the boys play in school grounds and 28 per cent of them play in outside grounds of a club or association. But in the case of girls 93 per cent of them play in school grounds only. None of them make use of outside grounds.

Extra Curricular Activities

The average number of domestic duties which boys have to perform is 1.5 while that of girls is 3.2. Girls still have their orientation in domestic managements and household responsibilities in their own families from their early teens. The actual responsibility also varies according to the sex. It is to be expected kitchen work, tailoring and embroidery are done by girls while marketing seems to be common work of the boys. Duties such as taking care of the children and washing do not show much difference. Gardening, looking after domestic animals, undertaking part-time jobs constitute a small portion, more done by boys than by girls.

The information relating to extra-curricular activities is of considerable interest, because it throws light on such activities as they enjoy doing, watching or listening. The responses show a variety of interesting items of such extra-curricular activities.

Activity.	Percentage of the total.
Listening to radio	18
Reading books and magazines	18
Watching games	13
Movie going	12
Visiting friends and relatives	12
Music and dance	10
Hobbies	9
Political meetings	4
Theatre attendance	4

Listening to Radio broadcasts and general reading seem to be the most favourite leisure time activities enjoyed by the teenagers. Watching movies, sports and games and visiting friends and relatives are the next popular choices. Drama and political meetings seem to be out of favour. These indicate lesser interest towards joyous doing like hobbies involving hand work. One reason is obvious, viz., lack of equipment and facilities for such creative and constructive and educative hobbies.

Audio-visual Education

Audio-visual education is one of the most interesting and effective means of instruction. The appeal to the eye and the ear is considerably more effective in

regard to children and teenagers and good results can be achieved by co-ordination of this method with other media of teaching. Hence it is that the Education department have provided for such Visual Education in Schools and Colleges. The All-India Radio also has introduced special programmes intended for school and college students.

Film shows, from the data available, seem to be very popular with the teenagers. They not only spend considerable amount of their leisure time in seeing pictures but also a considerable portion of their pocket money. If they had more time and money they would certainly see and enjoy seeing more. Boys in Hostel see on an average 2 pictures a month while day scholars see only 1.5.

Radio listening is another activity which is very popular with both boys and girls and it is one of their favourite activities. Excepting for 12 per cent of the teenagers all of them spend some of their leisure time in listening to radio programme daily, though in varying proportions.

Fine Arts

It is essential to create and foster a taste for fine arts in the young mind to make for a complete personality and interest in fine arts is the mark of culture. They take away also the medium of continuous study and give play for creative ability and the pleasure of performing and watching colleagues perform. It is gratifying to find that except for 16 persons that is 3.4 per cent of the total the rest have one or more favourite fine arts. On the average, girls take interest in fine arts more than boys do, their average being 2.6 per cent as against 1.8 per cent of the boys. It is interesting to know that fine arts facilities are encouraged more in girls' institutions and co-educational institutions than in boys' institutions though investigation indicate more interest for music among boys.

Taking interest in hobbies has not yet been taken root in our country but it is quite necessary that we cultivate this healthy habit of taking to one hobby at least to compensate for the drudgery of compulsory occupation even if it be interesting to a teenager. It is also not likely that the hobby would be a stand-by to a person in his later life. The responses show that this habit is gaining ground. Of the teenagers interviewed the majority had some hobby or other but their activities in this regard are not yet organised or properly guided and lack financial support.

Data is also available on the attitude of the heads of institutions towards encouragement of hobbies. Though 35 institutions have stated that they encourage hobbies, the majority of them do not have hobby centres or organised activities in order to utilise the leisure time of the teenagers in a proper constructive way.

Books and Magazines Reading

Reading general books, magazines, story books, periodicals, etc., is another leisure time activity which has educational value and is complementary to school time study. But it is the feeling of the heads of the institutions and the teachers who were contacted that the modern education imposes too much of bookish knowledge and the student is already burdened with the prescribed text-books to be studied. From the data collected it is however clear that the teenager still finds interest in reading books other than his prescribed class books for pleasure or knowledge or relief.

The impression created is that while most of the teenagers seem to take a live interest in politics, including

controversial party politics, they are not inclined to own up that they do so.

Teenagers and Religious Activities

Absence of any coherent system of values to replace the old certainties and beliefs have left the teenagers in the lurch, without an ideal standard of life to adhere to, for an ethical code based on religion is no longer acceptable to the present generation with no substitute taking its place. As a result a sense of drift and purposelessness is evident even among the children of well-to-do families. Viewing from this angle, we find that the opinion expressed by the teenagers in respect of religious worship is very encouraging. Of the total 469 teenagers interviewed, 354 of them are in the habit of going to temples, churches, mosques as often as possible, at least once in a month and the rest 115 do not go at all. As regards daily worship, 229 of the teenagers said that they spend more than half an hour daily, whereas 206 of them expressed that they do not spend any specific time for daily worship, apart from participating in the compulsory prayer assembly in the institutions. Thirty-four students did not give any opinion.

IMPRESSIVE PLAN ACHIEVEMENTS

By any reckoning what we have been able to achieve in the last 10 or 12 years, in terms of agricultural and industrial production, or in terms of the building up of infrastructure facilities is remarkable. Industrial production doubled between 1951 and 1961; and agricultural production went up by over 40 per cent. The generation of electricity has gone up nearly 2½ times. The freight carried by the railways is now more than twice that of 1951. The proportion of school-going children in the age-group of 6 to 11 was a little over 40 per cent in 1950-51 and is estimated to be about 75 per cent in 1965-66. The overall expectation of life at birth has gone up from 32 years in the decade ending 1951 to 45 years according to the 1961 census. These are certainly impressive achievements.



THE PRESIDENT COMMISSIONS THE MADRAS ALUMINIUM PROJECT A UNIQUE INDO-ITALIAN INDUSTRIAL PARTNERSHIP

The latest addition to the growing industrial complex at Mettur, on the banks of the Cauvery, is the factory of the Madras Aluminium Co. which the President of India inaugurated on July 2, 1965.

This factory, the biggest enterprise in the South, is presently designed to produce 10,000 tonnes of virgin alu-

minium metal from the Company's bauxite mines at Yercaud on the Shevaroyas. Plans for doubling the production at an early date are through.

This Rs. 14-crore Project is a visible index of the unique partnership of the two great and ancient peoples of India and Italy. Apart from

providing technical assistance Soc. Montecatini of Milan, Italy, have a substantial shareholding in the Company. Their collaboration and participation interested the Italian people to subscribe to a loan floated by the financing Bank of Italy, MEDIOBANCA, to enable the purchase of equipment and machinery from abroad.

THE MADRAS ALUMINIUM CO., LTD., Coimbatore-1
One step forward in the march of Nation's industrial advancement



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2. Copies of all issues of "Madras Information" are being regularly sent to subscribers direct from the Government Press, Madras-1, as soon as the publication is brought out. The subscribers are therefore requested to make enquiries at the local post office at their end whenever packets containing the issues are not received by them on or before the 20th of every month.

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All communications should be addressed to

THE DIRECTOR OF INFORMATION AND PUBLICITY
FORT ST. GEORGE, MADRAS-9.

PRESIDENT'S VISIT TO MADRAS



1. Arrival at Meenamalakam airport.
2. AICC President Sri Kamaraj greeting the President of India.
3. Inaugurating the Madras Aluminium Factory at Mettur.
4. Opening the new building of the Hindustan Chamber of Commerce at Madras.
5. Dr. S. Radhakrishnan releasing the book "Ariyakudam Arutpunal" at Rajaji Hall.
6. The President is receiving the welcome address on the occasion of the inauguration of the Vijayaraghavachariar memorial at Salem.



The price is Too High To Pay for freedom

CITIZEN'S DUTIES

1. To render all possible help and assistance for the defence personnel.
2. To increase the production of his factory.
3. To intensify efforts for increased production of agricultural and small-scale industrial commodities to make his State self-sufficient.
4. To avoid all strikes and lock-outs that may hamper production.
5. To maintain the price level of all essential commodities and curb the tendencies of hoarding and profiteering by conforming to the various legislative and other popular measures.
6. To maintain the supply lines of essential commodities.
7. To contribute generously in the form of money and gold for the war effort.
8. To inculcate the highest sense of duty and responsibility.
9. To join the various organizations set up for the defence of the country.
10. To prevent anti-social and anti-national activities of the fifth columnists.
11. To observe strict austerity in consumption of food, clothes and other essential goods and save for the National Defence Fund.
12. To avoid unnecessary travel so that more important and essential movement may not be hampered.
13. To keep up the morale of the people and prepare them for sacrifices.
14. To check rumour-mongering and to disseminate true and faithful news and information.
15. To join or help Citizens' Committee N.C.C., Territorial Army and Lok Sahayak Sena and Rifle Clubs.
16. To pray for the victory of our Motherland in this struggle and set aside all differences of caste, creed or party.

MADRAS Information

Vol. XIX AUGUST 1965 No. 8

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THIS MONTH'S COVER:

Eighteen years ago India started on its march towards economic freedom. Today, she can look back with pride on what has been achieved and look forward with confidence on attaining her objective.

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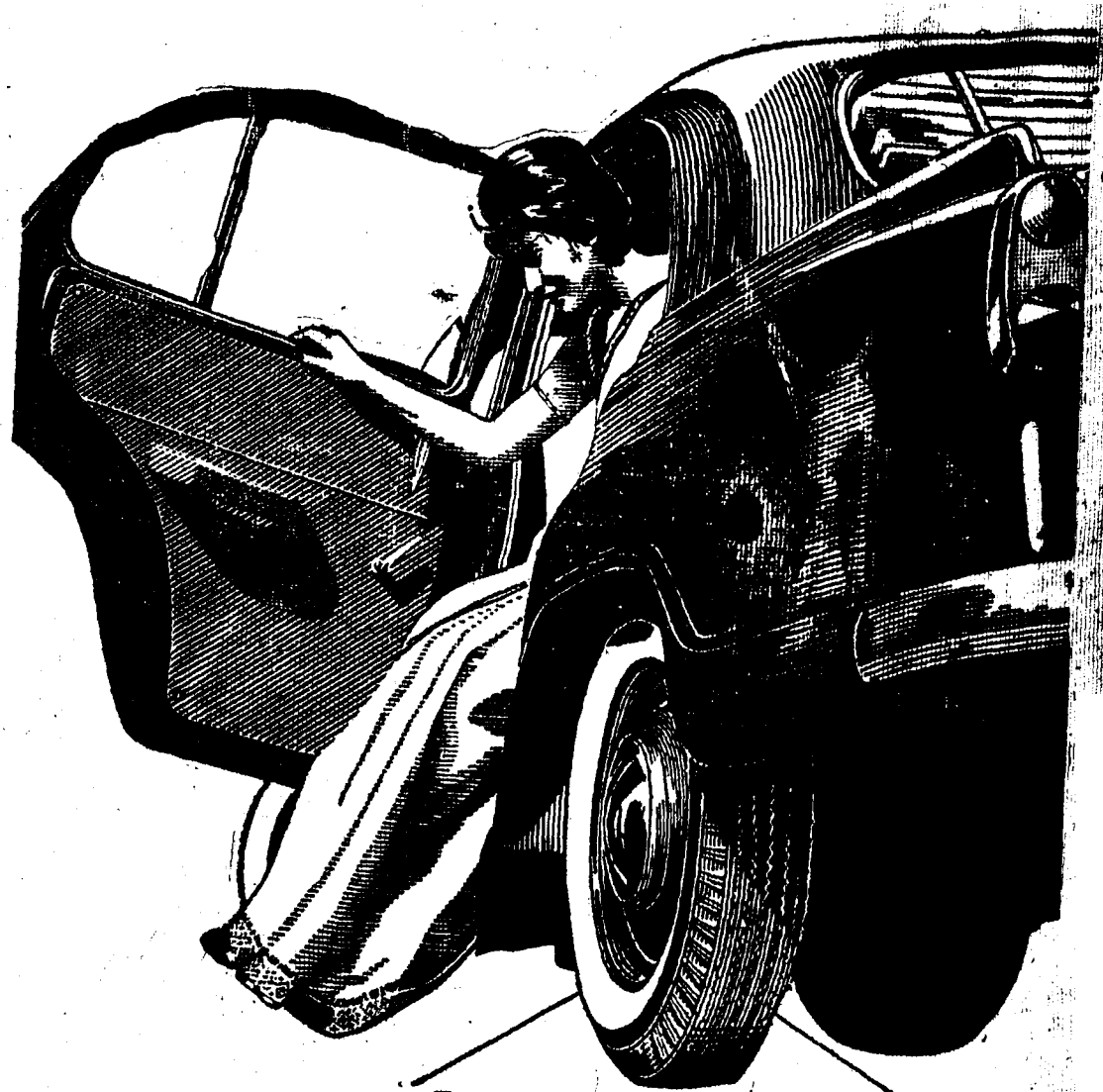
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THE LAMP THEY LIT IN 1947



I would like to see India free and strong so that she may offer herself a willing and pure sacrifice for the betterment of the World. India's freedom must revolutionize the world's outlook upon peace and war. Her importance affects the whole of mankind.

—Mahatma Gandhi

After centuries, India's star rose in the horizon. Its voice was heard in the councils of the World, because it was the real voice of India. And then these very people of India, who had shown Courage and Determination fell into a dream and into carelessness and quarrelled among themselves. Sometimes they fought in the name of religion, sometimes in the name of caste or language or State..... We should not loose ourselves in wrong directions. We cannot allow our country to fall. Let not this priceless treasure of our freedom slip through our hands because of our weakness.

The service of India means the service of the millions that suffer. The ambition of the greatest man of our generation has been to wipe out every tear from every eye. That may be beyond us. But so long as there are tears and suffering, so long our work will not be over.

—Pandit Jawaharlal Nehru

To-day when we are witnessing the fulfilment of our life's ambition and participating in the victory that has crowned the nation's struggle for freedom, it is our first duty to pay homage to the memory of those whose sacrifices have contributed so much to this glorious conclusion of that struggle. Let the nation honour their memory in the rejoicings which freedom has brought in its train.

Let us not forget, however, in the joy of the hour, the stupendous responsibilities and obligations which freedom has brought in its wake. Our primary duty is jealously to guard our freedom against dangers from without and from within.

—Sardar Vallabhbhai Patel

We are embarking on a great task and we shall do our best to serve it.

—Dr. Rajendra Prasad

All I can do is to give a personal declaration of the aims and ideals conceived in my childhood and youth and now watched in the beginning of their fulfilment, because they are relevant to the freedom of India, since they are part of what I believe to be India's future work, something in which she cannot but take a leading position. For I have always held and said that India was arising, not to serve her own material interests only, to achieve expansion, greatness, power and prosperity—though these too she must not neglect—and certainly not like others to secure domination of other people, but to live also for God and the World as a helper and leader of the whole human race.

—Sri Aurobindo

Shastri Government—A Year in Office

A surfeit of problems, serious and baffling, and a mere 12 months to cope with them! A year in the history of a nation is like a drop in the ocean. But when a nation has to make up for centuries of neglect and has to crowd into a decade or two what others have taken a century or more to achieve, even a year may acquire significance. One can, therefore, understand the impatience of people for quicker progress. In a way, impatience is a sign of dynamism. If people are exacting in their demands and harsh in their judgment, one could explain it.

During the year the Shastri Government has been in office, it has had to contend with difficult problems and face difficult situations. Its nerve has been fully



The Prime Minister, Sri Lal Bahadur Shastri, with the British Prime Minister, Mr. Harold Wilson (right) at the Marlborough House in London on June 17, 1965—the opening day of the Commonwealth Prime Ministers' Conference. The Indian High Commissioner in London, Dr. Jivraj N. Mehta is also seen in the picture.

tested. Not even the most uncharitable critics of the Government can say that it has reeled under difficult problems. The Government may have had some problems, but it has invariably emerged on top in the end. It has not only kept its head well above water, it has in fact displayed a degree of courage and determination which is certainly praiseworthy. What is more, the Government has given evidence of its determination to remain on top.

A virile nation will always have problems and the Government knows how to face them. Whatever the other failings of Government, it cannot be said that it ever took fright or beat a retreat. It has not swayed from the chosen path, at home and abroad, no matter what the difficulties.

Democratic Base

The Shastri Government assumed office under the shadow of a great tragedy. The towering personality of Sri Nehru, who had moulded a subject people into a vibrant nation, pulsating with life, and determined progress, was no longer there to guide the nation. Foreign observers and not a few scribes had predicted that the Shastri Government has not only held the nation together but strengthened the faith of the people in their ability to manage the nation's affairs.

Chroniclers will, perhaps, record that consolidation of democratic processes was an outstanding achievement of Shastri Government. Democracy was one of Sri Nehru's greatest legacies to the Indian Nation. Doubts had been cast even before his death that democracy would die with the death of the architect. But Shastri has not only nurtured Sri Nehru's legacy but has proceeded to strengthen and broaden the democratic base. Sri Shastri has encouraged free and frank discussion of issues inside the Government and outside in public and Parliament. There is free flow of information to enable a frank public debate on issues of importance. The Shastri Government has thus the advantage of knowing the public mood and mind on issues concerning the nation.

The day Sri Shastri was elected leader of the Congress Parliamentary Party, correspondents asked him what he considered the most formidable problem facing the

country. Pat came the reply: "Food and rising prices." The Shastri Government did not remain content to describe it as the most formidable problem. It set out methodically to catch the bull by the horn, and success appears to be knocking at the door.

Food problem

Sri Shastri lost no time in convening a conference of Chief Ministers to discuss the problem of food and rising prices. In the background, a dispassionate examination of the problem at the expert level continued. There were shortages indeed but the speculators and hoarders had exacerbated the situation. A complicating factor in the situation was that hoarding was not confined to the Arhtia or the urban foodgrains dealer. The producer was equally guilty of hoarding foodgrains in the hope of better prices in the future. As a result of discussions at the expert level and at the level of

Chief Ministers, the Shastri Government decided to fix producer and consumer prices. It also decided to promulgate an ordinance to provide for a summary trial of profiteers and hoarders. Simultaneously, the Government took steps to open a large number of fair price shops and geared its machinery in rural areas to disgorge hidden stocks.

The cumulative effect of these measures on the price level and on availability, though not spectacular, is there for every one to see. The situation has continued to take a hopeful turn in the wake of governmental measures. Food scarcity now seems a thing of the past. This is a positive achievement of the Shastri Government.

The Government also took bold steps to curb inflationary tendencies in our economy. Credit squeeze was tightened. Measures were adopted to unearth



The Prime Minister, Sri Lal Bahadur Shastri (Second from right) at the Conference of non-aligned nations held in Cairo. Sardar Swaran Singh, Union Minister for External affairs (with turban) is also seen in the picture.



Prime Minister, Sri Lal Bahadur Shastri at the Conference on food, attended by the Cabinet Ministers, Deputy Chairman of the Planning Commission and Chief Ministers of States held in New Delhi on 26th October 1964. The Prime Minister is seen talking to Sri C. Subramaniam, Union Minister of Food and Agriculture.

undeclared income. The bank rate was raised to a record level of 6 per cent. For the first time in many years, the Government presented a surplus budget.

The main concern of the Shastri Government on assuming office has been to ensure quicker and proper implementation of economic policies and programmes enunciated and defined by Sri Nehru. Sri Shastri is convinced that these policies and programmes are sound. With a view to ensuring a more effective implementation, he held discussions with Secretaries of Economic Ministries. They were told to streamline procedures and to exercise greater supervisory control over implementation of policies. Certain procedures like the grant of industrial licences have already been streamlined.

Attack on Corruption

Side by side with measures to cure ailments in the economy, the Government embarked upon measures to rid the administration of the evil of corruption. Shortly after assuming office, the Government accepted the Das Commission report on corruption charges against the late Chief Minister of Punjab and decided to release

the report for publication. The Government also took cognizance of allegations of corruption against other Chief Ministers and Ministers and had them examined at the highest level. Simultaneously, the drive against corruption in the services was stepped up. Recommendations made by the Santhanam Committee were accepted and their implementation taken up.

Foreign Affairs

Another step taken by the Shastri Government to purify public life was to draw up a comprehensive code of conduct for Ministers. Under the code, each Minister is required to make a declaration of his assets on assuming office.

In the domain of foreign affairs, the Shastri Government remains pledged to the policy of non-alignment and peaceful co-existence.

The Shastri Government has been able to strengthen the ties of friendship with the Soviet Union. India's relations with most of her neighbours have also become stronger. The problem of persons of Indian origin in Ceylon which had bedevilled relations with that country has been solved through the initiative of the Shastri

Government. Misunderstandings with the Government of Burma on the question of immigration of Indians have given way to friendly understandings.

Rann of Kutch

The Shastri Government was faced with two major crises during the short span of one year. The language riots in the South came as a severe shock. The law and order problem was faced with courage and the situation brought under control through firm action. At the same time the Government moved without delay to remove public misapprehensions in the South on the question of language. In a broadcast to the nation on February 11, the Prime Minister reiterated the Government's decision to honour Sri Nehru's assurance in letter and spirit. This mollified public opinion and normalcy was restored. It redounds to Government's credit that it refused to be stampeded into hasty action under the stress of emotion.

The Pakistani aggression in Kutch was the most serious threat facing the Shastri Government during

the year. Sri Shastri lost no time in declaring immediately on his return from Nepal that Government would defend the country's borders against Pakistani attacks "with all the strength at our command". Although fighting in an unfavourable terrain, Indian troops took a heavy toll of the invading forces.

When the issues of war and peace hung in the balance, the Shastri Government never lost its poise and equanimity. In consonance with India's desire for peace, the Government decided not to aggravate the situation in Kutch while British efforts to find a peaceful settlement were in progress. But Sri Shastri made it clear that the restoration of *status quo ante* was an essential ingredient to any acceptable solution.

While the Shastri Government remains wedded to a policy of peace, it has given evidence of its determination not to neglect the country's defences even if it involves the giving up of a few projects for economic development. "The threat to our freedom is real, continuing and immediate" said Sri Shastri, showing a keen awareness of the dangers on India's borders.



Sri G. Bhuvarehan, Minister for Information and Publicity declared open the Government Girls' Hostel at Adyar. Sri P. Kakkan, Home Minister Presided over the function.

The Madras Aluminium Factory



The Madras Aluminium Factory at Mettur was inaugurated by Dr. S. Radhakrishnan on 2nd July 1965. It is the biggest project in the private sector in Madras State. Initially the production capacity of the factory will be 10,000 tonnes of aluminium per year. The cost of the project is Rs. 14 crores

Set amidst a picturesque mountainscape, flanked by the Sithamalai and Palamalai ranges, the waters of the Stanley Reservoir glistening in the sun, the Cauvery flowing majestically down the valley skirting its sides, the fast-developing industrial complex of Mettur provides an impressive spectacle of Nature's bounty harnessed by human genius to serve the community's needs and promote its prosperity and wealth.

Cauvery's gifts of water and energy have been the most potent factor in attracting industries to this place in the last few decades. Factories producing textiles and chemicals, plastics and metalware and, last but not least, the Madras Aluminium Company, are prominent members of this industrial beehive.

Demand and production

India now consumes about 100,000 tonnes of aluminium and the demand is rising at an average of 10,000 tonnes every year. But the demand is expected to grow faster; five years hence we may be using 250,000 tonnes a year and ten years after, one and half times as much.

In India, production of aluminium has constantly lagged behind demand. Today, we see the spectacle of growing production and increasing imports at the same time. From 3,900 tonnes in 1961, production increased to 55,000 tonnes in 1963; during the same years, consumption figures were 16,000 and 82,000 tonnes. Increased production is thus imperative not only to save vital foreign exchange (about Rs. 8 crores annually)

but also to meet the ever growing demand within as short a time as possible.

At the end of the Third Plan, according to estimates and expectations, the country would be equipped for producing 87,500 tonnes, not taking into account the constantly revised targets, with an expected actual production of about 80,000 tonnes. Assuming that we actually produce this quantity, the gap between demand and supply would be of the order of at least 20,000 tonnes. It is the endeavour of the Madras Aluminium Co., Ltd. to contribute its share in producing and supplying in the initial stages 10,000 tonnes of aluminium to be enhanced in course of time to 20,000 tonnes, and simultaneously put up a rolling mill for the manufacture of rods, cables, rolled products including strips, extrusions, etc. and incidentally place the State of Madras and the district of Salem in the aluminium map of India.

Raw material

Bauxite, the basic raw material for the manufacture of aluminium, was long known to be available in sufficient quantities in nearby Shevaroy Hills. Its existence was first noticed in 1940 by the late Mr. E. K. Dickins, a European planter of Yercaud, who secured a mining lease from the Madras Government for about 500 acres covering the six hills around Yercaud. He had ambitions to produce aluminium. He did not succeed but, however, he started a factory to produce abrasives from one of the fused bauxite. After him others tried for one and a half decades but the idea of manufacturing aluminium

was only in an exploratory stage and never went beyond it. Making aluminium is a highly sophisticated electro-chemical process calling for large capital, intricate plant-structure, up-to-date technical know-how and comprehensive research facility besides a large and assured supply of electric power at reasonably cheap rates and caustic soda, the most important of chemicals needed in the process. All these were obviously beyond solution in the conditions ruling in our country in the forties and fifties.

Planning opened new vistas

The era of planning has introduced a new outlook in industry and every year of planning means fresh hopes, fresh horizons and fresh methods of industrial enterprises for new achievements. The Government of India in the Ministry of Industry had set up a committee in 1955 under the Chairmanship of Dr. A. Nagaraja Rao to specifically advise on the possible sites for the location of aluminium manufacturing plants in India and among its recommendations was a plant at Mettur for exploiting the Shevaroy ore.

The time was ripe for taking up the problem of manufacturing aluminium seriously and bringing it to fruition. Sri R. Venkataswamy Naidu, the industrialist of the Coimbatore who had already launched successfully the large enterprise of the Viscose Project at Mettupalayam, came forward to shoulder this gigantic job.

Three things were necessary by way of preliminaries, viz., to prove the quality of bauxite ore to ensure cheap power supply and secure technical assistance of the highest order from wherever it was available in the world.

Proving the ore

The House of Montecatini of Italy came on the scene. They are the largest mining and chemical company in Italy. Their interests cover a very wide range of industries. More than other factors, what is important from the point of view of Madras Aluminium in those early days of prospecting, was the fact that they possessed a highly modernised laboratory and research division and hundreds of scientists and technicians constantly experimenting on new methods and processes. So they were given the initial job of "proving" the ore.

The Geological Survey of India, under the guidance of Dr. M. S. Krishnan and Sri N. K. N. Iyengar, had in their first report indicated the availability and the adequacy of the ore and its quality. Sri N.K.N. Iyengar, after retiring from the Geological Survey, took over the Geology Department of the Madras Government, continued the surveys and helped considerably in the task of assessing the quality of the ore more precisely by actually sinking several test pits.

THE FACTORY AND ITS LOCATION

The factory comprising of four rows of long and stately sheds each affording a commanding view of the rows of machinery and the workmen, their rhythmic operations, flanked by seven tall and imposing 120 ft. siles that stand out as the mast-head of the factory, present an impressive sight. The administrative block located at one end of the factory, has an inviting frontage of lawn and garden while the laboratory is modelled to suit the requirements of a modern metallurgical plant. Rows of quarters for the staff and technicians, a little removed from and yet close enough to the factory, provide intimacy of pattern: and more quarters are on the way. The factory proper, in the design, lay out and appearance is considered to be the best of its type in the country. Located on terraced ground on the hill sides, the entire works, with the fine guest house and residential quarters built on higher ground at different levels command a grand stand view of the landscape.

At the invitation of the Government of Madras, Montecatini deputed their Geologist for studying the ore and reporting on its usability. The findings of Prof. Vighy of Montecatini were that two out of the six bauxite hills could be left out of account for the present, being not quite accessible; but that the ore reserves of the remaining four hills could be conservatively and safely estimated at near 3 million tonnes enough to last for 40 years on the basis of 10,000 tonnes of metal production per annum; and that the average grade was of the 42 per cent alumina with a low titanium content, a particularly favourable factor which renders it eminently suitable for manufacture of aluminium by the Bayers process. Checks and counter-checks and comparisons with earlier analyses have established beyond any shadow of doubt the feasibility of the project. To give weight to the finding and to show their own faith in the success of the proposition Montecatini had indicated their willingness to participate substantially in the equity capital of the project at the appropriate time.

The basis having been settled, the other hurdles were cleared quick enough. The Madras Government made it possible for the mines area to be transferred to Madras Aluminium Co. and also reserved for this project

an area of over 600 acres very near the Mettur Dam Railway Station, while the Madras State Electricity Board assured adequate power supply at an economic rate for ten years in terms of the recommendations of the Dr. A. Nagaraja Rao Committee.

Biggest private enterprise

With such assurances and the additional assistance of participation in the equity capital to the extent of Rs. 150 lakhs by the Madras Industrial Investment Corporation, the Madras Aluminium Company came into being in January 1961. This Rs. 14 crore project in the private sector, the biggest in Madras State, became a reality with the widest possible dispersal of capital.

The potentiality of Mettur Dam not only for purposes of irrigation but in promoting industries was visualised by its sponsors. But it was not until Sir C. P. Ramaswami Ayyar, then member of the Executive Council of the Madras Government, took up the matter and gave a dynamic lead, that the project began to make headway. He kept up a sustained effort in the face of sceptical and hostile criticisms and tenaciously pushed forward with the scheme. Only such projects as these have placed Madras in the forefront in the irrigation and hydro-electric field in India.

Availability of cheap hydro-electric power was the major factor in inducing industrial concerns to locate their production units here. The first to come was a textile undertaking and soon after many, including one to manufacture chemicals, followed. The town began to develop so rapidly in the wake of industrial advance that the Government took steps to constitute

MADRAS STATE'S BAUXITE POTENTIALITY

India's progress in aluminium production goes back to 1940. The discovery of large bauxite deposits by Mr. Cyril Fox in many regions of the country has made the exploitation of aluminium logical and inevitable. In the Techno-Economic Survey of Madras carried out in 1958-60, special stress was laid on the potentiality of aluminium to correct the deficiency of minerals and mining. In that survey a plant with a rated capacity of 20,000 tons a year was suggested as desirable. Since Salem provided both bauxite and power the erection of the aluminium plant at Mettur with the technical assistance of Montecatini became feasible.

a Township for its better administration. So Dr. Rao Committee recommended Mettur as an ideal place for locating this factory. The Montecatini Project engineers also endorsed the recommendation.

Mettur has all the commercial and technical advantages as the best location for the aluminium plant. It is equidistant to the harbours of Madras and Cochin. Bangalore, another State capital is nearby. Mettur is connected by the main broad gauge rail line. Power is generated and supplied right on "tap" there and so there will be no loss of energy in transmission. So also the river Cauvery will meet all the requirements of 5 million gallons of water every day for the factory. Mettur Chemicals working on door will supply all the caustic soda required for the factory. What more advantages, in location, and supplies can a project have and which can provide all these? So, Mettur became finally the venue of the project.

Foundation stone laid

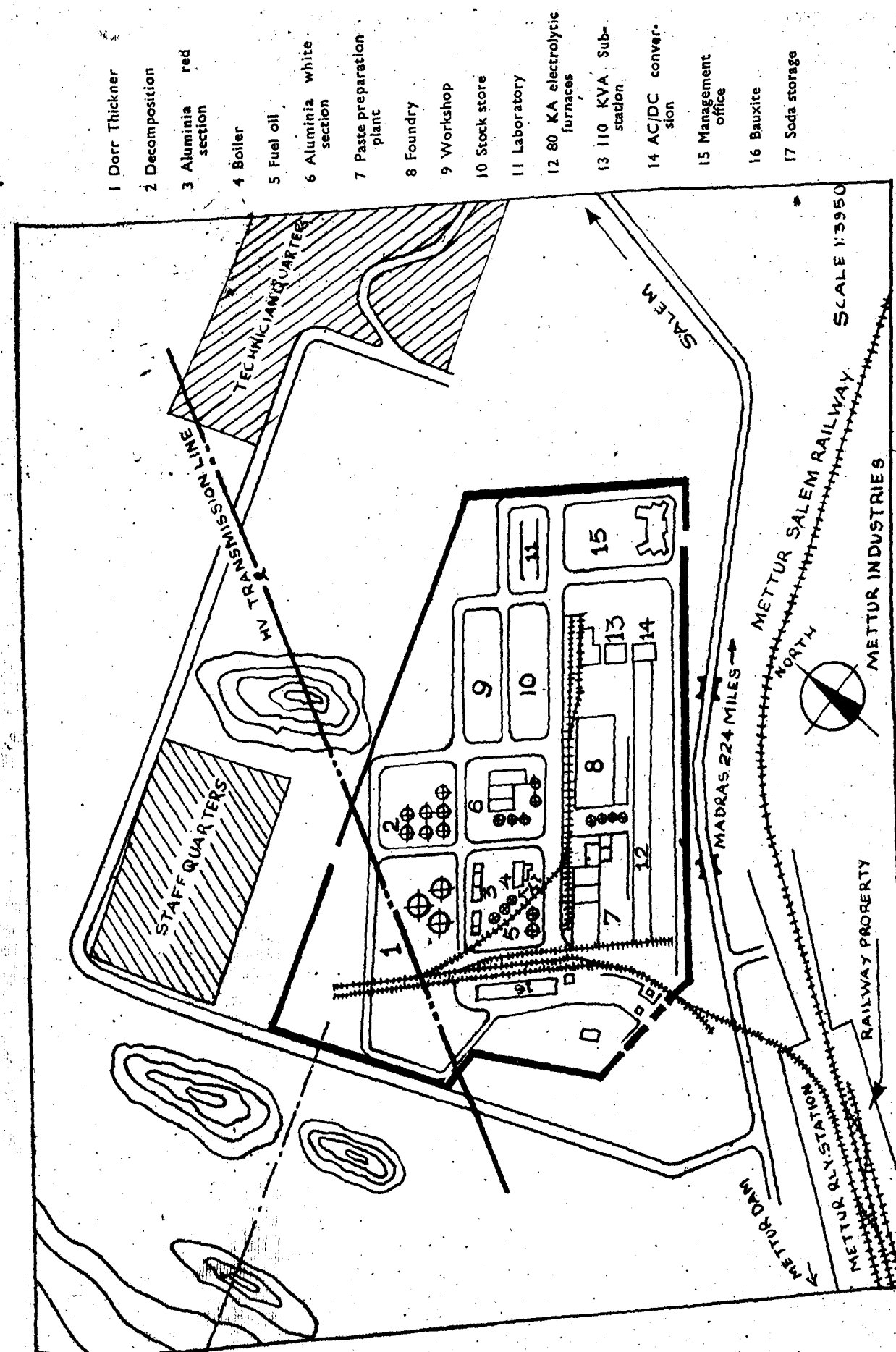
Then work started at Mettur in right earnest. The ground was bulldozed and the foundation for the factory was laid in June 1961, by Sri Lal Shastri, then Union Minister for Commerce and Industries, provided over by Sri K. Kamaraj, then Chief Minister of Madras State.

More than 20,000 tonnes of cement and 10,000 tonnes of steel and over 5 million stones have gone into the construction. Nearly 2,500 semi-skilled and unskilled labourers were on the job for the past two years in the construction of this industrial workshop. Over 100 technical personnel were on the job of construction.

The vastness and size of the factory could be understood more if it is known in terms of the length of pipelines and drainage pipe laid. Over 10,000 metres of pipeline were laid for carrying drinking water. 5,000 metres of pipeline were laid for carrying industrial water. The drainage requirements claimed 4,500 metres of pipes. Two hundred thousand metres of cables were used overhead and 25,000 metres of cables were used underground. The entire project costing over Rs. 2.5 crores is a beauty in form, design and architecture.

A railway siding has been laid out from the Mettur Dam Railway station to the factory sheds to facilitate receiving the incoming consignments and transport them right into the factory premises. The 12 length of rail line inside the factory is a great help in easy and quick movement of raw materials and finished metal from the works.

LAYOUT OF THE MADRAS ALUMINIUM FACTORY



A full-fledged 61,500 KVA Electric sub-station has been constructed within the factory to receive power supply from the Mettur Station and distribute in the required voltages to the various sections of the factory.

On 2nd July 1965 Dr. S. Radhakrishnan, inaugurated the factory. This day will be a red letter day in the history of the aluminium industry in the country, no less than in the annals of the Madras Aluminium

Company. Hardly three years have passed since the foundation for this project was laid. The encouragement and active co-operation of the Government at the Centre and in the State have been forthcoming right through and they have been quite appreciative of the valuable economics possessed by this venture. Starting with such promise and prospect the Madras Aluminium Company launches on its voyage of endeavour and achievement in the service of the nation.

Rice Production up by 5 per cent : Final Estimate for 1964-65

The All India final estimate of rice for 1964-65 puts the current year's area under the rice crop at 89.149 million acres (38.076 million hectares) and production at 38.73 million tonnes.

According to the Directorate of Economics and Statistics, Union Ministry of Food and Agriculture, this year's estimate shows an increase of 1.12 million acres (0.454 million hectares) or 1.3 per cent in area and 1.184 million tonnes or 5 per cent in production.

The increase in area under rice crop during the current year is accounted for mainly by West Bengal, Uttar Pradesh, Assam, Punjab and Madhya Pradesh and is attributed to favourable weather conditions at the time of sowing. The increase in area has been offset to some extent by the decline reported by Andhra Pradesh attributed to heavy rainfall and floods in some parts of the State at the sowing time.

The current year's production of rice is the highest on record for the second year running. Apart from Gujarat, Maharashtra, Jammu and Kashmir, Kerala and Rajasthan which have reported some decline due to inadequate or ill-distributed rains, all the other States have reported increase in production. Notable increases in production during the current year have been registered in Andhra Pradesh, Bihar, West Bengal, Mysore, Madras, Punjab, Orissa and Madhya Pradesh. A major part of the increase in production is due to the improvement in yield which has gone up by 3.7 per cent as against the increase of 1.3 per cent only in area over the last year. The increase in yield is attributed to development measures and favourable weather conditions during the period of growth of the crop.

Data in respect of Goa, Daman and Diu, Pondicherry and NEFA have been included in the estimate for the first time. These taken together account for 135,100 hectares and 130,200 hectares of area and 180,200 tonnes and 177,200 tonnes of production of rice during 1964-65 and 1963-64 respectively.



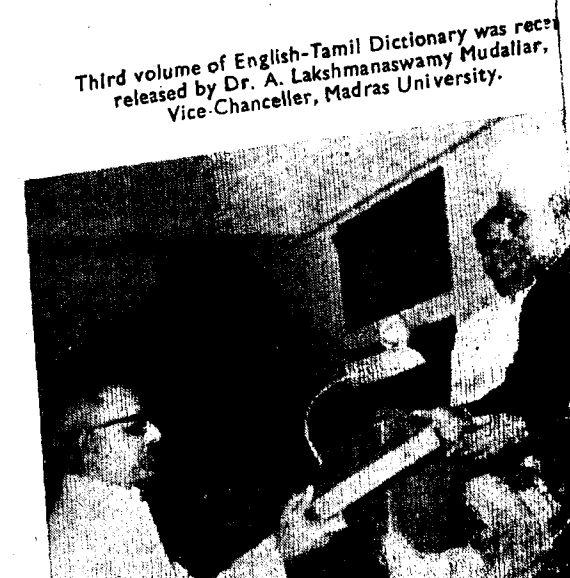
Chairman of the Southern Language Book Trust presenting books to the Chief Minister, Sri M. Bhaktavatsalam, at the Secretariat on 12th July 1965.



The delegation of American Journalists who recently are chatting with the Chief Minister at his chambers.



Sri T. A. Varghese, Chief Secretary presided over the Annual Day Celebrations of the Secretariat Association. Mrs. Vargese is distributing prizes.



Third volume of English-Tamil Dictionary was recently released by Dr. A. Lakshmanaswamy Mudaliar, Vice-Chancellor, Madras University.

The Ambattur Industrial Area: Facts and Figures

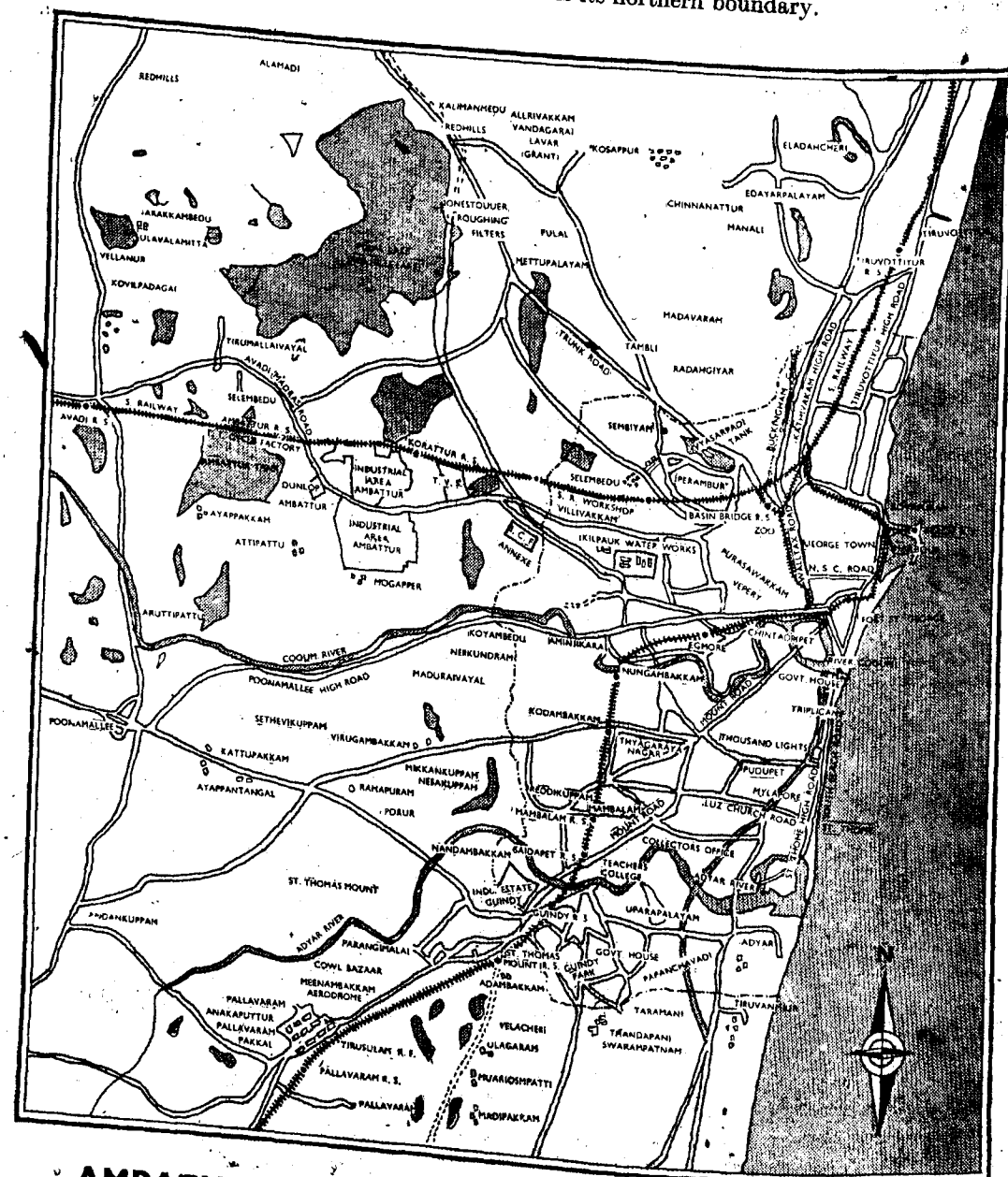
Unlike the conventional type of Industrial Estate which entertains only Small Scale Industrialists, the Ambattur Industrial Township is designed to accommodate Small, Medium and Large Industries.

Provides not only ready-built Factory Units for Small Industrialists, but also Developed Plots for Small, Medium and Large Industries for the entrepreneurs to put up their own buildings.

Lies in an important Industrial Belt of the State where a number of large industries like I.C.F., Central Heavy Vehicles (Tanks) Factory, T.I. Cycles, T.N. Group, Dunlop, Omega Cables, etc., are located.

It is situated at a distance of 3 miles from the municipal limit and 8 miles from Madras Fort.

It spreads on either side of the Madras-Avadi Road and the Madras-Arkonam Broad Gauge Railway Line is its northern boundary.



AMBATHUR INDUSTRIAL AREA LOCATION MAP

15

Space is being provided for the location of Chemical and Fruit-based Industries with amenities like steam, drainage, tin-can making unit, etc.

The Factory Units are so designed with plenty of open space as to allow easily the future expansion. For instance, a 'B' type Unit can be expanded into an 'A' Type by adding two more bays and a 'D' Type into 'C' Type by a similar procedure.

Only subsidised rent is charged for the units in the initial stages. The cost of the Developed Plots is recovered in instalments.

Labour Tenements, Transport Facilities, Power and Water-supply, State Bank, Petrol Bunk, Industrial Training Institute, Residential Accommodation and Departmental Common Service Centres are all provided.

Ambattur Industrial area			
Types of units.	Total area in acres.	For factory units.	For developed plots etc.
I Stage*	630	200	353
II Stage†	570	..	387

* Acquisition of land construction of Factory Units and provision of Developed Plots each ranging from 1 to 12 acres in extent have all been completed.

† Land is under acquisition : 72 plots each ranging from 2 to 20 acres are contemplated.

Stage-1—Developed plots			
Industries.	Number of plots.	Allotted.	Balance.
Private industries ..	87	66	21
Government purposes ..	14	5	9
Petroleum companies.	4	4	..
Grand total ..	105	75*	30

* Number of factories completed at Developed Plots 11
† Number of factories under construction 11

Factory units			
Types of units.	Number of units.	Total area of each unit (sq. ft.).	Monthly subsidised rent.
A	10	29,428	RS. 1,370 P. 34
B	20	28,909	1,189 16
C	20	25,141	969 48
D	20	22,018	762 03

Area of units				
Type.	Plot area for each unit.	Plinth area in square feet for each unit.		
		Office.	Work-shop.	Amenity.
A	67 cents ..	3,037	11,839	1,576
B	67 cents ..	3,037	9,860	1,576
C	57 cents ..	2,520	7,958	1,413
D	50 cents ..	2,520	5,956	940

Cost under broad heads			Cost.
Item number.	Name of work.		(in RS.)
1	Departmental Units ..		208,36,000
2	Developed Plots ..		48,21,250
3	Service Centres ..		10,44,550
	Total ..		267,01,800

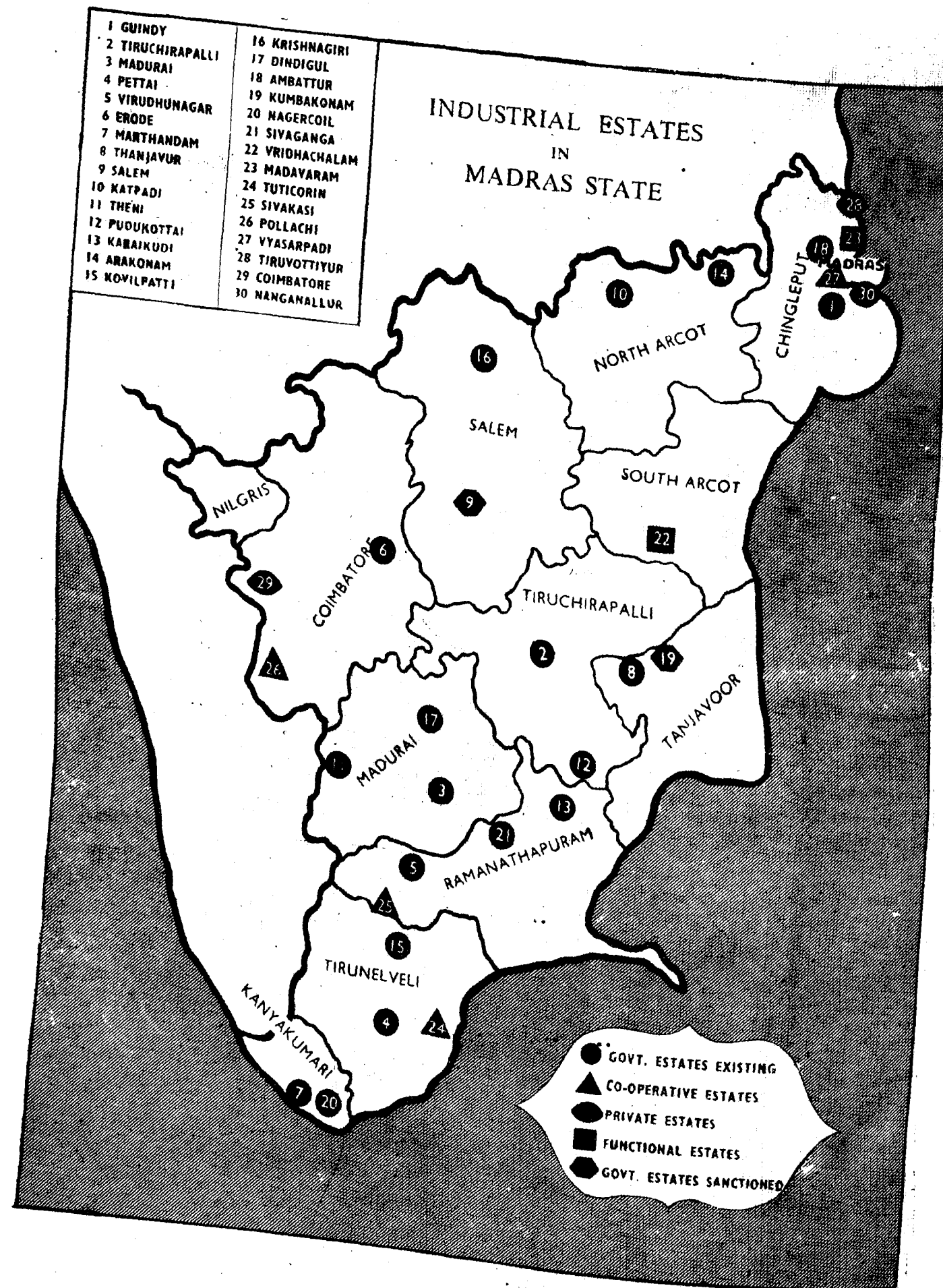
or 267.00 lakhs.

Cost of buildings			
Type.	Building portion.	Water-supply and sanitary arrangements.	Total Cost.
	RS.	RS.	RS.
A	2,59,900	7,900	2,81,100
B	2,31,700	6,500	2,49,800
C	1,88,400	6,400	2,04,600
D	1,51,400	6,300	1,65,800

Sale of Edible Oils

The Government of Madras direct that in the trade relating to edible oils in the State of Madras, no transaction, dealing or contract shall be made or had except by weight only.

This shall take effect on and from the 1st October 1965.



THE SAGA OF INDUSTRIAL ESTATES IN MADRAS STATE

SRI R. VENKATARAMAN,
Minister for Industries and Power.

The inauguration of the Industrial Estate at Ambattur by Sri. K. Kamaraj is a significant event in the industrial development of Madras State and is an appropriate occasion for recapitulating the history of the industrial estates programme in Madras State and assess the achievements in this field.

The industrial scene in our State before the First Plan period, and even during the First Plan, was not quite happy. There was no well developed industry worth mentioning except perhaps the textile industry. Apart from a few spinning mills and stray set of engineering industries, situate in the heart of congested cities like Madras and Coimbatore there was no significant development in the field of industries. Modern types of small industries using power and up-to-date machinery and employing specialised methods were almost absent.

Planners' Problem

The problem that faced the people responsible for industrial planning in Madras at that time was threefold. Firstly, they had to demonstrate to the people that well-equipped modern industries could be started with moderate capital and set up in the various parts of the Madras State. Secondly, they had to take steps to intensify the pace of industrialisation by enabling a large number of production units to come into existence in a relatively short period. Thirdly, they had to ensure that the new development of industries takes place in a balanced fashion in relation to the various regions of the State and that a well-planned dispersal of industries is achieved.

The planners had also before them the social objective of providing employment opportunities to a number of people and of enabling even the small entrepreneurs to participate in the exciting adventure of achieving prosperity through production.

To achieve these ends, a number of schemes were formulated and implemented during the Second Plan period. The most important of all of them was the programme of setting up industrial estates which may perhaps truly be called a package programme for industrial development of the given regions.

Dispersal of Industries

The industrial estates programme helped considerably to achieve the objective of dispersing industries to the various corners of the State. It helped the growth of a large number of small industries in the quickest possible time. It helped the small entrepreneurs to enter the field of manufacture by reducing the capital expenditure on land, buildings and general facilities.

By setting up a number of service units and demonstration-cum-training units and production units in the Estate covering a variety of new fields like Pressure Die Casting, Electroplating, Enamelling, Foundry,

Forge, Woodworking, Tool and Die Making, etc., the State not only demonstrated to the small entrepreneurs that modern types of small units can be set up with moderate capital but also considerably reduced the capital cost in respect of private entrepreneurs who came forward to set up production units in industrial estates.

The emergence of a new class of entrepreneurs, viz., "engineer-technician factory owners" has been made possible mainly on account of the industrial estates programme which resulted in the elimination of the delays arising from time factor and cost factor. The industrial estates acted as a nucleus in the industrialisation of the region.

To-day, in the field of small-scale industries, Madras State occupies an important position and we have more than 7,500 small-scale industries registered on the list as compared to a few hundreds which existed about ten years ago. The programme of industrial estates has been not a little responsible for this kind of progress.

It is at the beginning of the Second Plan period that we undertook to set up industrial estates in Madras. We planned to set up 10 estates containing about 182 factory units, at a cost of Rs. 95 lakhs. But the response to this programme was so good that by the end of the Second Plan we constructed 9 estates containing 237 units constructed at a cost of Rs. 154.80 lakhs.

Biggest at Guindy

The biggest of the estates constructed in the Second Plan was, of course, the one at Guindy which is considered to be one of the earliest and one of the biggest and one of the most significant and successful estates constructed in the country.

Industrial Estates in Madras	
Location.	Number of Units.
Guindy (Madras)	128
Madurai	28
Tiruchirappalli	22
Virudunagar	15
Pettai (Tirunelveli)	12
Marthandam (Kanyakumari)	5
Erode	7
Thanjavur	6
Katpadi	14



Sri K. Kamaraj Inaugurated the Ambattur Industrial Estate.

In the course of a few years all the units at Guindy were filled and an amazing variety of lines of production was brought into existence. The lines of production covered a wide range from machine tools, dies and jigs, high voltage line material, electronic instruments and consumer items like tape recorder, electrical appliances and fans to industrial products like castings, forgings, etc.

It has been the venue of the Seminar on Industrial Estates conducted by the ECAFE and it received words of praise from a number of foreign delegations who attended the ECAFE Seminar. It has also been the venue of the All-India Seminar where ideas on planning of industrial estates were clarified.

Similarly the estate at Madurai also received extremely good response from entrepreneurs in the State.

All the 237 factory units constructed during the Second Plan period have been fully occupied and are now used for production purposes. The rate of occupancy is considered to be one of the most striking achievements in the country, since the experience in respect of industrial estates constructed in the other parts of the country has not been so spectacularly successful. It has been estimated that in respect of these 237 units an investment of the order of Rs. 8.61 crores has been made and that employment opportunities have been generated to the extent of 8,610 persons. This is an out-standing example of generating high employment with low governmental expenditure. A promotional expenditure, of the order of Rs. 1.54 crores has



A view of the Industrial Estate.

resulted in a production investment of Rs. 8.61 crores and an annual production of nearly Rs. 9 crores and has generated employment opportunities for 8,610 persons.

Thus by the end of the Second Plan Period the programme had thoroughly justified itself and helped the Government to achieve the social and industrial objectives.

In the Third Plan

During the Third Plan we naturally decided to continue the programme and set up a large number of new industrial estates. The demand for space in the existing industrial estates was also so high that we decided to construct additionally 35 factory units in the estates of Madurai, Tiruchirappalli and Erode. Thirteen new industrial estates with 283 factory units were sanctioned at a cost of Rs. 320 lakhs. The details of the new estates sanctioned are: Ambattur (Madras) 70; Madavaram (Madras) 21; Vridhachalam 29; Theni (Madurai district) 12; Dindigul 25; Karaikudi 18; Kovilpatti 18; Pudukkottai 18; Krishnagiri 18; Arkonam 18; Sivaganga (Ramanathapuram district) 12; Nagercoil 12 and Kumbakonam 12.

Out of these 13 estates sanctioned construction of 11 estates has been completed and many of them commissioned and the units have been occupied. The Estate at Arkonam is under construction and the other estate is expected to be completed in the near future. A sum of Rs. 321 lakhs has already been spent and owing to the continuous revision and improvement of the

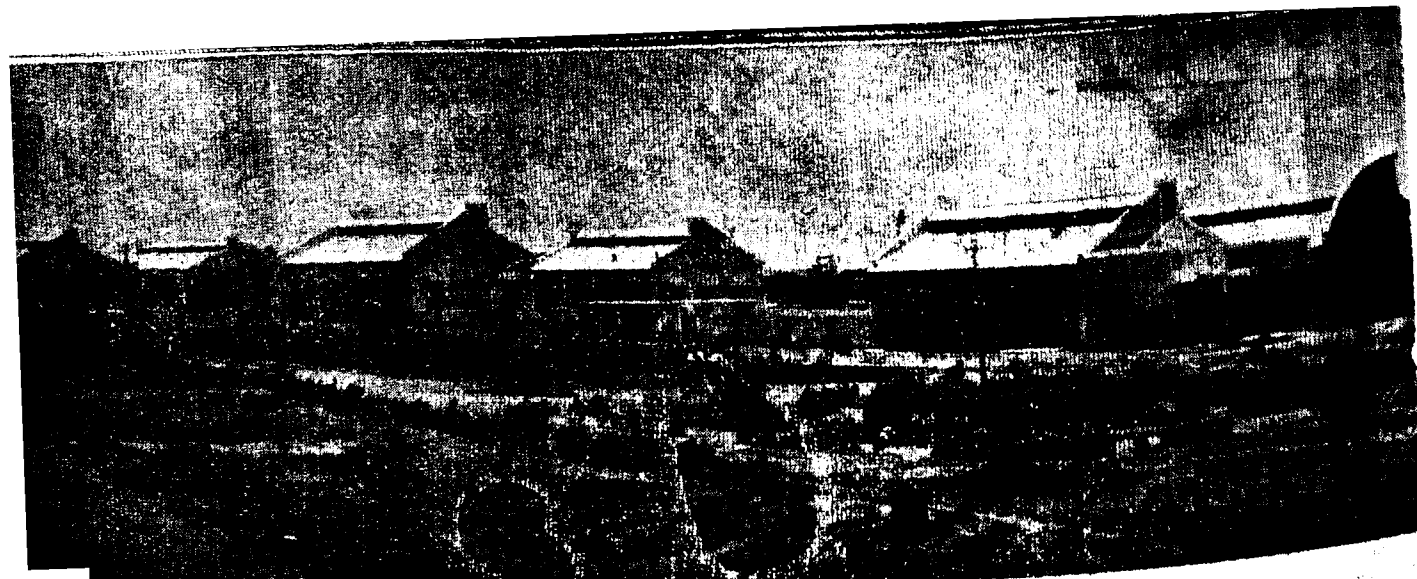
plans relating to the estates we expect that the total expenditure of these estates will go up to Rs. 500 lakhs before the end of the Third Plan.

Functional Estates

During the Third Plan Period we broke new ground in the programme of industrial estates by setting up a few functional industrial estates, ancillary industrial estates, private and co-operative industrial estates and also a few industrial areas. Functional industrial estates are designed to suit the needs of a group of industries coming under the same category. The most important advantage of a functional industrial estate is the possibility of designing common services and common processing facilities, thereby leading to an enormous reduction in the capital cost of the individual schemes.

The most interesting examples of this type of estates in Madras are the Ceramic Industrial Estate at Vridhachalam and the Leather Industrial Estate at Madavaram.

In the ceramic industry preparation of the ceramic body is the process which calls for high investment, complicated technical know-how and the employment of specialised personnel. The processing of the ceramic body into various ceramic products is comparatively simple and does not call for large investments. The next stage of firing the moulded, pressed and cast ceramic articles needs special types of kilns which again calls for high investment and complicated technical know-how.



A general view of the Industrial Estate at Kollipati recently inaugurated by the Industries Minister Sri R. Venkataraman.

In the Ceramic Industrial Estates the Government has set up a unit for manufacturing the body from ceramic clay and other minerals. The Government has also set up the necessary number of modern kilns for firing the ceramic articles. A number of units have been constructed for occupation by small industrialists who can buy the ceramic body from the Government units, process it into various ceramic articles and have them fired for a fee in the kilns set up by the Government for that purpose.

Similarly, in the Leather Estate, common facilities for specific processes have been created to enable superior production of leather articles. In the field of constructing functional industrial estates, this State has been a pioneer. During the Fourth Plan period, we propose to concentrate in this field and construct functional industrial estates for fruit preservation industries, for electronic industries, for pharmaceutical industries, for foundry industries and for chemical industries.

Ancillary Estates

An ancillary industrial estate is one which houses small industries which cater to the needs of large industries. All over the world large and medium industries purchase a number of bought-out items and have been encouraging small industries to manufacture them. In India Hindustan Machine Tools was the first organization to encourage the setting up of an ancillary industrial estate. In Madras the Government enabled the manufacturers of Royal Enfield motor-cycles to set up a private ancillary industrial estate for the manufacture of various components and ancillary items required in the manufacture of motor-cycles and scooters.

The Government is currently planning to set up an ancillary industrial estate near Tiruchirappalli to cater to the needs of the High Pressure Boiler Plant. This

estate will produce a variety of items like castings, forgings, turned parts, machined parts and other bought-out items for the Boiler Plant.

Private Estates

Another significant development during the Third Plan period is the encouragement given by the State Government to the private and co-operative agencies to set up industrial estates. The private company or the co-operative society is expected to raise by way of share capital 20 per cent of the cost of the industrial estate, viz., cost of the land, buildings and general facilities like water-supply, power-supply, rates, etc. The remaining 80 per cent of the cost is given by way of long-term loan by the Government.

The loan is generally repayable in 15 annual instalments. The rate of interest charged so far has been $3\frac{1}{2}$ per cent per year rising to $4\frac{1}{2}$ per cent in stages after 5 years. In future owing to the high rates of interest at which the State Government has to borrow funds it is proposed to give the loan at 7 per cent.

So far, four co-operative estates and two private estates have been sanctioned. Of these, a private estate near Tiruvottiyur has already come into existence. The other estates at Tuticorin, Sivakasi, Pollachi, Vyasarpadi, Coimbatore and Velacheri are in progress. A total loan assistance of Rs. 108 lakhs has been sanctioned so far.

Industrial Areas

The most significant development during the Third Plan period, however, is the introduction of the concept of the industrial areas in the industrial estate programme. This scheme has been introduced for the first time in the industrial estate at Ambattur, where an extent of 1,200 acres has been acquired for the purpose of providing developed industrial sites.

The adjoining area is being acquired by the State Housing Board for developing a large extent of residential area. The successful completion of the industrial estate at Ambattur is an important event in the industrial history of Madras State, since it provides for an integrated development of large, medium and small industries through mutual co-operation and assistance. Similar industrial areas are also being planned in half-a-dozen other places in the State.

Outlook for the Fourth Plan

The success so far achieved in the industrial estates programme in the Third Plan indicates that we should continue the programme during the Fourth Plan. We propose to set up 15 normal functional industrial estates. Besides this, special attention will also be paid for setting up a number of functional industrial

estates and ancillary industrial estates. Setting up of private and co-operative industrial agencies will receive special attention. Developed industrial sites will be provided in twelve places in the State.

The Madras State Industrial Development Corporation, Limited, which has recently been set up will undertake the work relating to industrial areas. The Madras State Small-scale Industries Corporation Limited which is proposed to be set up very shortly will most probably take up the work regarding the setting up and administering the conventional industrial estates. We have no doubt, that with the creation of the new organisations and with the allocation of larger funds and with the experience so far gained, we will continue to be successful in implementing the industrial estates programme.

REGIONAL LABOUR INSTITUTE AT MADRAS

Sri D. Sanjivayya, Union Minister for Labour and Employment, inaugurated the Regional Labour Institute at Madras on July 26th, 1965. The Institute would conduct training programmes with the assistance of the specialist staff of the Central Labour Institute and would carry out research and investigations on problems of particular importance or significance to the region. The follow-up activities of the Regional Institute would help to maintain sustained interest in the work indicated so that the *ad hoc* projects conducted in any particular field of specialisation also developed as a continuing activity. It is proposed to have four more Regional Institutes of this kind to cater to the needs of different industrial regions in the country.



PROGRESS THROUGH PANCHAYAT UNIONS



3. Rayapuram Panchayat Union — Palm-leaf products Training Centre at Karaimangalam Pudur.



4. Radhapuram Panchayat Union — Brush Making Unit at Thiruvannamalai Village.



5. Chalk Tranling Changanankulam denotified Nanguneri Union. Crayan Centre for tribes — Panchayat Union.

Panchayat Development Activities in Tirunelveli District

Gandhiji said in 1946 that the Indian Independence must begin at the bottom. Every village should be a Republic or Panchayat having full powers. The greater the powers of Panchayat the better for the people.

The Madras Government remembered those words of the Father of the Nation. When offered the opportunity it accepted the principle of Democratic Decentralisation. It was confident that, with the opening wide of the door of democracy in the countryside a full and rich life would be assured through the work of the millions marching forward to establish the new socialist regime in the State.

The State has been fully covered in the establishment of Panchayats. In all, there are 374 Panchayat Unions covering 12,000 Panchayats in the State.

Development activities

Special emphasis is being laid on the development of scientific method of Agriculture, Family Planning, Children's education and women and youth movements through the Panchayat institutions.

Today the Panchayat Unions in every district in this State has become the centre and the source of inspiration to the people of that area. Like the Panchayat Unions of the other districts the Panchayat Unions of the Tirunelveli have readily accepted the increasing responsibilities that were devolved upon them as a challenge and are marching ahead. The development activities of the Panchayats are man Panchayat Plantations, Compost-making, construction

of school buildings, organisation of Madhar Sangams, radio rural forums, and VVF are almost common in all the areas.

There are also other important activities which deserve special mention. "Idle-Man-Power Utilisation Scheme" form an important part of the Rural Development Programme. The Famine Relief Works, executed in the district, under the special supervision and personal guidance of the Collector is commendable. In blocks, which are generally dry, repairs to tank-bunds, digging of community wells for irrigation, formation of link roads to hamlets and construction of Harijan quarters, have taken up and are in various stages of progress. Most been of the tanks in Kayathar, Ottapidaram Nanguneri, Valliyoor, Radhapuram and a few parts of Kalakad and Alwarthirunagari Blocks are being renovated.

The community wells are being dug for irrigation purposes in Kayathar and Ottapidaram Blocks. This new item, included under the Idle-Man-Power Utilisation Schemes, provides ample scope for increasing irrigation facilities in arid tracts. Small pattadars having one or two acres, each cannot spend a huge amount of about Rs. 5,000 to Rs. 7,000 for digging irrigation wells. Under this new scheme, an opportunity is being provided for a group of about 10 to 15 small pattadars, who can join together and dig a common well, for irrigation purposes. Such a well becomes the common property of beneficiaries. Steps are being taken for putting up a pump-set, for drawing water from these wells. The question of collecting a reasonable sum as betterment fee for the maintenance of the pump-set, is also under consideration. This new

scheme is welcomed wholeheartedly by a number of ryots. Sri V. Ramaiah, Minister for Food and Sri S. M. A. Majid, Minister of Local Administration, recently inspected a few works of this kind in this area. It is expected, that this will help intensify the Grow More Food Campaign.

A Pilot Project for the development of rural industries has been sanctioned in Nanguneri taluk, by the State Government. A comprehensive survey has been made with a view to assess the available natural resources of these areas and a number of rural industries have been taken up for development.

Rural Industries

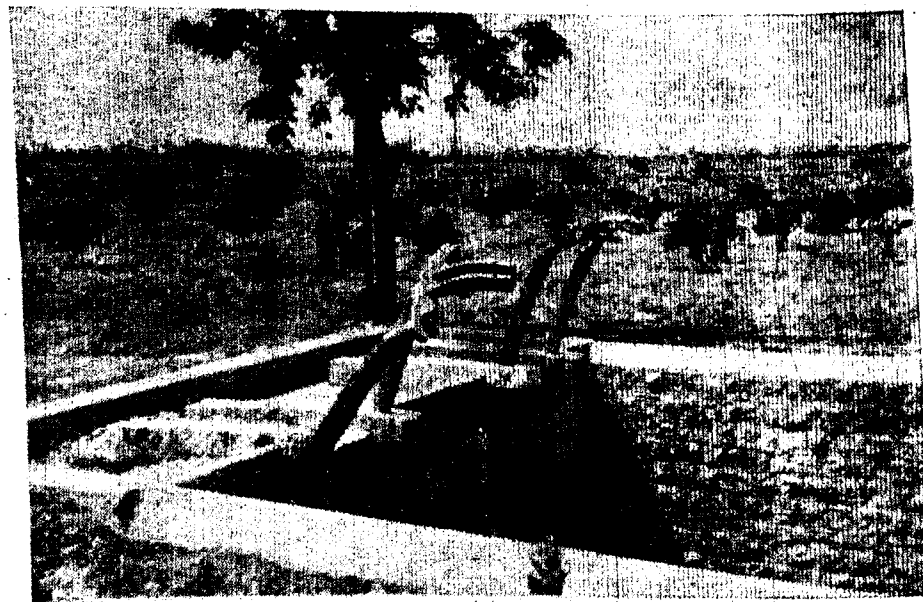
There is an Advisory Committee for Rural Industries at the State level, under the Chairmanship of the Chief Minister, Sri M. Bhaktavatsalam. The committee is in-charge of co-ordinating the activities of the three Rural Industries Pilot Projects started at Nanguneri in Tirunelveli district, Omalur in Salem district and Sriperumbuthur in Chingleput district.

Palmirah trees are the most important raw materials for rural industries in Nanguneri taluk. A number of schemes are under execution, utilising these raw materials for developing remunerative rural industries. According to the statistics furnished by the Project Officer of the Nanguneri Rural Project, there are about one crore of palmirah trees in Nanguneri Project area which is one-fourth of the total number of palmirah

trees in Madras State, and 50 per cent of those in Tirunelveli district.

Training centres for the manufacture of palm-leaf products are functioning very successfully at K. Pudar and Vijayapathy in Radhapuram Block and Chettikulam in Valliyoor Block. Sri S. Sounthara Pandian, M.L.A., the Chairman of Valliyoor Panchayat Union, serves as the President of the Project Level Advisory Committee of Nanguneri and a large number of rural industries are coming up, all over the area. There is very good demand for palm-leaf products, produced in these training centres. The trainees are paid a stipend of Rs. 30 per mensem. The Instructors of these training centres, mostly hail from Manappadu (near Tiruchendur) and Melpuram (in Kanyakumari district) which have earned a name for their quality work. It is learnt that the finished products of these centres were very popular and found a good sale at the festival, recently held at Nanguneri.

The training centre for the manufacture of brushes using palmirah fibre, is functioning at Thisaiyampilai in Radhapuram Block. Twenty trainees, getting a stipend of Rs. 45 p.m. each, are being trained in this Centre and the duration of training is six months. This new industry has a very good future, as there is great demand for these brushes, in the international market. It is expected, that the industry will become very popular in the near future and the finished products may earn a lot of foreign exchange, if this new industry is developed on proper lines.



Community wells—a sign of progress through co-operation. More lands come under irrigation. Small pattadars who cannot afford digging wells of their own, join together and dig a common well, for irrigation purposes.

The Blacksmithy and Carpentry Units are functioning in a number of Blocks. New types of useful materials for the villagers, such as, spades, ploughs, iron rims for carts and other agricultural improved implements are being manufactured in these Units. Alangulam Block deserves special credit in this field, as it has created a new record in the manufacture of special types of articles. Attractive furniture and play materials for children are manufactured in the Blacksmithy unit at Alangulam. The finished products are very fine and the quality is good. The prices are cheaper than the market rates. These articles are therefore becoming very popular. The initiative and zeal evinced in this matter, can be jointly shared by the Extension Officer (Industries), Block Development Officer and a skilled worker by name Sri Sundara Nadar.

The training centre for the manufacture of Banana fibre and starch utilising Banana stems, is functioning at Karayapuram, with the assistance of Khadi Commission and the Madras State Khadi and Village Industries Board. Ambar Charka Programme is being



The Gandhian Way—Women at the Ambar Charka.

implemented in a number of villages in the entire Nanguneri taluk and most of them are functioning very successfully. at Panakkudi village, where the "Tamil Nad Sarvodaya Sangh" is running a number of rural industries such as Khadi weaving, soap-making, brick kiln, etc. Highdraft Ambar Charka Unit, is functioning on experimental basis at Kalligulam (in Radhapuram Block), which is the first of its kind in the district. A training centre for the manufacture of chalk-pieces is run successfully by the Women's Welfare Department at Sanganankulam. Trainees of this unit are women of denotified tribes. All these industries provides employment for a large number of village artisans, especially women.

Radio Rural Forums

Radio Rural Forums are functioning effectively in all the Blocks, as agencies, for the exchange of views among the farmers. Authentic information about the activities of the various departments and other matters of importance are made available to the rural folk,



Listening Radio Rural Forums which provides latest information to the people.



Saving for prosperity—Hundi Savings is getting popular among women in Tirunelveli district. within a week, in the questions and answers programme of the Radio Rural Forums.

Alagappapuram Panchayat in Alwarthirunagari Panchayat Union has a Radio Rural Forum, which has sent about 170 questions to the All-India Radio and 80 per cent of them were answered. In two other Panchayats, namely, Nallur and Sivalarkulam in Alangulam Block, Radio Rural Forums have assisted in increasing the production of Compost-manure and other welfare activities in these villages.

Radio Mandram, a monthly bulletin in Tamil, is being published for announcing the rural programmes of the All-India Radio in advance and copies of the bulletin are being sent to all Blocks. It may be recalled that the Radio Rural Forum Programme was inaugurated by Sri Kamaraj, the then Chief Minister, at the time of the First Conference of the Panchayat Union Chairmen of Madras State, held at Tiruchirappalli on the 16th July 1962.

Small Savings

It is learnt, that Madhar Sangam in all Blocks are engaged, in conducting classes on tailoring, embroidery, etc. A few members are evincing keen interest in the distribution of hundies for Small Savings. Generally brass vessels for their families are being purchased from the hundi savings. Special mention must be made of the Madhar Sangams (in which most of the members were Harijans) at Bommaiypuram in Kayathar Block and Tharuvaikulam in Ottapidaram Block which are very enthusiastic in the Small Savings Drive. Hundies are distributed among women and the Small Savings Campaign is being intensified by the Block officials.

FAMILY PLANNING ESSENTIAL

Family Planning is essential not only for the control of population but for the health and well-being of mothers and children. I hope the efforts of our Government will be speeded up.

—Dr. S. Radhakrishnan

STATE'S FOURTH PLAN

The Fourth Plan of Madras State envisages an outlay of Rs. 750 crores for centrally assisted schemes with Rs. 65 crores on centrally sponsored schemes. Sri M. Bhaktavatsalam, Chief Minister, presenting the draft outline of the Plan in the Assembly on 27th July 1965 said that it would be bigger than all the three previous Plans put together.

The Plan accords top priority for augmenting agricultural production. The aim of Fourth Plan is to step up food production from 65 lakhs of tonnes anticipated by the end of the Third Plan to 82 lakhs of tonnes. The problem of drainage in the Cauvery Delta will also be tackled during the Fourth Plan. Power Schemes will get about Rs. 217 crores, Rs. 30 crores will be spent on rural electrification alone, which includes provision for an additional 2.5 lakhs of power pump-sets connection.

For the expansion of education at different levels the Plan provides about Rs. 80 crores.

The Chief Minister further said that the Plan, as now drawn up breaks new ground in assigning a more important and direct role for the State Government in the Industrial Development of the State.

Outlays on previous plans are as follow: First Plan—Rs. 80.38 crores; Second Plan—Rs. 187.76 crores; Third Plan original outlay—Rs. 290.88 crores. It is anticipated that the final outlay of the Third Plan might be of the order of Rs. 340 crores.



STUDENTS AND THE SMALL SAVINGS MOVEMENT

The Government Secondary and Basic Training School student Miss C. R. Santha receiving the consolation prize on Small Savings Scheme oratorical contest from the District Collector, Coimbatore.



The Suburban High School student Miss C. S. Vathsala receiving the first prize on Small Savings Scheme oratorical contest from the Collector of Coimbatore.



The Headmaster of the Suburban High School receiving the rolling shield for deputing the best team for the oratorical contest on Small Savings Scheme from the District Collector, Coimbatore.



The Union High School student Sri R. Mani receiving the first prize on Five-Year Plan publicity oratorical contest from the District Collector, Coimbatore.

SOME ASPECTS OF Chick Hatchery

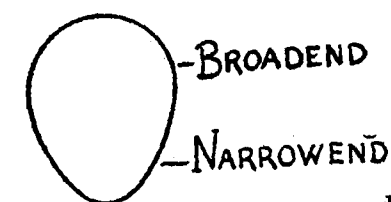
DR. K. V. PARTHASARATHY AND DR. S. RAJAN,
Poultry Research Station, Madras-35.

Some aspects of Chick Hatchery Scheme for the Village Level Workers under the Applied Nutrition Programme in Madras State is discussed in this article.

Well-begun is half done and with this motto, hatchery operations either on a small scale or on a big scale begin with the selection of eggs for hatching. A village level worker can use the following as his guide :—

Selection of Hatching Eggs

Eggs for hatching should be of proper shape. The standard for proper shape is, that at the broadest point, it should be $1\frac{1}{8}$ ". The broadest point is 1" below the broad end of the egg



Size.—Eggs weighing 24 ounces per dozen alone should be kept for hatching. Over sized or undersized eggs or mishapen ones should not be used for hatching.

Age.—Under proper condition of storage, it is generally accepted that eggs of less than 10 days of age can be set for hatching. But under our village conditions, eggs are not stored under ideal conditions and so it is recommended that eggs should be saved for hatching 6 or 7 days before the actual date of setting.

Eggs with defective shells such as thin-shelled ones, cracked and those showing body checks should not be used for hatching. Eggs showing germ development or meat and blood spots should also be discarded.

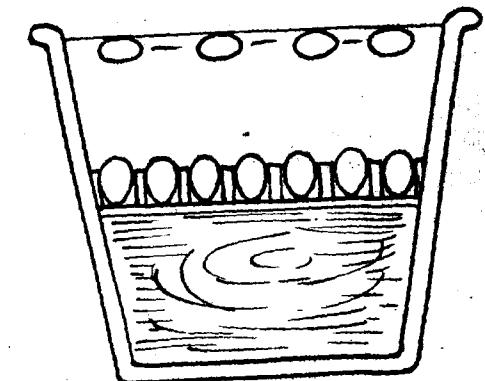
Mottled eggs should not be set for hatching.

Eggs from birds manifesting diseases like chronic respiratory disease and infectious Coryza should not be kept for hatching.

Hatching eggs should not be stored in places where smelly substances like onion, fishmeal, garlic, etc., are stored.

Some practical methods for storing eggs in villages :—

(1) Take a mud tub. Fill it up with one-third clean cool water. Over the water surface, keep a bamboo frame having holes to hold eggs. Cover the tub with a lid having perforations. This provides for evaporative cooling and eggs can be kept for atleast 10 to 12 days. This has been tried at Bhavanisagar and found to be suitable under our village conditions.



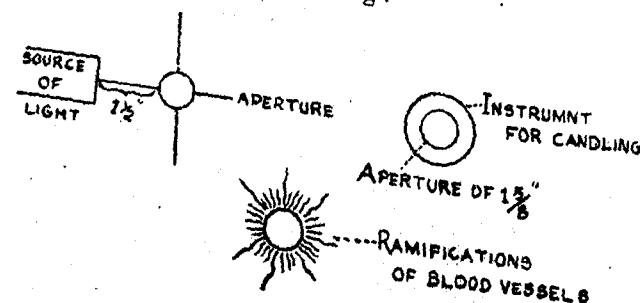
(2) Eggs can be stored in sand kept in a pot and covered with a wet gunny.

For enhancing the keeping quality of table eggs, produce infertile eggs in the farm. Infertile eggs keep better than fertile. In South Indian villages, when oppressive summer begins in April, remove the cocks from the flock and keep them away from the hens. Cocks are not at all necessary for the hens to produce eggs.

By about June 10th or so, re-introduce the cocks into the breeding pens. Start saving eggs for hatching 10 days after the cocks are introduced into the flock.

Candling

In simplest terms, candling is defined as the process of finding out the internal qualities of an egg in a dark room without breaking it open, making use of a source of light which is principally electric light. For candling 25 watts bulb is used. A green coloured bulb is preferable. This source of light should be at least $1\frac{1}{2}$ " from the aperture. The following sketch will explain the principles involved in candling:—



With a good candling equipment, it is possible to find out whether an egg is fertile or not even on the 2nd day of incubation though in actual practice, fertile eggs can

Srimathi Indira Gandhi, Union Minister for Information and Broadcasting at a reception given to her by the South Indian Film Chamber of Commerce.



be found out easily on 4th day of incubation. When the eggs are candled on the fourth day, a fertile egg will have the following appearance:—

Under the Applied Nutrition Programme "Lanyon" incubators (143 Eggs capacity) have been supplied. This incubator is provided with a mechanical contrivance to turn the eggs instead of the laborious process of turning eggs individually. Start turning the eggs after the 3rd day of incubation and stop turning eggs from the 18th day. For the last 3 days of incubation, no turning of eggs should be done because the chicks about to pip out should not be disturbed and allowed to assume positions which will facilitate easy breaking of the shell and thus allow the chicks to come without difficulty. Maintain the humidity at about 60 per cent as under natural breeding, the humidity has been found out to be 59.2 per cent. The incubation temperature should be maintained at the level indicated by the manufacturer. Maintenance of optimum temperature and humidity are of paramount importance to obtain good hatch.

After the chicks have hatched out and when they are dry, transfer them to a wooden brooder. The brooder will cost only about Rs. 30 to 40 with capacity for rearing 300-day old chicks.

Never starve the chicks. The old belief that chicks during the first 24 to 48 hours of their lives do not require any feed is wrong. Provide ample food and clean drinking water in the brooder to be available at all times. The chicks will eat and drink whenever they want. There is no other surer method of killing chicks or adults than by withholding water for 48 hours.

A brooder of $3' \times 5'$ as given would have 15 square feet or 15×144 : 2,160 square inches. Seven square inches of hover area per chick is to be provided and so this brooder will provide for 308 chicks, i.e., $2160/7$: 308 chicks under cold conditions and under hot weather conditions this would provide for 400 or 450-day old chicks.

Here is a sample of the calendar of operation that may be followed by a village level worker.

Chick hatching

March 31st—Remove all cocks from the pens.

1st April to June 10th—Dispose of the eggs collected, for table purposes. Only on June 1st, introduce the cocks into the breeding pens. June 10th: Start saving eggs for incubation. A farm of 60 layers will give 30 eggs for incubation. A farm of 60 layers will give 30 eggs with the right type of feed and managed properly. Out of the 30 eggs, select 18 eggs per day for hatching and send the remaining 12 eggs for distribution.

programme. Thus for 8 days, you get $18 \times 8 = 144$ eggs and thus one such "Lanyon" incubator can be loaded to this capacity. When once the incubator is loaded, then dispose off the daily collection of eggs for consumption purpose and when the chicks are about to be hatched, i.e., from the 18th day onwards, start saving eggs for hatching as described above for the next incubation. After the removal of chicks, fumigate the incubator with Kmno_4 and formalin. To 17.5 grams of Kmno_4 add 35 c.c. of formalin for every 100 square inches of incubator space. This dosage is very important for successful hatching. It is necessary to clean the trays well using antiseptic lotion and coir brush.

The chicks of today are the breeding stock of tomorrow. Success in brooding is defined as follows:—

- (1) Mortality less than 5 to 6 per cent only up to 10 weeks of age.
- (2) Chicks must grow uniformly, i.e., uniform body size, feathering, etc.
- (3) Chicks should be healthy.
- (4) Feed efficiency should be 2 lb. For every 2 lb. of feed consumed by the bird, 1 lb. increase in live weight must be there.
- (5) At 8 weeks of age, body weight should be: Cocks—2 lb. and Pullets—1½ lb.

The critical life of chickens is the first 2 weeks of age. If they live in the first two weeks, they can be expected to live right through. For a chick to reach the body temperature of 107°F , it takes about 7—10 days. The body temperature of chicks as it comes out of the egg will be 100°F . That is why you provide warmth inside the brooder house under the hover.

It should be possible in the villages especially at the R.E.T.C. Workshop Wings to make wooden brooders at a cheaper rate with the dimensions enunciated in a previous paragraph.

With the dimensions enunciated in a previous paragraph, the warmth provided in the brooder should be distributed uniformly so that the chicks will feel comfortable and be distributed through the brooder area uniformly.

Brooding condition

When natural incubation is resorted to, the mother hen takes care of her offsprings by providing the required warmth. But in artificial brooding, provide condi-

tions conducive to normal rapid growth. To achieve this end, follow the principles enumerated below:—

Age of chicks In weeks	Brooding temperature
0—1	95°F
1—2	90°F
2—3	85°F
3—4	80°F
4—5	75°F
5—6	70°F

A brooder can easily be made, as described in a previous paragraph, with spare empty dealwood cases and if electricity is available, you should provide 2 watts for each baby chick.

Each baby chick required 7 square inches of hover space and a hover of 60 inches diameter will hold 300—400 chicks.

(b) The following may be used as a guide for rearing chicks.

Age of chicks In weeks	Floor space per chick SQ. FEET.	Feeder space per chick INCHES.
0—4	0.5	1
4—8	1.0	2.5
8—12	2.0	3
Above 12 weeks	2.0	4

(c) Water space—

Age In weeks	Space required
3	½ per chick.
3—8	¾ "
8 and up	1 "

Srimathi Indira Gandhi who visited Madras recently is seen with the Balwadi children at Avadi.



TRAINING THE ARMY FOR NEW TASKS

Over 3,00,000 Jawans and more than 10,000 Officers have been recruited to the Indian Army after the declaration of the Emergency. Recruitment of 3,00,000 men has meant the screening of 14,00,000 to 15,00,000 volunteers—a task the magnitude of which can well be imagined. This article explains what it has meant to train the large numbers finally selected from raw young men to tough soldiers.

Rarely in history has an Army been called upon to double its size in a short period and at the same time to arm itself with new weapons and equipment. The Indian Army can pride itself on the fact that its large-scale programme of recruitment of officers and their training has been effectively carried out according to plan.

The raising of new Army Divisions to meet any possible Chinese challenge has not only necessitated recruitment of a large number of young officers and men but also resulted in considerable expansion of the training programme in several Army training centres and schools scattered all over the country. In certain cases new training centres have been set up to meet the large training recruitments.

The training of an army depends upon the training of three components, firstly, the troops who have to be trained to use effectively the weapons and equipment

Sri K. Kamaraj laid the Foundation stone for the "Koval Padur" Housing Scheme. Industries Minister Presided.



of their trade; secondly, the leaders, specially the officers have to learn the use of the weapons and equipment of their troops and to instruct their troops in their use and at the same time have to be trained in leadership of their men; and thirdly, is the training of the units, which means welding the leaders and their men effectively together to enable them to carry out different kinds of operations.

New training centres

In order to meet the additional man-power required for the raising of new divisions for the Indian Army, a large number of people who were recruited for different branches of the Army were sent to training centres to get their basic training. The type and period of their professional training, however, differed depending on the branch for which they were selected. For example, in the Corps of Signals, the soldier after getting the basic training has to be trained in his trade like operating a wireless set and telephone exchange.

The raising of new centres meant selection of new locations, construction of buildings, provision of equipment for training of the soldiers and getting items like clothing, boots, etc., for equipping the young recruits.

The first and foremost problem faced was to get men to serve as instructors in these training centres. Trained personnel from existing units had to be brought out to form the nucleus or the 'hard core' for the new units which were to be raised: this process in Army parlance is called "milking".

In order to meet the urgent need for raising additional units, the period of training of recruits was reduced. Longer hours of work and intensive use of the limited equipment available helped to ensure adequate training

of the recruits. The training, however, placed heavy burden on all the instructors who had been inducted in from the units to cope with the expansion; for example the Artillery Centre at Deolali had to deal with four to five times its number of the pre-emergency capacity.

Another important problem was to train sufficient men in technical trades since such training takes longer than the training of men for units. Full advantage was taken of the training facilities available in civil institutions for the technical trades particularly in training motor drivers for the Army. This has helped the Army to a considerable extent.

Training the officers

The problem of training the leaders who were required very urgently to man the expanded Army was one of the biggest one. A large number of young men came forward to join as officers. These young men were tested at Selection Boards before being sent for training as officers. Indian Military Academy at Dehra Dun was the only institution for training of officers. This was expanded and its capacity raised to four to five times that it had been before the emergency. Two Officers' Training Schools, one at Poona and the other at Madras were started in January 1963 so as to meet the need for training a large number of officers required for the expanded Army. The training of the Emergency Commission Officers was for six months. It is gratifying to note that these young men who came forward to join the officer ranks undertook the training with enthusiasm which not only eased the task of their instructors but also enabled them to be trained to the required standard during this short period.

The expansion of the Army also resulted in the promotion of a large number of Junior Commissioned and Non-Commissioned Officers in units, who, in many cases, were raised to two ranks above their previous ones in a short period of three to four months. It was therefore necessary that these officers had to be given training to be able to instruct and train the young soldiers who were coming to join the units. Such training was given in different schools of instruction such as the Infantry School at Mhow. The capacity of all the schools of instruction was therefore expanded to deal with the training not only of young officers who were coming out of the Indian Military Academy and the two officers' training schools but also of the Junior Commissioned Officers and Non-Commissioned Officers from units.

Grooming for Mountain Warfare

The training at schools and centres has also to be re-oriented to meet the requirements of the changed situation. The officers and men have to be groomed

to the peculiarities of operation in mountains such as lack of roads, difficulties of terrain, presence of numerous natural obstacles; quicker tiring of personnel and wearing of equipment, sharp climatic changes, adversely affecting the conditions of armaments and technical equipment, the occurrence of landslide and snowslips.

A High Altitude Warfare School was set up where training is given to operate under conditions involving movement of skis, rock and glacier climbing. Other schools have also been devoting a good deal of time in orienting the leaders in being able to function effectively in the mountain and jungle terrain in which we may have to fight.

Our men and officers were also required to be trained in handling new weapons and equipment that we had received from U.S.A. and U.K. after the emergency. Training was therefore imparted not only in the use of new weapons and equipment but also in their maintenance.

A number of our officers were sent on courses to U.K. and U.S.A. to learn the use and maintenance of the equipment which these countries had given to us. After attending these courses, these officers returned to the schools of instruction for training of our officers and men.

"Battle Inoculation" Course

The final task is now to weld together these leaders and men so that the units can function effectively. Instructions are imparted on models and on the ground as to how to plan an operation and handle the units in war. This is followed by units and sub-units going out and being able to do exercises and to carry out

Information and Publicity Minister, Sri G. Bhuvaram, inaugurated the Exhibition "Jawaharlal Nehru's Vision and Our Goal" at Tiruchy. He is seen going round the Exhibition.



Hence it is very important that the Village Level Worker should take continued personal interest to see that the chicks are housed comfortably. The comfort of the chick is an indicator of the correct temperature in the brooder house under the hover.

With the qualified Veterinary Assistant Surgeon available the Poultry Extension Centre at Block Headquarters it should be possible to prepare balanced feed to the birds for supply to villages. Depending on the facilities available, the Veterinary Assistant Surgeons at the central unit will be manufacturing feed and sell them to other breeders on a no-loss and no-profit basis by making use of the equipments received under UNICEF aid.

Purchase of the grains, etc., and manufacturing Poultry feed have been taken up under the Crash Programme at Madras and as the scheme progresses, it may be possible for the Officer in-charge of the same to provide chick Mash to breeders.

Vaccination

The Village Level Worker should be held responsible for the carrying out of vaccinations like R.D. Vaccination with F1 strain, pigeon pox vaccination, de-worming, Ranikhet Vaccination and fowl pox vaccination. The Extension Officers, Animal Husbandry and Veterinary Assistant Surgeons in-charge of Applied Nutrition Programme will carry out the same on demand from the village level worker. The periods when these vaccinations are to be conducted should be noted in a calendar in consultation with the Veterinary Assistant Surgeons, and action taken well in advance so as to ensure the routine being carried on.

Presuming that the village level worker gets a minimum of 50 per cent hatching it, will be seen that he gets about 70 chicks every 21st day. It is enough if he maintains them for about 8 weeks, for, by that time all the preventive vaccination would be over, and the chicken can well be given to those who are ready and eager to rear them. This arrangements would always leave 3 sets of chicks with him in 3 brooders.

The list of persons to whom the chick are to be distributed can be prepared well in advance so that a regular supply may be arranged. Chick breeders association

may be formed and they can work out arrangements to be made to house and feed the chicks in the proper way in which it should be done. This kind of education is absolutely necessary for villagers, for as it is, they are of the opinion that a few chicks purchased and let loose should all grow up and give the maximum number of eggs with no part played by them to think, plan or execute feeding or management arrangements. If additional accommodation and facilities are made these chicks will grow and replace older birds in the villages under Applied Nutrition Programme. Large number of chicks reared to adult stage by enthusiastic workers, may be given to other village panchayats with a view to open new Poultry Units in hamlets too.

Chick hatchery education

A number of leaflets in Tamil regarding poultry-keeping should be prepared and left with all the poultry workers under the Applied Nutrition Programme Scheme. The staff in-charge of Applied Nutrition Programme Poultry Scheme will be paying frequent visits to these units making use of the vehicles supplied under this programme with a view to advice the Village Level Workers, and other poultry breeders often and to carry out periodical preventive vaccinations, etc.

There are enough number of vehicles in the Applied Nutrition Programme and it should not be found difficult to provide them with vehicles whenever they should go for visit to village units. A number of such units started in a Block would necessitate undertaking of tours by the staff of Animal Husbandry Department at least 15 days in a month.

The department of Animal Husbandry will be rendering all technical help in running the Poultry Units successfully with the active co-operation of the villagers and the officers of other departments connected with this programme.

[The authors are greatly indebted to Dr. E. V. Babu, Grain Purchase Officer, Poultry Feed Manufacturing Unit, Madras, for his help in preparing this article. The help of the other colleagues working with them in the Poultry Research Station, Madras-35 is also gratefully acknowledged.]



Tirunelveli District Industries Seminar was inaugurated by the Chief Minister. Industries Minister presided over the function. Speaker Sri Chellapandian released a Souvenir on the occasion.

Sri R. Venkataraman, Industries Minister, inaugurated the Intensive Agriculture Scheme at Tirunelveli.



Sri G. Bhuvaraman, Minister for Information and Publicity, who opened the Agricultural Exhibition at Kancheepuram, is addressing the gathering.



The Chief Minister, who inaugurated the Intensive Agricultural Area Programme at Kancheepuram, is going round the Agricultural Exhibition organised on the occasion.





Sri R. Venkataraman, Minister for Industries who inaugurated the Pay Roll Savings Scheme in Messrs. Imperial Chemical Industries (India) Private Ltd, is seen receiving a cheque for Rs. 1,270 for the scheme from the Regional Manager.

practically all that they had learnt in theory. During such exercises, conditions are made as akin to war as is possible. Exercises are held which give an opportunity to Commanders at Brigade and Divisional level to work out and implement plans against the 'enemy', who is using the same tactics, as those with whom our nation may have to fight. Every effort is made to lay these conditions as realistic as is possible in peacetime.

To familiarise our troops to the noise of battle and to prepare them psychologically to being fired at by the enemy, they are put through what is called a 'battle inoculation' course. Troops are made to carry out exercises where fire from rifles, machine-guns, mortars,

and field guns is brought as close to them as is possible with safety. Units and sub-units also carry out firing with live rounds during exercises and this gives them a chance to carry out in training what is expected of them in war.

Acclimatisation to heights

The problem of acclimatisation of our troops to live and fight at high altitudes where our troops have to be located in the Himalayas have been studied in great detail by the Army Medical Corps and Scientists. Our troops are now suitably trained before they are sent to these places. The method used is to take the units to higher altitudes in stages carrying out exercises and training at each stage, so that they are physically conditioned to work as required of them during the war under sub-zero temperatures and at heights where there is lack of oxygen. Experiments have shown that the troops acclimatise themselves well if they are taken to the heights in stages. In fact, our troops who are located in these regions are carrying out their duties with no ill-effects whatsoever.

The expansion of the Army was the first task in the context of the Chinese aggression which brought into focus grave danger to the security of this country across the Himalayas. The expansion called for quick adjustment in the policy of recruitment as well as the modes and methods of training. New training facilities were created and training programme was modified both in respect of their content as well as duration. The Army as a whole was given an orientation in the type of training best suited to meet the new challenge. This is being carried out in a variety of ways including intensive training of troops in warfare in mountainous areas and in high altitudes.

POWER GENERATION IN MADRAS

As on 1st March 1965, the total Installed Generating Plant Capacity of all Power Plants in Madras State (including Neyveli Thermal Station) was 945.200 M.W. out of which the Hydro Power Plant form 62.9 per cent (594.200 M.W.) and the Steam Power Plant form 37.1 per cent (351.000 M.W.). The Total Power Plant Capacity of the Madras State is about 12 per cent of the Total Plant capacity in India (8.5 million K.W.).

Madras State ranks first in India in Rural Electrification Programme. As on 1st March 1965, the total number of towns, villages and hamlets electrified was 19,116 and the number of pumpsets given power connection was 2,20,432. The average revenue assessed per K.W. Hr. of power supplied to Agriculture in Madras State was 8.5 Paise which is the lowest tariff when compared to other classes of L.T. consumers in the State.

The total Capital outlay as on 1st March 1965 was about 221.05 crores.

The Gross Revenue of the Board upto February 1965 of 1964-65 was Rs. 26.59 crores as against Rs. 21.68 crores upto the same month of the last year (upto February 1964 of 1963-64). The Gross Revenue per K.W. Hr. of power sold works out to 12.5 Paise as against 11 Paise in February 1964.



1. A close-up photograph of the summit of Everest (29,028 ft.)

2. Ang Kami just before he tied the Indian tricolour and the Nepalese flag at the summit of Everest on May 24, 1965. The flags left by the earlier summit parties are also in the photograph (left).

3 to 14. Lt.-Cdr. M. S. Kohli, Leader, IMEE 1965; Shri Sonam Gyatso; Shri Nawang Gombu; Maj. N. Kumar, Deputy leader, IMEE 1965; Capt. A. S. Cheema; Shri Sonam Wangyal; Shri C. P. Vohra; Shri Ang Kami; an aerial view of Mount Everest; Capt. H. S. Ahluwalia; Shri H. C. S. Rawat; Shri Phu Dorji, Assistant sirdar, IMEE 1965.

15. Sri Shriman Narayan, Indian Ambassador in Nepal is greeting the leader of the Indian Expedition, Lt.-Cdr. M. S. Kohli.

Everest and the Conquering Heroes



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MADRAS INFORMATION

SEPTEMBER-1965
PRICE 20 PAISE



Chief Secretary Sri T. A. Varghese receiving the Governor.



The acting Governor Sri P. Chandra Reddy is going to hoist the National Flag before the Fort St. George.

INDEPENDENCE DAY CELEBRATIONS



The Governor is taking the salute.



The Governor is chatting with the Chief Minister.



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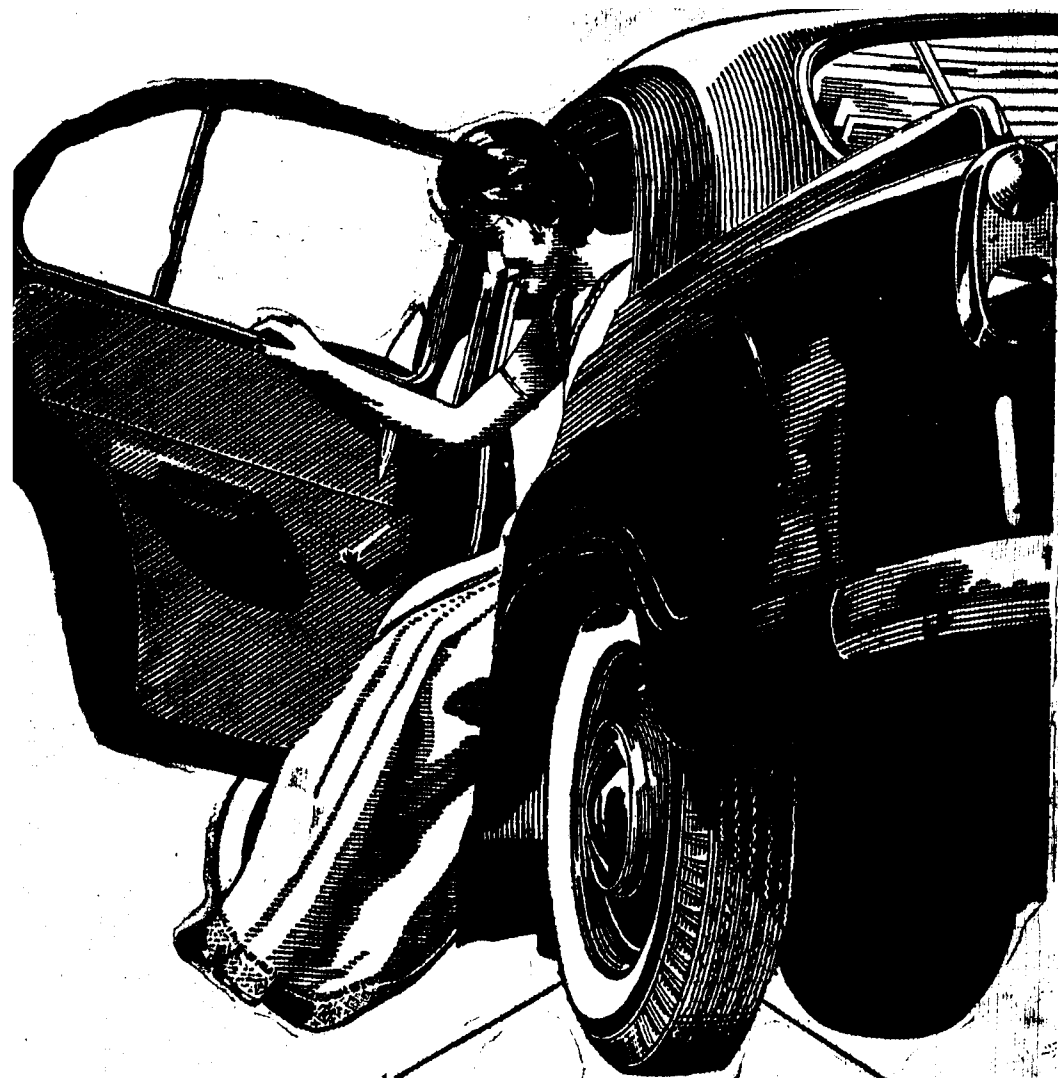
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THIS MONTH'S COVER:

Indian Society has always accorded a place of high honour to the teacher. For, the teacher is the maker of the citizens of tomorrow and therefore the moulder of the future of the Country. If the teacher is to do his duty correctly and well, he should be contented, happy. It is the duty of the society to see that he is looked after with great respect and care.

The teaching profession has contributed some very eminent men to the public life of India. Gokhale, Srinivasa Sastri and Satyamurti were teachers. So were Dr. Radhakrishnan and Dr. Zakir Hussain. When we celebrate the birthday of our Rashtrapathi as the Teachers' Day, we pay a tribute to the thousands of silent teachers who are engaged in shaping the minds of countless children.



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The TEACHER and the SOCIETY

In every country in the world whenever schemes of social reconstruction are undertaken, the apparatus used is the educational institutions and the educational machinery. We in our country look upon teachers as *gurus*, *acharyas*. What do these words indicate? *Acharya* is one whose *achar* or conduct is exemplary, is good. If he is victim of *durachar*, then he is not an *acharya*. He must be an example of *Sadachar*, of good conduct. He must inspire the pupils who are entrusted to his care with love of virtue and goodness and abhorrence of cruelty and violence.

That is the first essential for any kind of civilized being. We must love the good and detest the bad. Until we are able to give our youngsters that kind of outlook we cannot call ourselves good teachers. I hope that that ideal of a true teacher will be remembered by us.

Andhakaranirodhata gurur ityabhidhiyate.

Andhakar is not merely intellectual ignorance but spiritual blindness. He who is able to remove that kind of spiritual blindness is called a *guru*. Are we deserving of that noble appellation of an *acharya* or a *guru*? That is the first thing that every one of us will have to realize.

Courage of spirit

From the beginning of history, this country has stood as one. When people go out to Japan, China, Ceylon, etc., they do not go out as the representatives of this part or that part of the country but they go out as the representatives of this whole nation. When I go out, I do not say that I am this or that or a third thing but I go as a representative of India. I was there in Cambodia and the King and the Queen gave a banquet. And the first paragraph of their banquet speech was to demonstrate that they were the spiritual descendants of some Indian ancestor of ours who went there in the

early centuries, married a Cambodian princess and established a dynasty of which the present King and the Queen are the representatives.

We never had this idea of crossing the seas as something wrong, or marrying people from outside our particular community as something untenable. History is on the move. We cannot turn back the pages of history. Time is the greatest innovator which we have had. And our country had the courage of spirit, had the intellectual courage to adapt itself to the conditions which were imposed on us.

Are we to be men of yesterday or men of tomorrow? That is the problem which is facing us. If we want to shrink into our own shells and if we want to adopt ideas which once upon a time prevailed in this country, we will be left behind in the race. It is therefore essential for us to keep pace with the changing conditions and adapt ourselves to the new circumstances which are facing us. Any tradition, unless it is constantly recreated, unless it is refashioned so as to be relevant to the modern conditions, becomes an oppressive burden makes for death and not for life. So if we are to be progressive in this world we have to keep pace with so many things happening.

Great things

We appreciate Gagarin, we appreciate Titov—what is it we appreciate there? We appreciate the new spirit which has made them bring about a new world. You cannot build a new India with old minds. Unless our minds themselves become new or renewed, so to say, in the spirit of our country, we can never bring about a new India. A new India means new men and women, and new men and women means new teachers and pupils who are refashioned to adapt themselves to new things.

There are several things in the history of our country of which we can be proud. There are several things

of which we have to be ashamed. We have to discriminate between what is living and what is dead and take up what is living and try to make it a guiding principle of our lives.

There are great things which have happened here, great things of which we are proud. Our very antiquity tells us that we have some strange staying power which enables us to do great things. We adore people of learning, of wisdom, of renunciation. We have always held that, whatever be our religion, whatever be our creed, fearlessness, non-violence, renunciation are the great things by which this country has been built up. And unless we retain these qualities, it is wrong for us to expect that our country will be grateful to us or will respect us.

Teaching profession

Why is it that the teaching profession has fallen on evil days? Why is it that many of the teachers find themselves in a very unsatisfactory condition? And they are themselves frustrated, themselves disgruntled, unable therefore to look the boys in the face and teach them the central principles of what a civilized human being should be. I do not deny that society is responsible for a great deal. It is responsible for not having given the due status, the due honour, the due material emoluments which are essential for any decent kind of life in modern conditions.

All these things it is the duty and the responsibility of society to give to the teachers. They must have honour, they must have status, power and means for a comfortable existence. If all the time they are worried about where their next meal comes from, what they are going to do with the education of their children; if these are the problems which agitate and perplex the human beings, what is it that we can do? We cannot expect more things from the teachers than society is

Sri M. Bhaktavatsalam, Chief Minister, declared open the Thevaram School at Myslapore.



able to give them. It is therefore the responsibility of society, the responsibility of the State, to give the teachers proper conditions. Then it will be possible for them to realize their responsibility and do the best they can for the training of the young.

Pericles in his funeral oration said: 'I want every citizen of Athens to fix his eyes on the greatness of Athens until love of Athens fills his whole being.' Patriotism, if it is to be developed, can be developed only when you are able to know what the great achievements of this country were the great sculptors, the great painters, the great scholars, the great philosophers, the great saints, the great sages. You must have respect for what this country has produced.

Proper spirit

In every generation, in every part of the country, whatever might have been the pitfalls into which we fell, there were a few people standing up and beckoning to us. The way to develop a civilized community is by developing, understanding and compassion. Inward wisdom, outward compassion—these are the two great qualities of an authentically civilized man; be he a Muslim, Christian, Sikh, Hindu, Buddhist, it makes little difference. So long as we have that outlook, you will be a proper inheritor of the great civilization and you will be able to do things which will exceed the achievements of your ancestors. What is lacking is the proper spirit. Of course you may have learning but if in spite of that learning you do not have the principles of wisdom, your learning will be of no avail.

Saksara viparatave raksaso bhavati dhrumam.

If you become merely a *saksara*—a literate man—and you do not have the moral principles and you do not cultivate wisdom, what will happen to you? You will become a *raksasa*, a *saksara* turning the other side becomes a *raksasa*. Now you see all over the world people mad with power, intoxicated with might, trying not to build up a world but to wreck the world. Why does that happen? It is because knowledge is not accompanied by wisdom.

Jnanam vijñana sahitaṁ jñanam vijñana sahitaṁ.

Jnanam or wisdom, must be accompanied by scientific knowledge. Scientific knowledge by itself is not all.

We therefore appeal to our teachers that they should themselves be filled with a modernist attitude, with progressive outlook, with a forward-looking direction. Unless they themselves have it they cannot make the students forward-looking.

So the first essential is that you spread the spirit. If you are lacking in that spirit, what is it you can spread to your pupils? The first essential therefore is that the teachers themselves must know something of our history and something of what constitute the greatness of the history. They must have a knowledge of why we suffered shame, humiliation, gloom and downfall, times without number, in our history. What is it that contributed to the greatness? We adore all great people. Today, in our generation, we had two such great people as Tagore and Gandhi. They were there. Were they confined to their own particular grooves? Did they not open themselves out to a universal perspective, did not they appreciate that the conditions today require us to look upon the whole world as one kindered, as one family? When was it that we were lacking in this spirit? Whenever we confined ourselves to narrow grooves, we fell down.

Even the greatest champions of orthodoxy were really generous in their own time. You take a man like *Samkaracharya*. We look upon him as the champion of orthodoxy. Well, he was treated as a heretic in his own day.

*Samkaracharyapadadvayam mandalastham dadarsa
tataḥ sarvangani vikṣya samnyasi iti jñatva kopakola-
halachittāḥ kuto mundaḥ ityabravīt.*

Samkaracharya went to Mandan Mishra's *yajnasala* when he was performing a *yajna*. He looked at *Samkara* and said: 'You don't believe in ceremonials. Why have you come here, you shaven one? Get out of this place.'

Self-renewal

Therefore the progress of this country has been due to the heretics, to the non-conformists, not to those people who simply go about following the same tract. It has been achieved by the people who are able to sit in judgment on the past, castigate, repudiate whatever in the past was unnatural, corrupt, degenerate, take all the things which were regenerate, natural and honest. Unless we have intellectual integrity, unless we do not blind ourselves and say everything that has come from the past is great and glorious, unless we repudiate that mentality, it will not be possible for us to build a new India.

This country has grown by perpetual self-renewal. It has kept its vitality today because it has the capacity to cast away things which were obnoxious and we must

have that kind of capacity even today. Our teachers therefore, are the reservoirs of this new spirit, the new spirit of adventure in intellectual matters, in social matters, in political matters. If you do not have that spirit, you cannot communicate that spirit to the youth, who are entrusted to your care. Therefore, I appeal to the teachers that if the generous youth, hospitable youth, adventurous youth, courageous youth whom we have in this country, if they are to be utilized for building up a new country, a new India, a new society, the beginning must come from the teachers themselves. They must know what this country stands for and they must be able to communicate that vitality, not merely instruction.

Fair deal

Let me tell you, the boys do not care for what you teach them but they care for the example you set. It is not merely the instruction which you impart to them in the class room but the kind of life you lead. You think that they do not see it but they have eyes to see and ears to hear. They know everything about their teachers and if they have no respect for the teachers it is because they know more than they ought to know, more than what you expect them to know. Therefore it is education, it is instruction, it is knowledge and it is also the example which the teachers give.

We realize our responsibilities. As a Government we feel that we have not given a fair deal. It is the teachers in the lower stages who are really responsible for moulding the minds and hearts of our people. They must themselves be contented before they can communicate any spirit of contentment. We are trying to do our best, apart from what the Government is doing, giving free education to the children of teachers, helping them,

Chief Justice Sri P. Chandra Reddy is taking oath of office as the acting Governor of Madras.



They are students of merit, to have free education, higher on, even in the University stage. The Government will do what it can and it will indent upon private benefactions also so as to make the teachers feel they are a respected section of the community.

I myself have been a teacher for nearly fifty years of my life and still I am teaching. All that I am doing

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is to tell people what they should do, how they should behave, etc. That is the kind of job which I have undertaken and so long as there is breath in me I will continue to do that work irrespective of fear or favour.

[From "OCCASIONAL SPEECHES AND WRITINGS" of Dr. S. Radhakrishnan, Third series.]



Sri T. A. Varghese, Chief Secretary, laying a wreath on the coffin containing the body of Dr. Mathias, late Archdi Bishop of Madras.

AIMS AND OBJECTIVES OF THE STATE'S FOURTH PLAN

SRI M. BHAKTAVATSALAM,
Chief Minister.

Placing the draft outline of the State's Fourth Five-Year Plan before the Assembly Sri M. Bhaktavatsalam, Chief Minister, said, that the size of the Fourth Plan will be bigger than all the three Plans put together and calls for an outlay of Rs. 750 crores on Centrally Assisted Schemes and Rs. 65 crores on Centrally Sponsored Schemes.

The comparatively high density of population in Madras State—669 per square mile as against 373 for All-India—only highlights further the need for such a bigger Plan.

The Plan accords top priority for augmenting agricultural production and it also breaks new ground in assigning a more important and direct role for the State in industrial development.

Working groups constituted by Government have studied the proposals to be included in the State's Fourth Five-Year Plan for well over a year now and these studies and proposals have formed the basis for the Plan. The Plan as drawn up by us also keeps in view the targets and objectives of the National Plan and seeks to assist in their fulfilment.

Socio-economic objectives

It is 15 years since the country set out on its course of planned development. Even during our struggle for freedom, our leaders had recognized that political independence will have content and meaning only to the extent that it paved the way for rapid economic development. We also realised that an under-developed country such as ours, with its low productivity, low levels of consumption and low savings potential could hope to make up for all the retarded growth of past decades only through economic planning. Planning is

a continuous process and should keep a long-time, horizon in view. But within such a perspective, each Five-year Plan marks a distinct milestone in our long and arduous journey towards our goal of a self-sustaining and self-generating economy and a new social order, in which, as our Constitution proclaims, justice—social, economic and political—shall inform all the institutions of our national life. Our Plans have thus economic as well as social objectives.

While seeking to achieve appreciable increases in national income through our economic Plans, we are endeavouring to ensure at the same time that the benefits of economic development accrue more and more to the relatively less privileged sections of society. What is more important, these two objectives of economic progress and social justice are to be achieved within the framework of a democratic society. We do not, and within the frame-work of our Democratic Constitution cannot, employ straight-jacket methods

adopted elsewhere for enforcing restraints on consumption or stimulating production, but have to rely largely on persuasion and incentives for achieving the objectives of the Plan. We have to educate the people on the objectives of the Plan and thus secure their enlightened co-operation.

Our Plans cover three sectors—Central, State and private. In the Central sector of the Plan are the major industrial-projects such as installation of new steel plants, heavy machinery, heavy electricals, fertiliser factories and oil refineries, which by their very magnitude can be planned and executed only on a national basis. The State sector comprises such important heads of development as Agriculture, Power, Irrigation and Social Services like Education and Health. The private sector also accounts for a very significant portion of the total investment contemplated in the Plan. Investments by the private sector in organized industries like textiles, cement and sugar and also agriculture and house building are typical examples. The draft outline deals largely with the outlays and programmes in the State Plan, though significant developments anticipated in Central and private sectors also are referred to because the Plan for the development of the State comprehends the programmes undertaken in all the three sectors.

Creditable past achievements

This State has a creditable record in the implementation of the Plan and in the achievement of the targets and objectives of the Plan in physical as well as in financial terms. In the fifteen years of planned development, the agricultural and industrial base of the State has been considerably strengthened and a strong technical and administrative apparatus has been built up which is capable of meeting the challenge posed by a bigger Plan. Though the Third Plan originally

Smt. Jothi Vencatachellum, Health Minister, laying the foundation stone for the South Madras Water-supply Head Works at T. Nagar.



provided for an outlay of only Rs. 291 crores, on current trends it is anticipated that the final outlay may be of the order of Rs. 340 crores. I would like to stress here that we have been able to fulfil this Plan without any increase in Central assistance. It is because of our earnest efforts at mobilising resources for the Plan and enforcing the utmost economy possible in non-Plan and non-developmental expenditure, that we were able to fulfil a bigger Plan than we had originally embarked upon.

Organisation

It should be our endeavour in the Fourth Plan to make full use of the organization we have built up in several fields such as agricultural production, power development and reach out towards higher targets and thus bring about a significant improvement in the standards of living of our people.

The progress in the Third Plan has been satisfactory also in terms of achievement of physical targets. The physical targets under Power, Minor Irrigation, General and Technical Education, Small-Scale Industries and Roads will all be fully attained and in a measure exceeded. Even in regard to agriculture production, about which there has been keen debate and discussion, our achievements are by no means disappointing. Against a production of the order of 53 lakhs of tonnes at the commencement of the Third Plan, the actual production by the end is expected to be of the order of 65 lakhs of tonnes, representing an increase of well over 22 per cent. Even more than the actual increase already achieved, what augurs well for the future, is the increased awareness among the cultivators of the need for and their readiness to adopt improved cultural practices. Consumption of nitrogenous fertilizers, which was of the order of only 1.15 lakhs of tonnes at the commencement of the Third Plan, had increased to over 3.50 lakhs of tonnes by the end of 1964-65 and given the availability of fertilisers can be easily raised to 4 lakhs of tonnes in the current year. High-yielding strains have been evolved and they hold out possibilities of further significant increases in average yields per acre.

Why Bigger Plan?

The progress which we have made in the last 15 years should set the pace for further development in the next Plan period. The general standard of living of our people, as elsewhere in India, is however still low and can be raised only through successive Plans involving large investments in Agriculture, Industry and Social Services. The comparatively high density of population in our State—669 per square mile as against only 373 for All India—only highlights further the need for

a bigger Plan which will stimulate production all round and thus contribute to a measure of improvement in the conditions of living of the common man.

The Fourth Plan, as we have drawn up, is a big Plan, bigger than all the three Plans put together, and it calls for an outlay of Rs. 750 crores on Centrally assisted schemes and Rs. 65 crores on Centrally-sponsored schemes. The implementation of the Plan is the joint responsibility of the States and the Centre. While, as our experience in the Third Plan has shown, our own efforts at mobilisation of resources are of importance in determining the size and pace of execution of Plan schemes, Central assistance will be one of the crucial determinants of the size of the Plan. Our own contribution to the Plan will also, in some measure, depend upon the award of the Finance Commission. We will get a firm indication of the scale of Central assistance, only after our discussions with the Planning Commission, some time in September. The extent of external assistance will also have an important bearing on programme in the Plan with a foreign exchange component. Thus, while the size of the Plan will be subject to adjustments in the light of further discussions with the Planning Commission, we have no doubt at all that the substance of the Plan, as now framed, can be preserved. Our experience in the Second and Third Plans has also shown that if the productive schemes such as those relating to agricultural and industrial production, irrigation and power are implemented efficiently and expeditiously, it will be easier to find additional resources and enlarge the scope of the Plan as we proceed with its implementation.

Top priority to agriculture

The success of the Fourth Plan, whatever be its ultimate size, will depend largely on the efficiency of our performance in the agricultural sector. It has been recognised on all hands that the difficulties which we had to face during the Third Plan period, including the difficulties caused by the continuous pressure on the Government of India and the State Governments have been engaged in the last two years in a continuous study of the factors inhibiting growth in the agricultural sector, and the steps we have taken under the Crash Programme for pushing through schemes calculated to yield quick results in the short run such as intensification of programmes of minor irrigation, rural electrification and introduction of intensive cultivation programmes, reflect our awareness of agricultural production being the key to the success of the Plan. The highest priority has, therefore, been accorded in the Fourth Plan to programmes for augmenting agricultural production.



Sri K. Diraviam, I.A.S., Joint Development Commissioner, presided over the Tamilnad Secretariat Association inaugural function.

It will be our objective to attempt whatever is physically and technically feasible in this sector and not let financial resources act as a constraint on development. The provisions we have made for agricultural production are substantially higher than in the Third Plan and whatever be the size of the plan, these will be further augmented if necessary in the light of the progress of the schemes and the benefits flowing therefrom. The average yield per acre in our State is already among the highest in the country in respect of many crops.

The scope for further extension of cultivation through reclamation of land or execution of major irrigation schemes is comparatively limited in our State. We have reached the limits of utilisation of our water resources and further significant expansion of irrigation will be possible only when neighbouring States agree, in national interest to share their surplus water resources with us. Even so, we have provided in the Plan for a few medium irrigation schemes for exploitation of marginal surpluses. We have also recognised at the same time the need to improve the old irrigation systems so as to promote a more economical utilisation of water and facilitate further extension of irrigation with the water so conserved. Provision has therefore been made in the Plan for modernisation of channels in Thanjavur district and for improvements to Periyar channels. Problems of drainage in the Cauvery Delta have also to be tackled on a systematic basis in the Fourth Plan. Due to heavy run-off from north-east monsoon rains, both from outside and inside the delta, a large portion of the Cauvery Delta gets water-logged during the period. Upland drains entering the delta have therefore to be diverted either away from the delta or taken to the sea without affecting the irrigation crops. A provision of Rs. 5 crores has been proposed in the Fourth Plan for the execution of drainage schemes in the Cauvery Delta.



Chief Minister who inaugurated the Employees' State Insurance Dispensary at Perambur is inspecting the Dispensary after the function.

We will have to turn to more intensive utilisation of sub-soil water for stepping up productivity in agriculture. This State has already made impressive progress in the utilisation of electricity for lift irrigation. By the end of the current Plan, we will have 2.35 lakhs of wells connected to power. As part of the programme for rural electrification and utilisation of power for agricultural production, all villages with a population of 5,000 and above and most of the villages with a population of 2,000 and above will have been covered by the end of the Third Plan. In the Fourth Plan, we have provided for connecting 2.50 lakhs of additional pumpsets to power and in the course of fulfilment of this programme, power will be extended to all villages. A provision of Rs. 30 crores has been made for rural electrification programme in the Fourth Plan. The provision made in the Plan for acquisition of undertakings of private licensees should, in particular, give a fillip to the progress of rural electrification in areas which have lagged behind the rest of the State.

Apart from extension of irrigation in all directions, we will have to lay emphasis on expansion of output through application of good seed, fertilisers, green manures and adoption of modern methods of cultivation. The Fourth Plan contemplates a further big step-up in the consumption of nitrogenous as well as phosphatic fertilisers and with a view to encourage the application of fertilisers to crops grown under rain-fed conditions, it is also proposed to introduce an element of subsidy on fertilisers applied for rain-fed crops. Our experts have made a careful study of all factors contributing to increased agricultural production and have concluded that it will be possible to step up production of food-grains from 85 lakhs to 82 lakhs of tonnes in the Fourth Plan. This order of growth, though slightly

less than the rate of growth visualised in the National Plan, will still represent a substantial increase over the base level production.

The Fourth Plan also recognizes the need for accelerating the rate of growth in ancillary sectors, particularly under fisheries, through extensive mechanisation of fishing craft, improvement of fishing gear and tackle and through exploitation of deep-sea fisheries. The Plan aims at an increase of production of fish from 2.9 lakhs of tonnes to 4.7 lakhs of tonnes by 1970-71.

Industrial development

Although agricultural development has a crucial role in the process of economic development in this State, substantial gains in levels of living and employment opportunities can only be achieved by diversification of economic activities through rapid industrial development. The State has made rapid strides in industrial development in the last decade. But the State Government's direct investment in industrial development has not been substantial. The Government's policy has been one of stimulating the private sector, with provision of necessary economic overheads.

The Fourth Plan, as now drawn up, breaks new ground in assigning a more important and direct role for the State Government in the industrial development of the State. The State Government will concentrate on development of certain medium sized basic industries producing raw materials and intermediates which could be used by other industries in the private sector. The State will also directly engage in the production of certain vital consumer goods needed for mass consumption such as yarn, sugar and cement so as to be able to influence pricing policies better. The State's Plan also assigns an important place for co-operatives in the development of these consumer industries. The outlays in the State Plan under Industries will have to be supplemented by substantial investments in the Central sector in projects such as the Oil Refinery and Neyveli-Salem Steel Plant.

Power schemes

The development of agriculture as well as industries is closely linked with that of power, which has always been assigned the pride of place in our Plans. At the end of the Third Plan, the installed capacity of the Madras Grid will be 1,140 mW exclusive of 400 mW to be commissioned at Neyveli. Apart from providing for completion of the Anamalai Hydro-Electric

Scheme, extension of Basin Bridge Power Station and Kodayar Hydro-Electric Scheme, the Fourth Plan provides for the following new schemes:—

Scheme.	Installed capacity.	Estimated cost. (RS. IN CRORES)
Thermal Station at Ennore ..	300 mW	28.0
Thermal Station at Tuticorin ..	100 mW	11.1
Hogenekkal Hydro-Electric Scheme.	800 mW	56.0
Upper Tambaraparni ..	155 mW	17.8
Pandiyar-Punnappuzha ..	70 mW	9.2
Upper Manimuthar ..	95 mW	11.7
Paralayar Hydro-Electric Scheme.	30 mW	3.8
Suruliyar Hydro-Electric Scheme.	25 mW	3.2

Even with the execution of all these schemes, there will be a substantial gap between the effective capacity of our grid and the demand for power, which can be met only by further expansion of Neyveli Thermal Station and the execution of the Kalpakkam Nuclear Plant Scheme. These Schemes will have to be accommodated in the Central sector of the Plan. The total outlay on power projects in the State Plan will be of the order of Rs. 217 crores, against an anticipated expenditure of Rs. 121 crores in the Third Plan and reflects adequately the continuing importance, which we attach to power development in our Plans.

Social service

While thus giving due importance to productive schemes, the Fourth Plan seeks to give a new orientation to our economic planning with the emphasis it lays on development of social services such as Education, Medical and Public Health, Water-supply, Housing and Welfare of Backward Classes. The expansion of opportunities for education at primary and secondary levels in the last decade has, to some extent, mitigated the inequalities of opportunities in our society and has opened out vistas of opportunities for betterment of the socially and economically submerged sections of our population. An outlay of nearly Rs. 80 crores proposed for expansion of education at different levels should assist in this process further and create a milieu in which the economically backward sections of our society can come into their own. The national directive of free and compulsory education will be fulfilled throughout the State by the end of the Fourth Plan.

The Fourth Plan also seeks to make a significant contribution towards improvement of the basic amenities of life in rural areas in respect of communication, water-supply, medical relief and public health and thus abridge, to some extent, the present wide gap between rural and urban areas in regard to these essential amenities of life. We are already implementing a large programme of acquisition and assignment of house-sites in favour of Harijans, and over one lakh of house-sites have already been assigned in the last three Plan periods. There are still a large number of Harijans who live on private sites under constant threat of eviction. This programme has therefore to be accelerated so that all Harijans in rural areas could have sites of their own by the end of the Fourth Plan period.

As part of our Plan objective of assuring certain minimum of living conditions for the poorer sections of the society, it has been proposed that, besides Harijans, all poor people, irrespective of caste or other consideration and subject only to economic criteria, should also be assured of free house-sites by the end of the Fourth Plan period. A provision of Rs. 15 crores has been made in the Plan for this programme.

Outlay—quite modest

The Fourth Plan may appear big in financial terms, but is quite modest in relation to the needs of the people who, after centuries of neglect, naturally expect some improvement in their conditions of living in the new social order we are trying to forge over-awed by temporary stresses and strains if we falter at this stage and fail to maintain the tempo of development, we will only be piling up problems for the future. The difficulties caused by large investments, not matched by sufficient savings, and consequent rise in prices are no doubt there. But these difficulties will only be further aggravated, if we set our sights low and slow down our rate of growth. Our emphasis should, on the contrary, be on increase in production through wise and planned investment so that, out of such increased production, we may be able to sustain the improvement in standards of living which our people are keenly looking forward to. In discussions on the size of the Plan, we are apt to be pre-occupied with the financial resources for the Plan. Resources are important, but even more important is efficient and determined implementation of Plan projects. Through hard work and efficient performance in all sectors of our economy, it should be possible for us to fulfil the Plan, on the success of which the hopes of our people rest.

FOURTH PLAN OUTLAY

The size and pattern of outlays proposed for the State's Fourth Plan under different heads of development are indicated below :—

(1)	Third Plan (Anticipated).		Fourth Plan	
	Centrally assisted. (2)	Centrally sponsored. (3)	Centrally assisted. (4)	Centrally sponsored. (5)
(RUPEES IN LAKHS)				
Agricultural Production	45.94	1.08	84.37	8.61
Co-operation, Community Development and Rural Development Programmes.	28.32	78	*51.26	1.61
Irrigation	32.80	..	68.81	..
Power	1,21,28	..	2,17,00	..
Industry including Handlooms	24,27	..	88,36	..
Transport and Communications	13,16	48	37,49	11.33
Education and Cultural Activities	35,91	24	94,85	1.15
Health	25,86	1,61	92,48	3.00
Housing including Town Planning	5,24	6,89	19,55	27.00
Welfare of Backward Classes	5,34	2,41	14,21	4.10
Social Welfare	17	6	2,00	..
Craftsmen Training and Labour Welfare	1,66	2,49	6,06	9.09
Public Co-operation	1	8	15	23
Miscellaneous	56	..	1,16	..
Total	3,40,52	16,13	7,77,75	65.52
Less	..	..	(—) 27,78	..
Total	3,40,52	16,13	7,49,97	65.52

* Includes schemes costing Rs. 27.78 lakhs provided in other heads of development.

STATE'S 4th PLAN

Size and pattern of investment

The size and pattern of investment of the State Plans should conform to the targets and objectives of the National Plan and assist in their fulfilment. The Plan of each State should, nevertheless, take into consideration its own special economic and social problems, the level of development reached, the natural and human resources available, their full utilisation, etc., for securing a balanced development.

The Fourth Five-Year Plan of Madras State with an outlay of Rs. 815 crores (750+65) has been drawn up within this frame-work, subject to the approval of the Planning Commission.

planning for the Socio-economic progress of a State is the basic decisions governing the rate of growth, the size and pattern of investment are all taken at the national level. The State Plan should conform broadly to the targets and objectives of the National Plan and assist in their fulfilment. It should also be consistent with the economic and social philosophy underlying the National Plan. Further, ours is a mixed economy consisting of Centre, State and private sectors in which Central investments play a dominant role. Decisions of policy of Central Government in regard to allocation of scarce resources, of which foreign exchange is the most important will also have an important bearing on the Plan Programmes at State level. It is against this background the size and pattern of investment of the State Plans have to be considered.

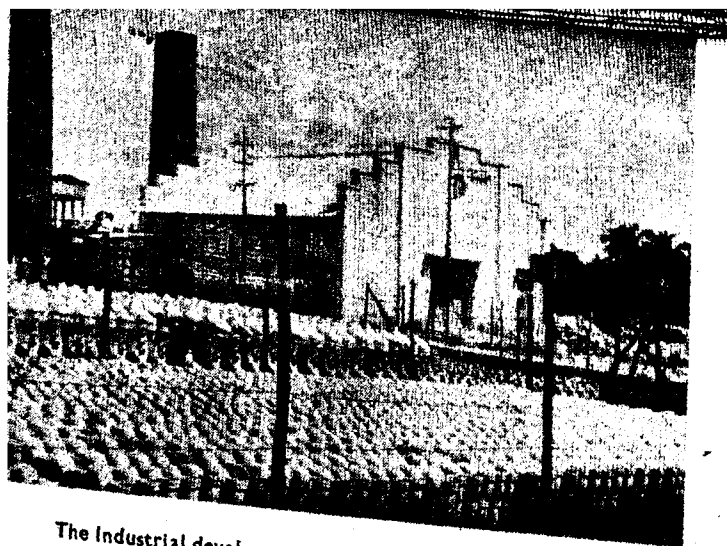
The State Plans cover such vital sectors of development as agriculture, small industries, irrigation and power, roads and road transport, education and other social services. The successful implementation of the State Plans in these fields, which impinge closely on the welfare of the people, has therefore an important bearing on the realisation of the objectives of the National Plan.

Planning for development is a continuous process and successive Plans form a continuing series, both

in terms of investments and benefits. In a scientific approach to the Fourth Plan, we should therefore appropriately begin with assessment of the progress made in the three plans, take note of the deficiencies which still exist and seek to determine in the light of growth achieved in various sectors of economy the pace and direction of economic development that could be profitably attempted. The possibilities of growth within the physical resources available have to be assessed and then matched against the financial potentials of the State with the Central and private sectors.

Past achievements

Outlays made in the first two Plans strengthened the industrial and agricultural base of State and paved the way for the vastly enlarged development effort of the Third Plan period. The Third Plan originally visualised an outlay of the order of Rs. 291 crores. But with the progress already attained in the first four years of the Plan, and on the basis of outlay anticipated in the last year, the expenditure on the Third Plan is expected to touch Rs. 340 crores. The anticipated outlays of the Third Plan should guide the allocations of the Fourth consistent, of course, with the economic and social objectives of the National Plan.



The industrial development of Madras in the last three Plans are impressive. Here is a view of the Ceramic Factory in South Arcot District.

The progress in the Third Plan has been satisfactory also in terms of achievement of physical targets. There has however been legitimate concern about the slow rate of growth in agriculture, the most important sector of our economy. Shortfalls in agricultural production are also largely responsible for the comparative slower growth in national income and the continuous pressure on prices. But even in this sphere, our achievement in the Third Plan are by no means negligible. Considerable additional production potential has been created as a result of execution of programmes relating to minor and major irrigation, distribution of improved seeds, and increase in the application of fertilizers. Further acceleration of production up to the level targeted in the Third Plan will depend largely on a still larger increase in the consumption of fertilizers. Though the Plan provides for a step-up in consumption of nitrogenous fertilizers, up to 5.6 lakhs of tonnes in terms of Ammonium Sulphate, on current trends of availability of fertilizers, it is estimated that the consumption can be raised only up to 4 lakhs of tonnes or so. On this reckoning and after making minor adjustments under other programmes, it is prudent for the present to plan on the basis that production of foodgrains may reach up to a level of 65 lakhs of tonnes.

Population Density

On this estimate of agricultural production, the State income at 1960-61 prices is expected to register an increase from Rs. 1,120.97 crores in 1960-61 to about Rs. 1,423 crores in 1965-66. At this level the *per capita* income of the State at 1960-61 prices will be Rs. 391 in 1965-66. In spite of the real progress which this State has made in terms of growth in *per capita* income and the considerable vigour shown in the implementation of the Plans, the general standard of living is still low. Further in view of the comparatively higher density of population in Madras (669 persons per square mile as against 373 for the country

as whole) we should aim at somewhat higher rate of growth than the 6½ per cent visualised for the national economy as a whole.

In settling the strategy and pattern of investment of the Fourth Plan, the following further points have also to be kept in view. The *per capita* availability of cultivable land per head of agricultural population is also very low in our State being only 0.61 acre, against 0.98 acre for the country as a whole. This factor serves to depress the *per capita* income generation in the agricultural sector below the national average, in spite of higher productivity per acre judged in terms of average yields under important crops. *Per capita* income in the agricultural sector can be raised only by a two-pronged programme directed simultaneously towards stepping up of agricultural production to the maximum extent feasible and at the same time diverting a portion of the rural population in a planned manner from the agricultural to the secondary and tertiary sectors.

Agricultural Sector

In spite of all the expansion and diversification which have undoubtedly taken place in the industrial sector, the agricultural sector which contributed 47.28 per cent in 1960-61 is still expected to contribute 44.94 per cent in 1965-66 to the State income. A significant

OUTLAYS IN I, II, III PLANS

(1)	First Plan Outlay	Second Plan Outlay	Third Plan Outlay (Original)
(RUPEES IN CRORES)			
Agriculture ..	9.67	16.80	36.98
Community Development and Co-operation ..	50.43	15.23	25.18
Irrigation and Power ..	1.53	95.78	127.61
Large and Medium Industry ..	2.70	1.13	3.35
Small Scale Industries and Village Industries ..	3.82	12.72	20.16
Roads and Tourism ..	6.42	5.38	11.25
Education ..	1.29	13.73	32.16
Health ..	4.59	14.35	21.50
Housing ..	4.59	4.80	7.00
Welfare of Backward Classes ..	4.52	4.59	5.38
Social Welfare ..	0.18	0.18	0.52
Labour and Labour Welfare ..	0.48	0.48	1.33
Other items ..	1.01	1.01	0.59
Total ..	80.38	186.18	290.89

* Shown in the Central Plan.

impact on State income and *per capita* income can therefore be made only through planning for maximum possible increase in agricultural production.* It should also be remembered that the Fourth Plan is being framed against the background of the rise in prices due in a large measure to lags in agricultural production, the improvement of which should therefore have the highest priority in any plan of action for containment of prices. The Fourth Plan therefore accords topmost priority for augmenting agricultural production.

Growth factors

In determining the feasible rate of growth for the agricultural sector, certain constricting factors of special importance to the State have to be kept in view. The State has reached the limits of utilization of its water resources and further extension of irrigation facilities will become increasingly difficult. In the absence of yet an agreement with the neighbouring States which will provide for the diversion of west-flowing rivers for irrigating the arid tracts of the State, the scope for extension of cultivation and multiple cropping by provision of irrigation facilities is comparatively less than in many other States. In respect of minor irrigation too, the State has to turn progressively to schemes of a marginal character. The scope for further extension of cultivation by reclamation of culturable waste lands is also not significant. We have therefore to rely principally on expansion of output through intensive cultivation. We are entering a more difficult and challenging phase of development of agriculture in this State in which accent should be on increased application of science and modern technology to problems of agricultural production.

On a careful consideration of these and other relevant factors, it has been estimated that it will be possible to step up production of foodgrains from 65 lakhs of tonnes to 82 lakhs of tonnes during the Fourth Plan period. This increase, though substantial in absolute terms will be slightly less than the order of increase visualised for the country as a whole.

Role of Industry

Since the rate of growth considered above feasible for the agricultural sector is somewhat lower than that assumed for the country as a whole, and the contribution of the tertiary sector may generally be expected to rise only at the same rate as the projected increase in national income, the rate of growth for secondary sector should be comparatively higher than that visualised in the Memorandum of the

Fourth Plan for the country as a whole, if the State is to achieve the overall rate of growth aimed at in the National Plan.

In the last ten years, there has been appreciable investment in industries. Even so, the contribution of the Industrial sector to State income will be of the order of only 19 per cent at the end of the Third Plan. For reasons already stated, the scope for augmenting opportunities for employment in the agricultural sector is restricted. Therefore, from the point of view alike of ensuring a minimum increase in State income and provision of employment opportunities, the Fourth Plan of the State should aim at a substantial increase in the contribution of the industrial sector.

It has been estimated that it will be necessary to plan for an increase of income generated by the industrial sector of a little over Rs. 200 crores. This order of increase in outlays from industries will call for an investment of Rs. 600 crores.

Government's role

The Government's policy so far has been one of stimulating the private sector in promoting industrial ventures, with provision of necessary economic overheads. There are however certain gaps in the structure and pattern of industries as it has developed in this State in the last ten years. There is, in particular, need for development of certain basic industries producing raw materials and intermediates which could be used by other industries. It is also increasingly realized that the State should directly engage in the production of certain vital consumer goods needed for mass consumption as to be able to influence pricing policies better. Keeping all these objectives in view, it is visualised that the State should play a more direct role in industrial development in the Fourth Plan.

On an assessment of the investment capacities of the three important agencies in industrial development, it is felt that the aggregate investment of 600 crores may be

Interior view of a factory in one of the industrial estates of the State.





Power generation in Madras State during the past fifteen years is spectacular. Picture shows a general view of Kundah Power House No. 1.

broadly distributed as 100 crores by the State sector and 325 crores by the Central sector, the balance being in the private sector. In addition to the projects already in existence such as the Neyveli Lignite Project and the High Pressure Boiler Plant whose programmes of expansion are on hand the execution as part of the Central Plan of projects such as the Neyveli Salem Steel Plant and petroleum refinery will besides helping to achieve the targets of investment considered necessary for minimum rate of growth in the Fourth Plan, lay a strong base for accelerated progress in the subsequent Plan periods.

Power Development

The development of industries is closely linked with that of power and the Planning for power as also transport has always to be a little ahead of requirements so that shortages of these essential infra-structural facilities may not inhibit industrial expansion. The past trends in growth in consumption of power point to a doubling of the demand over a five-year period. In view of the limited scope for creation of additional irrigation potential through medium and minor irrigation schemes, emphasis has to be laid on further extensive use of power for lift irrigation. In this view, provision has been made in the Plan for connecting 2.5 lakhs of pumpsets. In assessing the dimensions of the power development programme needed for the Fourth Plan, this fact has been borne in mind. The rural electrification programme will be pushed through further so as to extend to all villages, in view of the great contribution it can make to food production. The need for maintaining a balance between hydel and thermal power has also been kept in view and apart from the establishment of thermal plant in the vicinity of Madras and Tuticorin, further expansion of Neyveli and establishment of a nuclear plant in the Central sector have also been proposed.

The inter-dependence of programmes of industrial development and technical education has been recognized in the Fourth Plan and technical education programmes have been worked out with reference to the manpower requirements anticipated in the Fifth Plan, in view of the time lag between the establishment of institutions and the turn out of trained personnel. While providing for the expansion of the existing institutions to the extent feasible, the need for promotion of balanced regional development within the State through a wider dispersal of facilities for technical education with the establishment of new institutions has also been kept in view.

Social Services

The rural areas in this State as elsewhere too have lagged behind the urban in respect such amenities as, communications, water-supply, medical relief, Public Health, etc. The Fourth Plan breaks new ground in the considerably larger provision in proportionate terms proposed for these social services. Besides ensuring greater equality of opportunities for different sections of the people, the development of social services will also be of significance as a measure of redistribution of income in favour of the poorer sections. The national directive of free and compulsory education will be fulfilled throughout the State by the end of the Fourth Plan. With a view to remove the few difficulties which still exist in the enrolment of pupils from poorer strata of society. It has been proposed as one of the important programmes of the Fourth Plan to supplement the free education policy with free supply of text-books and uniforms for all poor pupils in elementary schools. It is one of the essential objectives of the Fourth Plan as formulated to mitigate these disparities through larger investments in rural areas in provision of link roads, water-supply, construction of buildings for elementary schools, etc. We are already implementing a perspective plan of rural electrification. It has now been visualised as one of the important objectives of the Fourth Plan that every village should by the end of the Fourth Plan have also a source of protected water-supply or a pipe-line.

We have already been implementing a vigorous programme of acquisition and assignment of house-sites in favour of Harijans. While the needs of Harijans in this regard will continue to receive special attention, it has now been proposed as part of the Fourth Plan that all poor persons, irrespective of castes or other considerations, subject only to strict application of certain economic criteria, should be provided with free house-

sites in rural areas. This programme and its fulfilment should eventually rank among the principal achievement of the Fourth Plan.

Employment

Social justice and assurance of certain minimum standard of consumption call for greater efforts to enlarge opportunities for gainful employment. Large outlays proposed for Labour Intensive Programmes, such as soil Conservation, Minor Irrigation, construction and improvement of roads, and development of Village and Small Scale Industries including Handlooms, as also the rural manpower programme, should help to make a dent on this unemployment problem.

It is necessary at the same time to ensure that the fruits of planning are not eroded by rapid growth of population. A programme of family planning involving intensive education provision of facilities and advice on the largest scale with emphasis, particularly on sterilization, has been embodied as an integral part of the Fourth Plan.

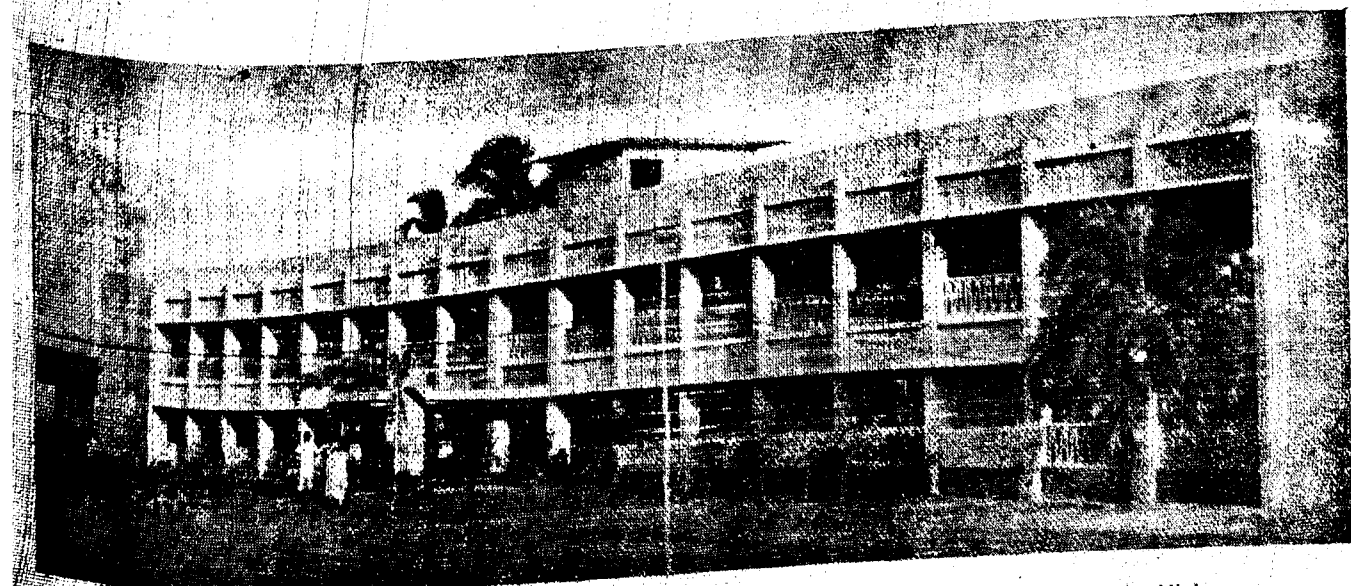
Local Plan

The question of preparation of District and Village Plan, with a view to promote local initiative in planning and to stimulate local efforts at mobilization of resources, will also be pursued as part of the State's Fourth Plan. The working groups concerned with different heads of development have indicated areas in respect of which

such local planning could be successfully undertaken. When State's Fourth Plan is cleared in outline with the Planning Commission, it will be possible to initiate action for formulation of such local plans on the basis of mobilization of local resources supplemented by grants from the State as part of the Plan.

The Fourth Plan is being prepared in the context of a rise in prices of raw materials as well as consumption goods in the Third Plan period. One of the important causes accentuating the inflationary trends in the Third Plan period was the delay in securing maximum returns from investments in certain directions. Priority will therefore be given to the completion of projects started in the Third Plan and the full utilization of capacities already created. It should be our endeavour to see that schemes for increased agricultural and industrial production are pushed through with the utmost vigour and efficiency so that the increased flow of goods and services from these sectors may help abate inflationary pressures and also sustain a larger effort in regard to social services.

It is in keeping with the above consideration the draft outline of the Fourth Plan of Madras State has been worked out for an outlay of Rs. 750 crores on Centrally assisted schemes and Rs. 65 crores on Centrally sponsored schemes. Therefore though the Fourth Plan may appear big in financial terms is quite modest in relation to the needs of the people.



A general view of the Trainees Hostel of the Surgical Instrument Plant. Sri R. Venkataraman Industries Minister, declared open the building.

FINANCIAL RESOURCES FOR THE FOURTH PLAN

A Fourth Plan of the dimensions now visualized at National and State levels will naturally call for vigorous efforts on the part of the Centre and States in mobilizing resources. There will be need for the utmost restraint in regard to non-development expenditure as well as maintenance expenditure of a developmental character. The principal elements for consideration in assessment of State's resources for the Fourth Plan are—

- (i) Balance from current revenues at existing rates of taxation;
- (ii) Net open market borrowings of State Government as well as autonomous bodies like the State Electricity Board;
- (iii) Share of Small Savings;
- (iv) Unfunded Debt;
- (v) Miscellaneous Capital Receipts; and
- (vi) Contribution of public sector enterprises, viz., Madras State Electricity Board.

Tax

In computing the resources available for financing the State's Fourth Five-Year Plan, it is difficult at this stage to estimate the balance from current revenues at the existing rates of taxation, for it is dependent on the award of the Finance Commission. We may reasonably expect that the Finance Commission will recommend a scheme of devolution of resources which will help us to balance the non-Plan account. Whatever recommendations the Finance Commission might make, it should be our endeavour to keep non-developmental expenditure as well as maintenance expenditure within strict limits so as to ensure that substantial resources are earmarked even out of current revenues for financing the Plan.

Open market borrowings by the State Government and the State Electricity Board is the next important element to be considered in estimating the State's resources for the Fourth Plan. The net borrowings by all State Governments including State Electricity Boards, visualized for the Fourth Plan, is Rs. 860 crores,

net of re-payment. In the light of past trends, the open market borrowing of Madras could reasonably be expected to be of the order of 12.5 per cent of the total borrowings of the States and on this basis, the net borrowings of the Fourth Plan might be estimated at Rs. 106 crores. Having regard to past trends, it may not be too unrealistic to estimate a net borrowing of the order of at least Rs. 90 crores by the State Government and the State Electricity Board together. The repayment of maturing obligation in the Fourth Plan period will be of the order of Rs. 37.75 crores, as against Rs. 16.58 crores only in the Third Plan period. The fact that a significant portion of the maturing loan will generally be offered for conversion also renders the attainment of a target of Rs. 90 crores feasible.

Small Savings

Efforts will also have to be taken to intensify collections under Small Savings. Such efforts will also be necessary in the interest of abating inflationary pressures which a bigger Plan is bound to generate. The target fixed for the State Government's share for Small Savings in the Third Plan was Rs. 20 crores. Against this, the achievement is however likely to be of the order of only Rs. 16 crores. Keeping in view the large developmental effort contemplated in the Fourth Plan, the target under this source has been fixed at Rs. 28 crores.

Unfunded Debt which consists largely of the Provident Fund subscriptions of employees of State Government may be expected to provide at normal rates, Rs. 6.35 crores, over the five-year period.

The State Government will have to repay a substantial amount of Rs. 107 crores to the Government of India. Miscellaneous Deposit receipts will also register a substantial decline, as the autonomous bodies like the State Housing Board and State Khadi and Village Industries Board which now keep their funds in public account, accelerate their programmes. The deposits of local bodies in public account will also be drawn

on in a larger measure for their programmes of development. Though the State Government have been following and should continue to follow a policy of utmost restraint in construction of administrative buildings and staff quarters, a minimum provision for this purpose may be inescapable in the Fourth Plan. An analysis of different elements under receipts and disbursements under this head shows that Miscellaneous Capital Account receipts may account for Rs. 105 crores. The contribution of Madras State Electricity Board in the form of depreciation and other reserves is expected to be about Rs. 48.7 crores over the five years of the Fourth Plan. The following is thus a tentative picture of State's financial resources. This is exclusive of balance from current revenues, a view in regard to which may be taken only after the Finance Commission's award becomes available :—

	(RUPEES IN CRORES.)
Loans from the Public (net)	90.00
Share of Small Savings	28.00
Unfunded Debt	6.35
Miscellaneous Capital Receipts	105.00
Contribution by the Madras State Electricity Board.	48.70
Total revenue at existing rates of taxation and at existing pricing policies of public sector enterprises.	68.05

A significant part of the resources which the State may have to raise for financing the Fourth Plan can be secured through improvement in efficiency of tax administration and through suitable legislative and other measures for checking evasion of tax, particularly under heads such as Sales Tax and Stamp Duties. Our experience in the current Plan has shown that

The share of Central assistance in the financing of the State Plan has been progressively on the increase, as will be seen from the following figures :—

Total Assistance Percentage
outlay, from Centre.

(RUPEES IN LAKHS.)

First Five-Year Plan	80.38	29.85	37.1
adjusted for Residuary Madras State.			
Second Five-Year Plan	1,87.76	1,02.52	54.6
Third Five-Year Plan	2,91.00	1,90.00	65.3

vigorous efforts on these lines are bound to yield substantial results. The State has a creditable record in regard to prudent financial management and in mobilization of resources for financing the development programmes. Though the original outlay on the Third Plan was of the order of only Rs. 291 crores, the final outlay will be nearly Rs. 340 crores. The State has managed to finance the entire increase in Plan outlay from out of its own resources secured through additional taxation effort, curbing of tax evasion and strict economy in regard to non-Plan expenditure. To the extent we continue to enforce such economics and formulate measures for putting down evasion of tax, our task in regard to financing of the Fourth Plan will become far more manageable. It should also be stressed that the implementation of programmes under productive sector such as agriculture, power, industries and transport, will generate resources for financing the larger outlays on social services visualized in the Fourth Plan.

A New Fine Arts Studio was declared open by Sri R. Venkataraman, Minister for Industries at the Government College of Arts and Crafts. The Minister is inspecting the studio.



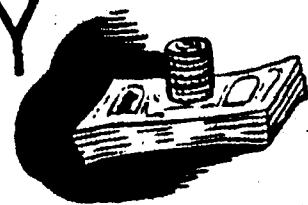
INDIA IS ONE

On Independence Day a National Cultural Programme—"Onre Bharatham" was organized by the Government at Children Theatre. The children of various Linguistic Groups residing in the city participated in the programme.

1. Vanoli Siruvar Sangap'Peraval.
2. Boys of Santhome Dharma Vidyasala (Hindi).
3. Gujarati Girls from Manilal M. Mehta High Girls' School.
4. Bengali Students from Queen Mary's College.
5. Children from Andhra Balananda Sangam (Centre, top).
6. Girls from Sugunihal Sanatana Girls' Secondary School (Hindi).
7. Kannada Sanga Group Girls.
8. Chief Minister presided over the function.
9. Students from Murthazavys Urdu High School.
10. Girls from A.B. Parakh Gujarathi Vidya Mandir.
11. Punjab Association Adarsh Vidyasala girls.

COUNTRY'S ECONOMY

An Appraisal



SRI T. T. KRISHNAMACHARI,
Union Finance Minister.

In a broadcast talk to the nation in the middle of July 1965 the Union Finance Minister reviewing the current economic situation of the country said that the devaluation of rupee is no answer to our present balance of payment difficulties.

"Many of you have perhaps heard or read a great deal in recent weeks about our current economic difficulties. When so much is said and written about our credit policy, the price situation, import policy and above all, our foreign exchange stringency, we consider it our duty to take the country fully into confidence.

Foreign exchange reserves

I would, however, like to make it clear at the very outset, that I am not going to make any startling announcement.

Foreign exchange difficulties have been with us now more or less continuously for a number of years; and it is only natural for our people to inquire why we run into a critical position in this regard from time to time. The plain but honest answer is that the requirements to meet our imperative needs including those of defence which have been superimposed on our developmental effort have been larger than the resources available to us. In our individual lives we all find that we cannot spend more than we earn without running down our cash balance. As a nation also, we cannot spend more than we produce or obtain under aid without running down the nation's cash balance, which is the amount of foreign exchange reserves we have at any given time.

The foreign exchange reserves which were built up by the deprivation and want which our people had to undergo during the second World War were used for post-war reconstruction and development during a

period when foreign aid was not available to us in any significant measure. At the beginning of the Third Plan these reserves were hardly sufficient to help us tide over the normal fluctuations in our trade fortunes. The Third Plan, therefore, did not envisage any drawing down of reserves over the five year period. At the end of the first three years of the Plan, our reserves were in fact at virtually the same level as at the beginning of the Plan, but this was possible only because we increased our indebtedness to the International Monetary Fund during this period.

Unforeseen Exigencies

The year 1964-65 turned out to be a difficult one for our balance of payments. Exigencies of the food situation in the country during these months compelled us to undertake larger imports of food and fertilisers, and our outlays of foreign exchange on defence account were also on the increase. Besides, bearing in mind the urgency of increasing industrial production and taking into account the rise in prices abroad, we had to allocate last year a significantly larger amount for imports of raw materials and components than during the earlier years of the Third Plan. Our expectation was that the rising trend in exports would continue during 1964-65 and would offset the outgo under larger import commitments.

In actual fact, export earnings in free foreign exchange did not increase in 1964-65. The world price for some of our exports such as sugar fell sharply and we had to reduce the quantity of some of our exports in view of domestic shortages. The net result was

that our reserves declined from 188 crores at the end of March 1964 to Rs. 116 crores by the end of March 1965, i.e., by Rs. 72 crores in 1964-65. In view of this you will recall that we entered into a stand-by arrangement with the International Monetary Fund for \$ 200 million last March. As against this, our repayment obligations to the Fund itself amounted to \$ 175 million between March 1965 and March 1966. Over the current year, therefore, we have to live within our own export earnings and such foreign aid as is already in sight and as may be forthcoming.

Import policy

As most of you are perhaps aware, the Prime Minister ordered a ban on the issue of import licences during May and June so that the import policy for the current year could be announced and implemented only after the most careful and realistic assessment of foreign exchange availability and outgo over the year as a whole. I know that the import policy that we have decided upon, both for the public sector and the private sector, for established importers and actual users, is very stringent indeed. In order to mitigate the constricting effects of this, however, we propose to allocate as much of aid and rupee resources as possible for raw materials and components required for industrial production.

We are also trying to increase the export of specific items where demand abroad is brisk. In order to expedite the bringing in of export earnings and to eliminate the scope for malpractices, import entitlement licences against exports will now be given only against actual surrender of foreign exchange. We have also announced today the rates at which tax credit certificates will be granted for a number of export products. It is only as these efforts succeed that it would be possible to allocate more resources for sustaining industrial production. I should like to make it clear also that we are subjecting import on Government account against free foreign exchange to the same rigorous scrutiny. Barring food and fertilizers, all Government imports against free foreign exchange this year are being permitted on a much smaller scale than last year.

I can well appreciate that industry and trade will be sorely disappointed over this stringent import policy. But I would like to make an appeal to our technicians and industrialists that they should accept the challenge of our present needs and make even more vigorous efforts to increase the production of items in regard to which we have hitherto been dependent on imports.

The measures that I have already referred to are calculated to produce a better balance in our external accounts over the current year as a whole. Meanwhile, the decline in our reserves during the past few weeks seems to have attracted a great deal of attention in the press and elsewhere. I would, therefore, explain to you the reasons for the recent pressure on reserves. A decline in reserves during April-September is normal as our exports are seasonally low during these months. Making allowance for this, export earnings during April, May and June have not been too disappointing. On the other hand, debt repayments during the past few weeks have been particularly heavy. Import payments against licences already issued have also been running high. This may well reflect a trend towards quicker encashment of old licences in anticipation of a stringent import policy. While this phenomenon carries within it the seeds of future improvement we have to counteract any undue tendency for quicker utilization of import licences; and that is why we have introduced the advance deposit scheme against imports.

It has been said that in our present difficulties we propose to declare a moratorium on our debt payments. I would like to make it clear that Government have no such intention. We shall meet our debt obligations as indeed all our obligations. Of course, in seeking long term assistance from friendly foreign countries and international institutions we shall ask them to take our debt obligations into account as has been done in the past; but there is absolutely no question of any default on our part.

Question of devaluation

Some of you have perhaps also come across the suggestion that our balance of payments difficulties will be cured by devaluation of the rupee. Government have considered this question most carefully and are firmly of the view that devaluation is no answer to our problems. I shall briefly tell you what our reasons are.

First and foremost, devaluation is no answer to our basic and immediate problem which is that of living within our means. Indeed, it might well serve as and opiate by creating the impression that by taking what is generally considered a drastic action we have really done all that needs to be done to correct the imbalance in our external payments.

Over the long-run also, devaluation is not the best means of giving the necessary impetus to export promotion and import substitution. Essentially, our

problem, here is that of enlarging the base of domestic production and this task may well receive a set-back by a sharp, sudden and indiscriminate increase in the price of even those imports which cannot conceivably be produced at home in the immediate future. This is not to say that selective increases in import costs cannot give a stimulus to import substitution. We ourselves have recognized this in the selective increases that we have made in our import and excise duties over the recent past. But what devaluation implies is, as I have said, a sharp sudden and across-the-board increase in the price of ALL imports.

Selective approach

On the side of exports also, our structure of production and exports is such that a selective approach is preferable to a general one. There would be little point in lowering the prices of exports such as jute or tea where demand abroad or supply at home is inelastic. I should think that the same is true even of invisible earnings like those from tourism. On the other hand, our newer products like engineering goods might need subsidies on a discriminating basis. It is this kind of selective approach that we have been pursuing, and we can extend and refine it from time to time to the extent necessary in the light of changing circumstances. But to think that we can do away with the necessity of a discriminating approach to the problem of export-promotion and import-substitution

is tantamount to assuming that the economy has already arrived at that stage of development and technology where structural rigidities are no longer relevant, which is not true.

Let me then say this in conclusion. Government are determined to restore strength to our balance of payments both in the short and the long run by selective deployment of the instruments we have already forged. Situated as we are a greater sense of discipline and determination will be required over a period of years to avoid recurrence of similar crisis. It must be reflected continuously in our budgetary and credit policies and indeed in the shape and size of our plans for development. We do not propose to be deflected from this basic endeavour by enticing but nonetheless illusory short-cuts. It is never a day too soon for a nation of 470 million people to begin to rely essentially on its own strength and genius. And it is my earnest hope that our present difficulties would instil in all of us a new sense of purpose and determination in our struggle for economic independence.

We have in the past faced greater difficulties with courage and fortitude. I have no doubt that once the essentials of the problem are realized, people of all classes will display the discipline and determination required and will co-operate wholeheartedly with the Government in our endeavour to tide over the country's difficulties.

BIFURCATION OF SALEM DISTRICT

The Government of Madras have decided to implement the scheme of bifurcation of Salem district with effect on and from 2nd October 1965 and they direct that the Salem district will be divided into two districts, namely, Salem district and Dharmapuri district; and will be divided into two following the natural boundaries, viz., the Thoppiar river and Eastern Ghats.

The seven taluks of Salem, Attur, Rasipuram, Namakkal, Sankari, Tiruchengode and Omalur will constitute the Salem district; and the four taluks of Hosur, Krishnagiri, Dharmapuri and Harur will constitute the Dharmapuri district.

Production technique AND EMPLOYMENT OPPORTUNITY

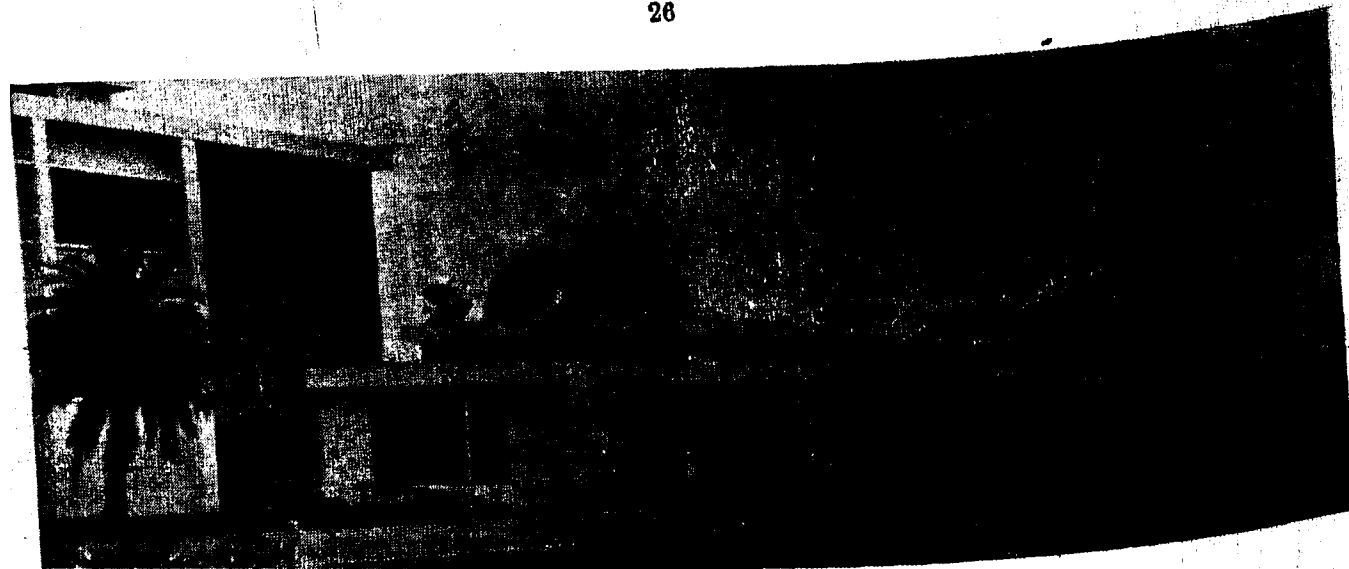
SRI D. SANJIVAYYA,
Union Minister for Labour and Employment.

Stupendous efforts for the promotion of productivity in the industry were the pre-requisite for expanding and promoting trade, for increasing employment and for providing enduring improvement in the living standards of the working class. In the greater turnover that modernisation must bring in its wake, employment opportunities would eventually increase, and not diminish. No misgivings, therefore, should persist in worker's mind.

The industrialists should grasp the vital elements of productivity improvement and simplification of methods and techniques, elimination of wastage of material, promotion of productivity consciousness amongst the workers through training and help surmount psychological barriers through a patient process of education.

The advantages of higher productivity should be obvious to any reasonable mind. The question has a special urgency in our country at the present stage. We have put through two Plans of economic development and are nearing the end of the third. We propose to complete many more to make India an industrially advanced country. We want to provide more and more amenities to our workers—give them better wages, better social security benefits, better housing and better education. We want to find employment for all the many millions who are now without jobs. We want to expand our export trade so that there may be some relief from the chronic foreign exchange difficulties in financing our Plans. This means that our industries must run more efficiently. We must get more and more out of every unit of capital and labour. In short, productivity in Indian industries must go up if industry is to expand, if labour is to have a better standard of living, if the problem of unemployment is to be solved and if our foreign markets are to be maintained and expanded.

Yet, in spite of these obvious facts, misgivings about the productivity drive seem to persist, particularly in the minds of workers. To me, higher productivity means simply this that every man-hour of work should result in greater output. In other words, productivity is more and more production with less and less effort. It is efficiency. It aims at getting the best out of industrial and human resources. If it is meant more intensive work and increase in workload, the misgivings of workers would be understandable. If it meant workers in large numbers being rendered surplus one could also understand their hesitation. But it occurs to me that it need not mean either. Modernisation of existing plants does not necessarily mean rendering labour surplus. In the greater turnover that modernisation must bring in its wake employment opportunities will eventually increase rather than diminish. Secondly, a rational re-arrangement of work or doing it in a more methodical manner need not mean an increase in workload. In fact, it might even make work less irksome.



A view of the Regional Labour Institute recently opened in Madras.

To a layman many simple methods for promoting productivity suggest themselves. I think the upkeep of machinery, tools and equipment is a vital element in the improvement of productivity. And I do not suppose that there is no room for improving the present system of maintenance of machinery and equipment in any of our established industries. If greater attention is paid to this simple matter the interest of workers will, in no sense, be adversely affected.

Increasing productivity

Take again the question of improving work methods and processes. I would concede that in the name of improvement of work methods and processes, workload can be intensified. But it is equally possible to introduce improvements without adding to the intensity of workload.

Then, again, the question of handling of material and prevention of wastage comes to my mind. If managements keep a sharp eye on this and the workers co-operate, quite a lot of cost can be cut by preventing wastage through better handling of material. This also is a very simple thing which should not affect the interest of the workers in any way.

Improve worker skill

It has also been found that improvement in the plant lay-out and better organisation of production and work on the site as well as on the bench have led to better results in terms of yield. Now, this is an aspect which can be taken care of without in any way affecting the interests of those who are employed. As a matter of fact, improvement in plant lay-out and work re-arrangement might make work more satisfying to the workers. While improving productivity it may also make work more congenial.

There is also the question of simplification of processes, standardisation and greater specialisation. If the management makes continuous efforts and experiments in this line, I think, there is considerable room for increasing productivity without any resistance from the workers' side.

Allied to all these processes is the question of skill development of the workers through education and training and I think in a developing country like ours the industrial establishments must not only be units of production but also function as centres of training and education. In the long run—or perhaps even in the short—any efforts made by the management in this direction will be rewarded by increase in output and improvement in the efficiency of its employees.

Basic to all this is improvement in management techniques. There has been a growing interest in developing new management techniques and quite a few training institutes have also been set up. But there is no denying the fact that many of our industries are still stuck up in routine. It is not the administrative machinery of Government alone which suffers from this peculiar sickness. Routine-mindedness is a common phenomenon which affects even industries even though the so-called omnipotent profit motive is there to drive them on.

Productivity Consciousness

It is not for me as a layman to suggest what you should do by way of promoting productivity consciousness amongst the workers as well as the employers. Though it is distinctly in the interest of the employers to see the curve of productivity rise, it does not automatically prove that they will always go in for new ideas that you might offer to them.

I am sure in your pioneering work—I call the productivity movement in India a pioneering movement at this stage—you must have seen that even methods which seem to you clearly of advantage do not always find an easy acceptance. The reason is not far to seek. Because even on the employers' side there is a mental inertia and hesitation in going in for new methods. One reason is that managers as a professional class have yet to emerge in India. And many of the persons who run industries in India have a tradition which is either feudal or financial—a tradition not always ideal for running industries on modern lines. I am prepared to concede that many among the management personnel in the public sector undertakings also suffer from a hang-over of the civil service from which they have been drafted.

Psychological barriers

On the workers' side the typical industrial worker in India also is hesitant to go in for anything that is new. But those of you who are engaged in this delicate task of promoting new ideas must understand these hesitations and fears. It is only through a patient process of education that you can break the mental barrier to the acceptance of new methods which are clearly advantageous to all.

All mental habits die hard and the psychological barrier is the most difficult to surmount. We have been reared far too long in the school that thinks only in terms of conflict and opposition between the interests of employers and workers. Any productivity drive is thought of in terms of increase in workload and creating problems of redundancy, without any corresponding benefit to the working class. In the context of the past this may be partly true. But to-day India is creating its own history and it is our business to ensure that the bitterness of industrialisation that to the West has seen may not repeat itself in India. We have pledged ourselves to the realisation of a socialist order of society through democratic means and we are proceeding towards our goal in a planned manner.

Productivity Gains

It is the task of the productivity movement to disabuse the minds of workers and enlist their co-operation. Workers must be convinced that the productivity drive is mainly in their own interest and the gains from higher productivity would be shared equitably between capital, labour and the community as a whole. It is through constant education and demonstration of benefit that our habits of mind will change and co-operation will be forthcoming.

I consider this to be basic to the success of the productivity movement and this may be fulfilled best through local efforts at the unit level.

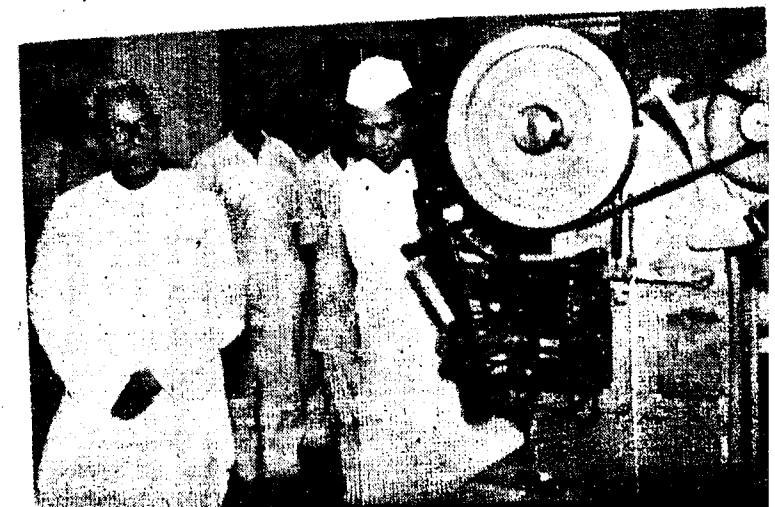
Co-ordination and Co-operation

Thus it would appear that improvement in productivity is as much in the hands of those who manage as those who are managed. If those who manage are selfishly inclined, the productivity system suffers and the economy suffers. If those who are managed, co-operate with those who manage to make a given industrial establishment more productive, the economy as a whole benefits. The employer gets more production and more profits; the stock-holder better dividends; the worker higher wages; the consumer lower prices—and all this helps the economy.

Co-ordination therefore is essential in any productivity campaign; co-ordination between management, labour and capital investment. While research and development, improved methods and equipments, technological advances and managerial skills are essential to meet the productivity challenge they would be dust and ashes if not supplemented by the willing co-operation of labour. This is particularly so in less industrially developed countries where it has been seen again and again that spurts to productivity stem more from labour efforts than from managerial ingenuities. In the last analysis in these countries productivity is not so much how to get more from machinery and material as how to get more from men. Good industrial relations is therefore a condition precedent to any attempt at improving productivity. Similarly schemes like training within industry and workers' education can also help promote the productivity idea.

[Excerpts from the address delivered at the Seventh Session of the Bombay Branch of the National Productivity Council on 3rd July 1965.]

Chief Minister inaugurated the Regional Labour Institute at Guindy, Sri D. Sanjivayya, Union Labour Minister, presided. They are seen going round the Institute after the function.



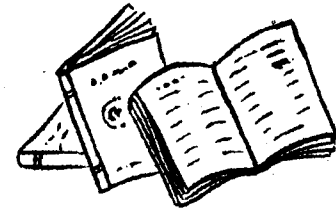
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Role and Functions of THE STATE INSTITUTE OF EDUCATION



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Madras has stolen a march over the other States in the field of education and it is expected that about 92 per cent of the children of the age group 6—11 will be at school by the end of the Third Plan as against a target of 87 per cent envisaged in the Fourth Plan for the country as a whole. The draft outline of the Fourth Five-Year Plan of Madras State states that "The national directive of free and compulsory education will be fulfilled throughout the State by the end of the Fourth Plan".

With such a vast expansion in educational facilities it is imperative that the quality of education too is toned up according to the needs of a fast developing society. It is in this perspective the role and functions of the State Institute of Education assumes greater importance. The establishment of this institution is an important milestone in our education policies.

The Government of Madras have sanctioned the establishment of a State Institute of Education in Madras. This is one of the fifteen similar institutions set up in all the States of the country. Government of India have offered cent per cent assistance outside the State Plan Ceiling for all expenditure incurred in respect of the State Institute subject to a maximum of Rs. 2 lakhs per year. The State Institute of Education has been started from 1st July 1965 as an independent and separate institution under the direct control of the Director of Secondary Education.

Expansion of education

Great and unprecedented has been the expansion of educational facilities at all stages in Madras State during the last few years. During recent years there has been in evidence an increasing hunger for education everywhere. Almost every habitation with a population of 300 and above has a primary school within a distance of one mile. The number of elementary schools has increased from 15,303 in 1948-49 to 30,383 in 1964-65.

The increase of about 15,080 elementary schools in Madras State in less than 15 years is a noteworthy feature. Phenomenal progress has been achieved under enrolment too. The enrolment of boys in the age group 6—11 has increased from 14.3 lakhs in 1954 to 25.7 lakhs in 1964 and girls from 7.7 lakhs to 18.6 lakhs. The enrolment of boys has thus increased by 74 per cent and that of girls by 150 per cent. At present the percentage of boys in Standards I to V to the total number of school-age children 6—11 in the State as a whole is over 100 per cent and that of girls 75.2 per cent. In Standards VI to VIII, the enrolment has increased from 2.92 lakhs in 1956-57 to 9.86 lakhs in 1963-64.

In the field of Secondary Education too, the progress has been marked. In the last 10 years, the number of Boys Secondary Schools has increased by about 1,050 and the Girls Secondary Schools by 183. The number of Secondary Schools has increased from 440 in 1947 to 2,100 in 1965 and the number of pupils from 2.36 lakhs in 1947 to 12 lakhs in 1965. It is

gratifying that the Government of Madras have made education in the State up to Standard XI completely free irrespective of the means or Community of the parents.

There has been increased opportunities provided for the training of Teachers also. In the last 10 years the number of seats in Training Schools has been increased by about 50 per cent as shown below :—

	1947	1954	1964
Number of Training Schools for Men.	32	56	77
Number of Seats	2,000	4,100	6,100
Number of Training Schools for Women.	41	51	62
Number of seats	1,600	3,000	4,400

The Government of Madras have steadily increased their expenditure on Education every year which is a good sign. They do believe that Education is an investment for the future. From Rs. 1,173 lakhs in 1957-58 (19.8 per cent of the Total Revenue Expenditure) the expenditure has increased to Rs. 13,152 lakhs in 1963-64 (22.6 per cent of the Total Revenue Expenditure of Government).

Qualitative Improvement

Thus it is seen that Quantitative Educational Expansion has been achieved in our State. Now it is time therefore that qualitative improvement is also gained in our Schools. This matter has been engaging the attention of the Ministry of Education, Government of India and other State Governments for some time. But it was the Study Group on the Training of Elementary Teachers in India which examined this problem and recommended that as a first step in this direction an Institute of Education should be set up in each State.

It is realized on all fronts that not only Education but 'Good' Education is the birth right of a free and Democratic Republic. The quality of Education should be of a high order. It is not useful if the number of schools is increased while the quality of Education imparted in them decreases. The people who are working in the field should accept new attitudes and skills and improve standards. They have to devise ways and means by which the quality of school education improves considerably. Quality has to keep pace with massive quantitative expansion.

As the University Education Commission reported :

"We must realize that experience needs to be supplemented by experiment before reaching its fullness and that a teacher to keep alive and fresh should become a learner from time to time. Constant outpouring needs constant intaking; practice

must be re-inforced by theory and the old must be constantly tested by the new."

It is with this aim that the State Institute of Education has been started. The State Institute is a new experiment. The fundamental role of the State Institute of Education is to bring about a qualitative improvement of school education from all points of view. As Sri J. P. Naik, Adviser on Primary Education, Government of India, has said, "The State Institute of Education may be described as the special unit created in the Education Department to look after all programmes of qualitative improvement of education".

Objectives

The following are the objectives of the State Institute of Education :—

- (1) To give an inservice training to all Inspecting Officers (dealing with elementary schools) and the staff of training institutions for elementary teachers in such a manner that every officer will undergo a total training of about three months in every five years of service ;
- (2) to conduct studies and investigations in the training of elementary school teachers in problems of Elementary Education in general and in the teaching of the Basic School subjects at the elementary stage in particular ;
- (3) to provide an extension service to all training institutions for elementary school teachers in the State ;
- (4) to produce literature (inclusive of teaching aids) for elementary schools and teachers ;
- (5) to provide an orientation training to the staff of training institutions for Elementary teachers and to Inspecting Officers of Elementary Schools when they enter upon their career ; and
- (6) to co-ordinate the work of the extension service centres in training institutions for elementary teachers.

Role and Functions

The workshop for the Principals and Vice-Principals of the State Institutes of Education held in New Delhi in 1964, defined the role and functions of the State Institutes of Education as follows :—

- (a) To provide an induction training course for persons who are appointed, for the first time, to work as supervisors of schools or as teacher educators ;

*The Report of the University Education Commission, Delhi, Government Printing Press, 1949, Vol. I, Page 96

†Workshop for the Principals and Vice-Principals of the State Institutes of Education—Part I—Recommendations—General Institute of Education—1964—Pages 3-5.



The members of the Education Commission constituted by the Government of India are discussing with the Chief Minister of Madras, who is incharge of education.

- (b) to provide in-service training programme to supervisors of schools or teacher educators in accordance with the programme approved by the Education Department from time to time, in such a way that every officer would have three months in-service training in every five years of service ;

- (c) to organize conferences and seminars for senior officers (district level and above) of the Education Department from time to time, at least one annual seminar or conference of about a week's duration being obligatory ;

- (d) to organize conferences or seminars for non-official office-bearers of local bodies, connected with the administration of education ;

- (e) to conduct an extension service centre for elementary schools in the neighbourhood and when authorised to supervise other extension centres for elementary schools established in the State ;

- (f) to provide extension services to training institutions for elementary teachers ;

- (g) to organize research in all matters relating to school education, either directly through the staff of the institute or by collaboration with other educational institutions and agencies ;

- (h) to improve the programme of teacher education in the State through such measures as may be

approved by the State Department of Education from time to time and in particular, to implement the programme which is being proposed by the Ministry of Education for the establishment of State Boards or Councils of teacher education ;

- (i) to provide correspondence courses for teachers—either for clearing the back-log of untrained teachers or for further professional improvement of trained teachers ;

- (j) to produce educational literature including the conduct of Journals ;

- (k) to evaluate such educational programmes as may be selected for the purpose by the State Education Department from time to time ;

- (l) to assist in the revision and improvement of text-books ;

- (m) to conduct experiments with a view to improvement of education ;

- (n) to improve curricula and teaching methods and to devise improved teaching aids ;

- (o) to educate public opinion in the State on the need for expansion and qualitative improvement of education ; and

- (p) To assist the State Education Department in the preparation and implementation of educational plans.

The Main Functions of the State Institute of Education can be broadly summed up as (1) Research, (2) In-service Training, (3) Extension work and (4) Publications.

Fields of Improvement

One of the Important functions of the State Institute of Education is to Improve Supervision, Inspection and Educational Administration. Inspectors also need in-service Education in order to discharge their responsibilities in the most appropriate way. Their attitudes and methods have to be changed for the better. Research and Publications have to be undertaken to devise methods by which their efficiency could be improved. The system of Inspection, as it is, has to be examined with a view to suggesting improvements. Periodical Conferences, Seminars and Training Courses are needed for Educational Administrators. Guidance can be given to the newly appointed Inspectors of Schools. Information about the problems in the field can be collected, studied and suggestions given for their solution.

If the quality of School Education has to be improved the quality of Teachers should be improved. Hence the qualitative improvement of Teacher Education is also necessary. This is an important responsibility of the State Institute of Education. A survey of the facilities provided, the methods followed, evaluation done and practical activities carried on in training schools for elementary school teachers may have to be undertaken. Teacher Educators will also have to be given in-service Education by the State Institute of Education. Extension Work and experimental



Chief Minister Sri M. Bhaktavatsalam inaugurated the evening College for Women at Queen Mary's by cutting a cake.

work including publications for teacher training schools should also be done.

The Improvement of instruction in Elementary Schools is the most important responsibility of the State Institute of Education. Problems of Basic and Elementary Schools will have to be studied and suggestions made for improvement. Steps should be taken to reduce wastage and stagnation in elementary schools. Matters of discipline, Citizenship Training, Health, and Teaching of the various subjects have to be studied. Hand-books will have to be produced for teachers. The State Institute of Education will work for the improvement of curriculum, teaching methods, text-books and teaching aids.

Research and Evaluation

The State Institute of Education should attempt research and evaluation in the Educational field which will directly promote qualitative improvement of school education. Research work will be "action-oriented" and productive of quick results. Surveys, studies and investigations can be undertaken. A strong Research wing will be built up. The State Institute of Education can assist in the preparation and implementation of plans and schemes, both short-term and long-term. The State Institute of Education has also the function as a clearing-house for information in the State. Basic data and Statistics on the State should be readily available here. It can also be a public relations office for the Department and Educate public opinion. Publications including News letters and Journals for teachers should be attempted. The State Institute of Education has the opportunity to Collaborate with other agencies, Inspectors and Teacher Educators in the field. The State Institute of Education has to keep in close touch with NCERT, Ministry of Education, New Delhi, Department of Teacher Education and Other State Institutes of Education.

In order to make the State Institute of Education effective it is necessary to assign as high a status as possible to the State Institute of Education. The Workshop of the Principals and Vice-Principals of the State Institute of Education held at New Delhi in 1964 therefore recommended that the State Institute of Education should function directly under the Director of Public Instruction as an Integral part of the State Department of Education. The Institute will be guided in the formulation and implementation of various tasks towards qualitative improvement by a high level Advisory Committee consisting of the Director of Secondary Education as Chairman, the Principal as Secretary, representatives from the NCERT and the Ministry of Education and Non-Official members.

The State Institute of Education is the Academic Wing of the Directorate of Secondary Education. It may also be termed as the "Improvement Wing" of the Education Department and not an institution outside the Department. While administrative matters are dealt with traditionally in the administrative wing of the Directorate of Secondary Education, non-administrative academic matters concerning development and qualitative improvement would become the responsibility of the State Institute of Education. The Administrative department cannot be rightly expected to look to the qualitative improvement of institutions or personnel. It is therefore advantageous that the officers in the State Institute of Education will be comparatively free from the burdens of routine administration and they will be free to devote their best time towards improvement of standards in education and contribute to educational progress. Such an academic wing is very necessary in the field of education just as we have in the world of Engineering and Medicine.

Special units

It follows naturally therefore that several functionaries and other departmental agencies like the Audio-Visual Education Section, Institute of Science, Co-ordinators for Extension Work, the Science Consultant, Research Bureau, Vocational Guidance Bureau and Evaluation officers, functioning in isolation as separate units will have to be, in process of time, brought together to function under the aegis of the State Institute of

Education. This will result in integration and co-ordination of all educational activities with the purposeful endeavour of planned action towards improvement of School Education.

The State Institute of Education, Madras has to maintain a High Standard of quality in its own work so that it can bring about qualitative Improvement of Education. It is not quantity but quality that matters to-day. The State Institute of Education forms part of a Nation-wide movement. It needs the Co-operation and Good will of all official and non-official agencies concerned with furthering the noble cause of education in our State. The State Institute of Education has been started with great faith and missionary spirit and there is no doubt that, given the facilities, the Institute will succeed in the mission entrusted to it. As Sri M. C. Chagla, Union Minister of Education, said while welcoming the establishment of State Institutes of Education, in the Workshop for Principals held at Delhi,

"A hunger for education has been created in the masses so that further expansion will continue more or less as a matter of course. What is important in the present situation therefore is an emphasis on the improvement of quality. It is from this point of view that the State Institute of Education are established".*

* Workshops—For Principals and Vice-Principals, op. cit. p. 29.

NEW ADDITIONS TO MADRAS GOVERNMENT MUSEUM

Among the many schemes that were recently implemented in the Government Museum, Madras, since 1959, the copying of murals from various representative temples in South India, is nearing completion. The scheme consisted of the preparation of exact copies of famous murals from eight temples. So far six places, namely, Chidambaram, Tiruvarur, Srirangam, Rameswaram, Thirumalaipuram and Tiruparankundam have been covered and select examples of mural paintings have been copied from them. Murals from two more places, Thirumalai and Kanchipuram are expected to be copied, this year.

Of the above six temples, copies from Chidambaram and Srirangam have been suitably framed and they have been newly displayed in the Picture Gallery of this Museum. The Chidambaram murals depict Siva at Kailas, the meeting of Vishnu and Siva, on the eve of the developments in Tarukavana, Vishnu as Mohini Avatar and Siva as Bikshatana. The Srirangam murals depict Vishnu with his consorts and the incarnations of Vishnu.

A few modern paintings by Krishna Reddy, Madhava Menon and Antony Doss have also been displayed for the first time in this Gallery.

Copies of murals from the famous Ajanta, Bagh, Sigiriya and Kerala monuments are already exhibited in the same gallery.



FREE PRIMARY EDUCATION IN KEERAPALAYAM PANCHAYAT UNION

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Deputy Inspector of Schools, Namakkal

The article is based on a thesis submitted by the author to the Annamalai University in 1964 under the title "Problems arising from the enforcement of Free Primary Education in Keerapalayam Panchayat Council area".

With a phenomenal increase in the enrolment of children year after year, especially after Independence, the need for simultaneous improvements in teaching facilities and aids is stressed in this article with particular reference to the education facilities available in the Keerapalayam Panchayat Union Council area.

Expansion of primary education and increase in the rate of literacy are dependent on provision of primary schools within easy reach of the home of every child. It was until 1957 only villages with a population of 500 and above were provided with primary schools. The Elementary Education Reform Committee (1954) recommended for provision of primary schools for villages with a population of 300 and above. Taking these two minimum requirements of population before and after 1957 the progress in provision of schools may be studied from the following table since 1911.

Period.	Number of schools opened.	Cumulative provision of schools.
(1)	(2)	(3)
1911 to 1920	2	2
1921 to 1930	31	33
1931 to 1940	9	42
1941 to 1950	16	58
1951 to 1960	24	82
1961 to 1964	4	86
	86	86

There was significant progress in opening of schools during the periods 1921-30, 1941-50 and 1951-60. This shows how the Madras Elementary Education Act, 1920, was responsible for the rapid progress and enormous opening of schools during 1921-30. The next important period is the Post-Independence period, 1951-60 when another set of large number of schools have been opened. This progress may be attributed to awakening among the mass got through Independence to the country, and to lowering the minimum population from 500 to 300 in 1957.

As per 1961 census, the population of this "Area" is 73,977 and it is spread in 79.63 square miles. A school is provided now on an average for a population of 860 people and for an area of .94 square miles. At a whole all the habitations with a population of 300 and more are served by a school either in the same habitation or within a mile.

Enrolment

The provision of a primary school in a given locality creates only an opportunity for the present to send the child to school. Whether the opportunity would be availed of and the child sent to school depends, to a considerable

extent, on parental attitudes to education and on their economic condition. The progress of enrolment may be studied with the following data:—

Year.	Enrolment.	Year.	Enrolment.
1950 ..	3,800	1958 ..	5,982
1951 ..	4,081	1959 ..	6,826
1952 ..	4,092	1960 ..	7,361
1953 ..	4,327	1961 ..	7,401
1954 ..	4,588	1962 ..	9,132
1955 ..	5,078	1963 ..	10,016
1956 ..	5,425	1964 ..	10,452
1957 ..	5,763		

The enrolment has steadily increased from 3,800 in 1950 to 10,452 in 1964. In a period of 15 years about 6,000 children have been additionally enrolled. Hence the post-Independence period is a period of tremendous progress in enrolment. As per 1951 census, the total population of the area was 66,171 and the total enrolment in primary schools was 4,081. The percentage of enrolment works out to 6.1. As per 1961 census, the total population of the area was 73,977 and the total enrolment in Primary schools was 7,401. The percentage of enrolment works out to 10. The percentage of enrolment works out to 13.8. The table given below shows how enrolment has improved to nearly 95 per cent of school-age population.*

Within a period of 15 years the enrolment has risen from 6.1 to 13.8 per cent of the population. It is estimated, of late, that 14.5 per cent of the population falls under the age-group 5-11. Hence the lee-way to make up is only .7 per cent only. The progress so far achieved emboldens us that it is sure to reach the hundred per cent enrolment in 1965-66.

Provision of Schools

From the educational survey register and habitation register 1957 of South Arcot district it is seen that at present there is no habitation whether big or small without a school in a radius of one mile. However, during the period 1961-64 four new schools have been opened. It is obvious that these new schools and any more new schools that may be opened in future will be superfluous and hence there may not be any chances



Madras has achieved a creditable record in spreading Free Primary Education. In the picture are two children with their kits going to school.

for them to develop into a full school with adequate strength in students and staff.

The census of 1951, the basic document with which the survey had to start, enumerated 71 villages and 61 hamlets thus making the total of 132 habitations in "Keerapalayam Panchayat Union area". Of these

* TABLE

Year.	Total population.	Enrolment.	Percentage of enrolment to population.	Estimated School-age (5-11) children at 14.5 per cent to population.	Percentage of enrolment to estimated school-age children.
1951	66,171	4,081	6.1	9,594	42.5
1961	73,977	7,401	10	10,726	69
1964	75,608	10,452	13.8	10,963	95.3

132 habitations 35 are main villages without any hamlets attached to them. The remaining 97 habitations consist of 36 villages and 61 hamlets.

The distribution of all the schools in this area is as follows:—

Number of habitations.	Number of schools provided in each.
1	3
9	2
65	1
57	..

This kind of unequal distribution of schools seems to have occurred due to opening of Harijan Welfare Departmental Schools or Schools by private managements intended for Harijan population. All these departmental or aided schools are located in Harijan localities. None of the schools in plural school areas is self-sufficient in enrolment, staff and equipment. This defect stands in the way of improvement of quality of education.

Wastage

A child admitted in Standard I should reach and complete Standard V to attain complete literacy. Hence every child who is withdrawn from school before reaching Standard V is considered to be a case of wastage. For the sake of convenience the cohort starting in a particular year in Standard I following it up to Standard V has been taken up through five succeeding years. But even this cannot be said to be an actual estimate of wastage because cases of stagnation also comes into it. The table I given below studies wastage for three sets of pupils who were in Standard I during the years 1950-51, 1955-56 and 1959-60 and reaching Standard V in 1954-55, 1959-60 and 1963-64 respectively.

The diminution of strength of Standard I (1950-51) when it reaches Standard V (1954-55) is 54 per cent in total and it is 48 per cent for boys and 65 per cent for girls. The diminution in strength of Standard I (1955-56)

when it reaches Standard V (1959-60) is 59 and for boys alone 51 and for girls 70. The diminution of strength for the next set starting in Standard I in 1958-59 and reaching Standard V in 1963-64 is 58 per cent. For boys 51 and girls 64. Hence it is steady for the last fifteen years. Steps are to be taken to reduce wastage.

A pupil who is required to spend more than a year in any one standard is regarded as a case of stagnation.

The table II given below reveals that nearly 23 per cent of children are reading in all Standards for two years and 1.7 per cent of children are reading in all Standards for three years. The situation is grave in the first and second Standard. This is because of premature admission, irregular attendance throughout the year.

Equipment

The minimum requirements of teaching equipments with reference to the staff of the school are—one black board per class and one set in each of geography maps, physiology charts, mathematical tables and materials, picture cards, flash cards, story telling charts and a globe. Taking all these as minimum requirements of each school, no school is found to have a satisfactory position. Apart from teaching aids, furniture for teachers and pupils are also insufficient in majority of schools. The studies on requirements of teaching aids, furniture, etc. in equipment of primary schools show that the total cost of equipping a primary school adequately would come to Rs. 100 per child. This would include furniture, teaching aid, craft equipment, books, materials for games, sanitary facilities and utensils for school meals. Even if equipment is restricted to a bare minimum of essential items, the cost per child will be about Rs. 50. Assuming that the present availability fulfils the needs of 10 per cent of existing enrolment, it will be necessary to provide equipment for a total enrolment of 9,000 children for the present immediately. It works out to Rs. 4,50,000 at the minimum rate and Rs. 2,50,000 for the future additional enrolment.

TABLE I.
Standards reached in Succeeding next years.

Starting year.	I			II			III			IV			V		
	B.	G.	T.	B.	G.	T.	B.	G.	T.	B.	G.	T.	B.	G.	T.
1950-51	483	237	720	366	184	550	322	116	438	299	93	392	251	80	331
1955-56	692	511	1,203	594	393	987	510	262	772	452	203	655	347	148	495
1959-60	1,024	764	1,788	789	589	1,378	742	429	1,171	615	302	917	490	275	765

TABLE II.
Stagnation for 1963-64.

	I	II	III	IV	V
Those who are reading for one year	2,028	2,228	1,501	1,170	922
Those who are reading for two years	1,152	541	344	207	181
Those who are reading for three years	103	36	32	5	2
Total	3,283	2,805	1,877	1,382	1,105

Fisheries Week



Fisheries Week was celebrated for the first time in India by the Government of Madras in July 1965. 1. Tableaux depicting the progress of Fisheries in Madras State which took part in the procession. 2. Chief Minister is inspecting the dishes prepared from fish. 3. Home Minister is talking to the gathering. 4. Fisheries Minister Sri G. Bhuvaram speaking to the gathering. 5. Fisherwomen took part in the sport competition conducted on the occasion. 6. Smt. Saraswathi Bhuvaram is distributing prizes to the winners.



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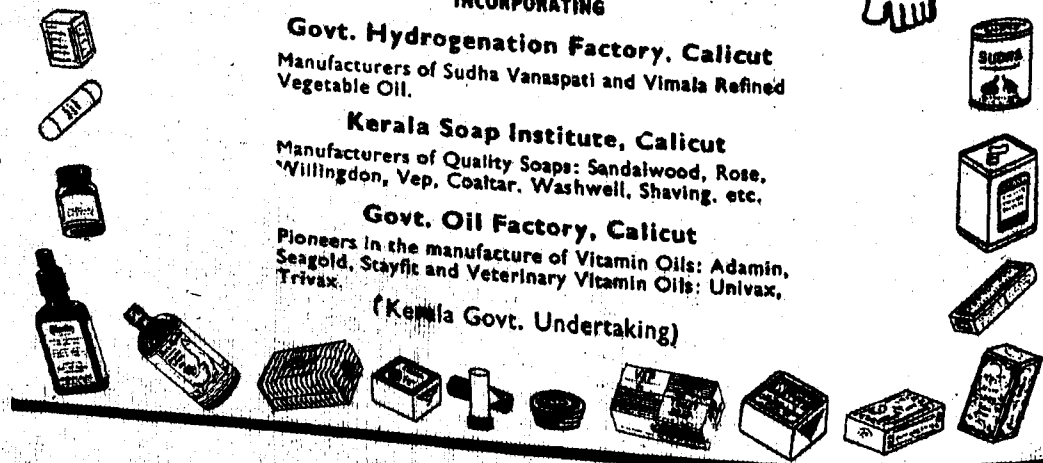
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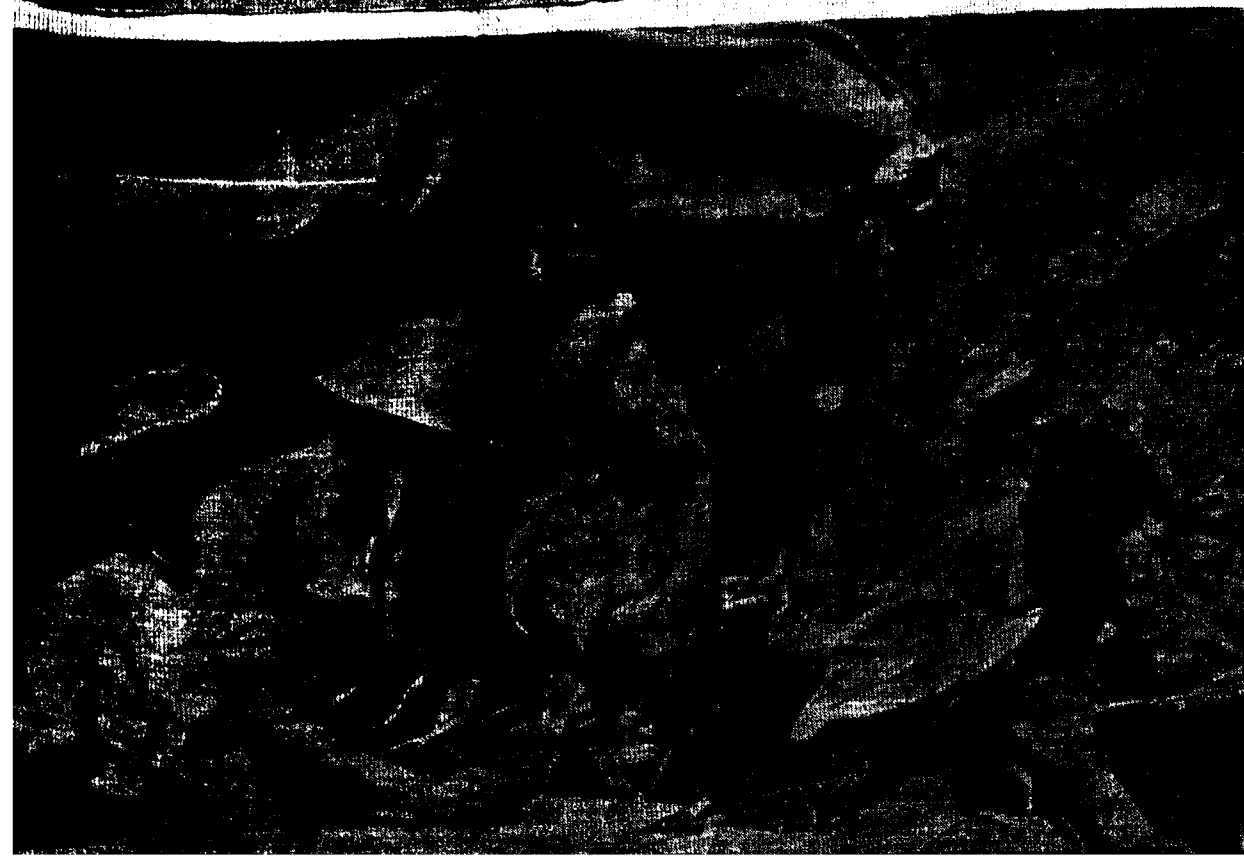
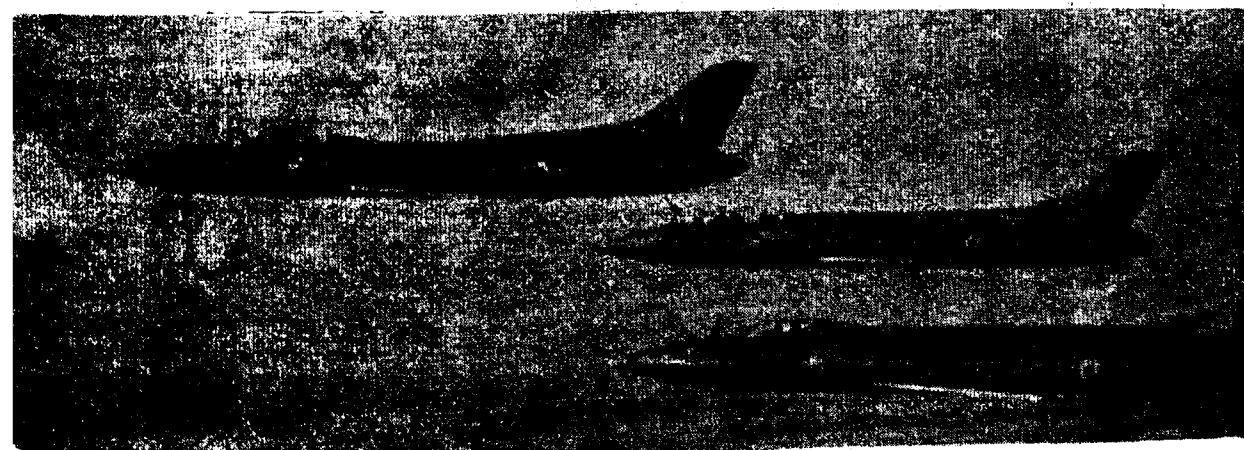
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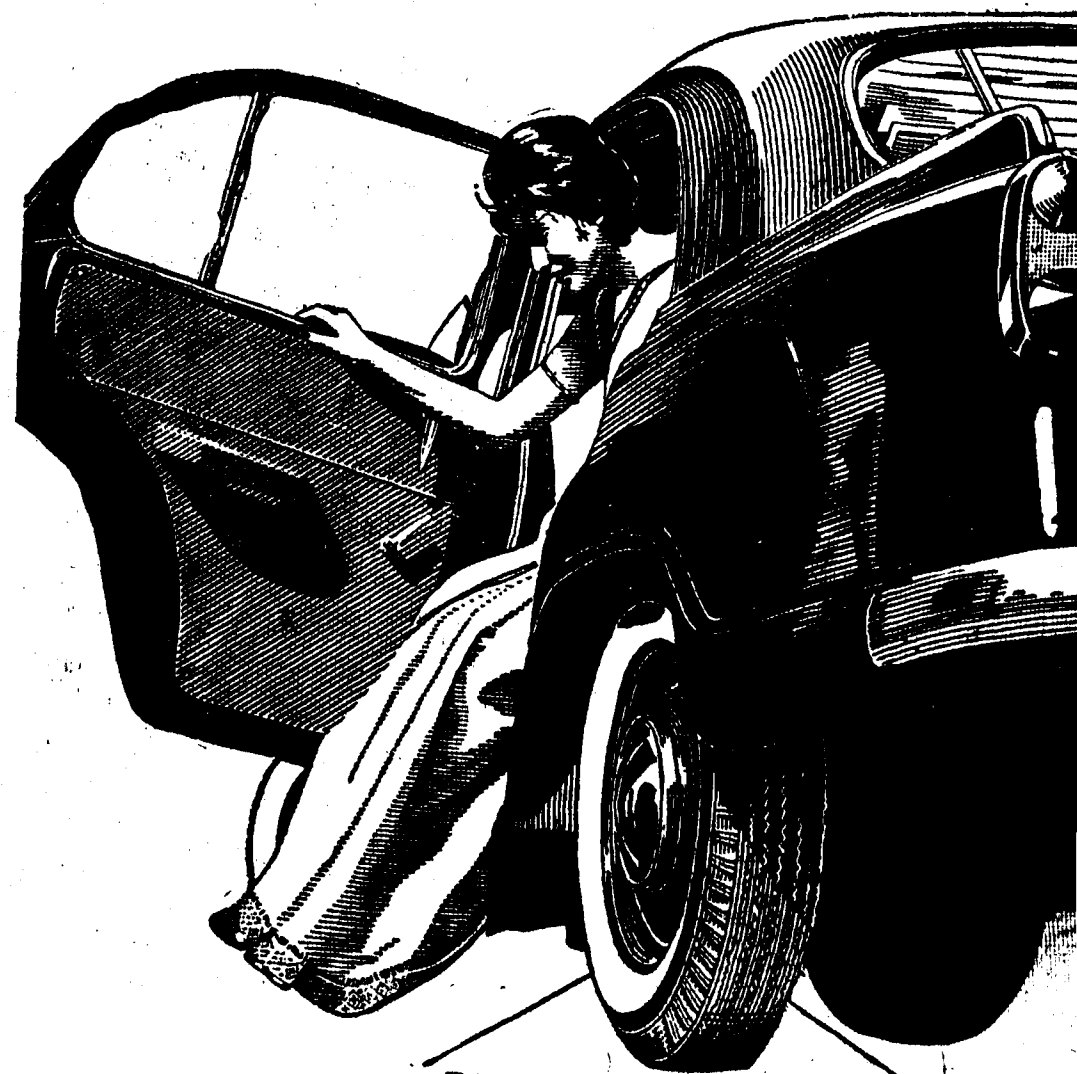
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GANDHIJI AND TAMILNAD

Gandhi travelled widely in Tamilnad. While in Tamilnad Gandhiji felt inwardly that he was with his former colleagues in South Africa. While in Madras his words flowed naturally and he seemed to bear the key to his future programme. During his tour of Tamilnad he has not failed to see two widows whose husbands had been shot during the South African struggle.

He had great affinity for the people of the Madras Presidency. He once wrote, "thanks to my South Africa work. I felt I had some special rights over Tamils and Telugus and the people of the South have never belied my belief".

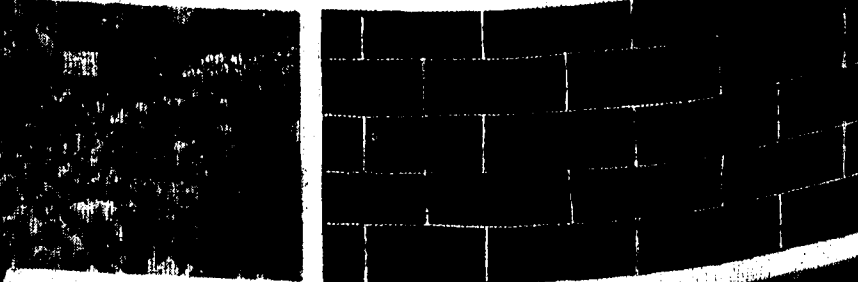
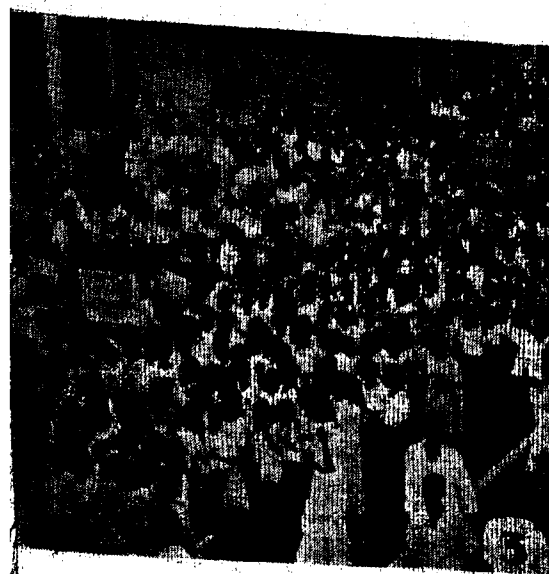
It was in 1896 Gandhiji visited Madras City for the first time and had the most enthusiastic audience. In Madras he got the help from Sri G. Parameswaran Pillai, the editor of Madras Standard and Sri G. Subramania Iyer of the Hindu.

Madras State can very well boast of intimate connections with Gandhiji and it was Tamilnad which made him "The half naked fakir". While Gandhiji was touring in Madurai District, he heard that there was not enough khadi to meet the requirements of all. On hearing this Gandhiji resolved that he would wear nothing more than a small piece of cloth until there was enough khadi to go round.

Gandhiji had great affinity to the Tamilians since he got full support from them in his passive resistance campaigns in South Africa. It was Gandhiji's experiment in South Africa that paved the way for the use of that weapon in India's freedom struggle. The Tamil immigrants in South Africa not only supported Gandhiji but some of them sacrificed their very lives during the campaign. Gandhiji paid a personal visit to the birth place of these "Thyagis" in Tamilnad.

More than any other State, Tamilnad has given unstinted support to Mahatma Gandhiji and strived its utmost in fulfilling his programmes.

An opportunity offered itself to Gandhiji to know intimately the indentured labour within four months of his starting legal practice in South Africa. A Tamil man in tattered clothes, head gear in hand, with two front teeth broken and his mouth bleeding stood before the young Barrister. Gandhiji was shocked to see this spectacle and persuaded him to put his turban on and behave like an equal. It was a new experience to the poor slave. Balasundaram, as this poor visitor was called, was serving his indenture under a well-known European resident of Durban. His master beat the helpless worker till he bled. Gandhiji sent for a doctor to secure a certificate and took the injured man to a magistrate. It was not Gandhiji's desire to get the employer punished but he wanted Balasundaram to be released from him. Like the slave, the indentured labourer was the property of his master. Gandhiji succeeded in transferring him to someone else. Balasundaram's case reached the ears of every indentured labourer as far as Madras and Gandhiji came to be regarded as their friend. They called him Bhai. A regular stream of indentured labourers began to pour into his office, and thus Gandhiji got the opportunity to know their sorrows intimately. What impelled him, however, to make a deep study of their conditions was the campaign for bringing the ex-indentured labourers under special heavy taxation.



1. A view of the procession of the Secretariat staff, which took part in the citizens' rally held at Marina on 9th September 1965.
2. Sri M. Bhaktavatsalam, Chief Minister, who presided over the rally, is addressing the gathering.
3. A view of the students' procession which rallied at the Marina on 12th September 1965 to condemn Pakistani aggression.
4. A student is addressing gathering.

No price is Too High To Pay for Freedom

CITIZEN'S DUTIES

1. To render all possible help and assistance for the defence personnel.
2. To increase the production of his factory.
3. To intensify efforts for increased production of agricultural and small-scale industrial commodities to make his State self-sufficient.
4. To avoid all strikes and lock-outs that may hamper production.
5. To maintain the price level of all essential commodities and curb the tendencies of hoarding and profiteering by conforming to the various legislative and other popular measures.
6. To maintain the supply lines of essential commodities.
7. To contribute generously in the form of money and gold for the war effort.
8. To inculcate the highest sense of duty and responsibility.
9. To join the various organizations set up for the defence of the country.
10. To prevent anti-social and anti-national activities of the fifth columnists.
11. To observe strict austerity in consumption of food, clothes and other essential goods and save for the National Defence Fund.
12. To avoid unnecessary travel so that more important and essential movement may not be hampered.
13. To keep up the morale of the people and prepare them for sacrifices.
14. To check rumour-mongering and to disseminate true and faithful news and information.
15. To join or help Citizens' Committee, N.C.C., Territorial Army and Lok Sahayak Sena and Rifle Clubs.
16. To pray for the victory of our Motherland in this struggle and set aside all differences of caste, creed or party.

MADRAS Information

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No. 10

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THIS MONTH'S COVER:

The epic valour and heroism displayed by our defence forces in fighting back the aggression of Pakistan and in maiming her striking power will constitute a golden chapter in the history of our nation. The whole country stands behind our armed forces who guard our freedom against mighty odds and great risks. This month's cover provides a window on the front line where our troops are keeping constant vigil.

Kashmir—Symbol of India's Secularism

DR. KARAN SINGH,
Governor, Jammu and Kashmir.

The fundamental issues in the present military conflict with Pakistan seeks to resolve is nothing less than whether or not India is to survive as a unified secular and democratic nation, declared (Dr. Karan Singh, Governor of Jammu and Kashmir in a broadcast from All-India Radio.)

Pakistan is at present a military dictatorship based on theocratic principles. It is an independent nation and we have no right to interfere with its internal political structure. Although as well-wisher of the people of Pakistan, we would naturally welcome an opportunity for them to demonstrate whether they prefer the present dispensation to a free and democratic system of Government. However, with regard to our own Nation, we are determined to maintain the fundamental principles of democracy and secularism upon which our Constitution is based. While we have no wish to impose our form of Government upon others, we are determined at all costs to prevent any such imposition upon ourselves.

Pak's demand untenable

The unity of this great nation of ours stretching from Kashmir in the North to Kerala in the South, from Gujarat in the West to Assam in the East is a prime necessity, if our freedom and progress are to be ensured. Any attempt at a further partition of the country on the basis of religion or for that matter on any other basis will have to be implacably resisted. Pakistan's demand that Kashmir because of its Muslim majority must break away from India, is, therefore, completely untenable. Apart from the fact that the State's succession to India is legally and constitutionally unassailable, the demand goes against the very bedrock of our polity, which postulates that religion is essentially a personal matter between the individual and the divine power that permeates the universe, while politics is an entirely different matter of political rights and responsibilities as citizens of a secular and democratic State.

India had for centuries cradled almost every religion known to history and in free India today millions of

people belonging to religions, other than the predominant Hindu faith, live in full freedom and equality. Indeed Kashmir Muslims constitute barely five per cent of the section of Indians who profess the noble Islamic faith. Our whole nation is a colourful tapestry made up of various religious communities living harmoniously together.

Secularism which is unequivocally enshrined in our constitution is a principle from which we cannot deviate without placing our entire social and political structure in the gravest jeopardy. It must also be remembered that once the principle of religious differentiation is applied to the Muslims of Kashmir, just because they happen to be geographically contiguous to a foreign country the whole fabric of unity will be disrupted. There will then be logically no reason why the same principle should not be applied to other religious minorities similarly placed. In addition, there may be latent fissiparous element which can then demand cessation on grounds other than religion. It is, therefore, no exaggeration to say that Kashmir is the keystone of the proud arch of Indian unity, subversion of which will have disastrous consequences for the entire sub-continent.

Unflinching faith in secularism

It is in this broader ideological context that the present hostilities with Pakistan must be viewed. They began with a massive invasion of Jammu and Kashmir from across the cease-fire line by thousands of armed infiltrators highly trained, fully equipped

MEANING OF BRAVERY

There is no bravery greater than a resolute refusal to bend the knee to an earthly power, no matter how great and without bitterness of spirit and in the fullness of faith that the spirit alone lives, nothing else does.

—Gandhiji.

and regularly paid by Pakistan. The invasion failed in its political objective because once again as in 1947 the people of Jammu and Kashmir displayed their unflinching patriotism and devotion to secularism and refused to be swept off their feet by communal propaganda. Nevertheless, it constituted a grave threat to national security and it was immediately countered by our Security Forces.

It soon became clear, however, that if our defence was to be ensured, it was essential that the bases from which the invaders were operating and the strategic passes which they used as points of ingress and egress must be brought under our control. For this purpose, we launched strictly limited tactical offensive across the cease-fire line resulting in the capture of the Haji Peer Pass and other strategic positions.

When Pakistan realised that as far as the infiltrators were concerned, its game had failed it launched a massive military invasion in Jammu across not only the cease-fire line but the International frontier. This invasion again seriously threatened our entire military position in this crucial border State and it is to offset this threat that we have been enforced to take to retaliatory action.

Present crisis

My purpose in broadly recounting these events is not only to show that it is Pakistan, which is responsible for the present hostilities but to emphasise that it is her obstinate refusal to accept the reality of Jammu and Kashmir being part of India and her complete misunderstanding of the centuries old secular tradition of the Kashmiri people that has led to the present crises.

Having clamped down on their country an absolute dictatorship of which the people of East Bengal and Pakhtoons are the principal victims, the present rulers of Pakistan are cynically trying to exploit the concept

of self-determination to wrest Kashmir from India. It is hardly necessary to point out that the principle is never applicable to parts of nation-states and that in fact Pakistan's callous insistence upon creating trouble in Kashmir is merely a reflection of the fundamental ideological divergence that I have mentioned earlier. If India can be forced to part with Kashmir then its disintegration and the failure of its magnificent experiment in democracy and secularism are assumed. This is a consummation, which the rulers of Pakistan may devoutly desire, but which every single Indian

Historical destiny

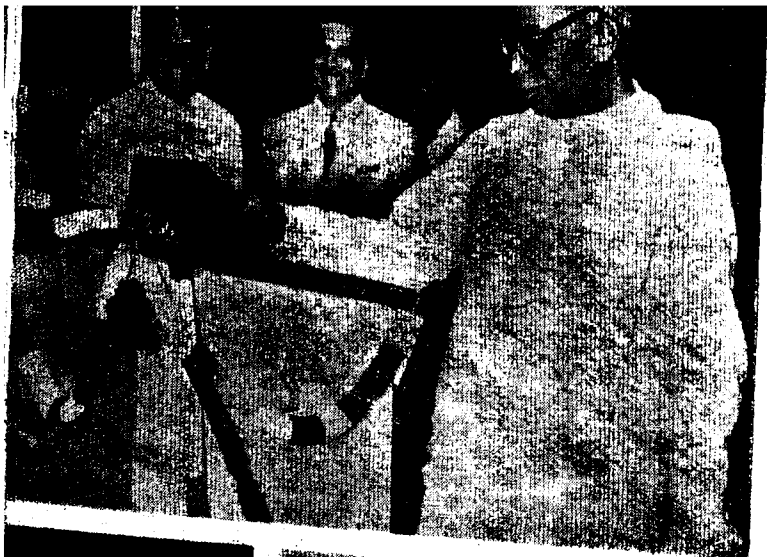
It is sincerely to be hoped that thinking persons the world over will appreciate this attitude and that enlightened sections in Pakistan itself will also realise the dangerous futility of the pathological anti-Indian posture that their rulers have adopted, ever since independence. The people of Pakistan are our closest neighbours bound to us by innumerable ties of history and culture and for them we can have nothing but good will and friendship. But the rulers of Pakistan must realise that their demand to seize Kashmir have only resulted in ruin and destruction of which the people of Pakistan are the worst sufferers.

Even now it is not too late for them to revise their ill conceived policy and accept that friendship is the historical destiny of our two great Nations. At a time of grave crisis such as the present, we must turn to the one divine power from whence all religions arise and in which they all meet and pray that we are granted the wisdom to know what is right and the courage to act accordingly. Our national motto is "Satyamev Jayate"—Truth alone Triumphs. Our cause is just and will, therefore, necessarily emerge triumphant.

OUR ACTION

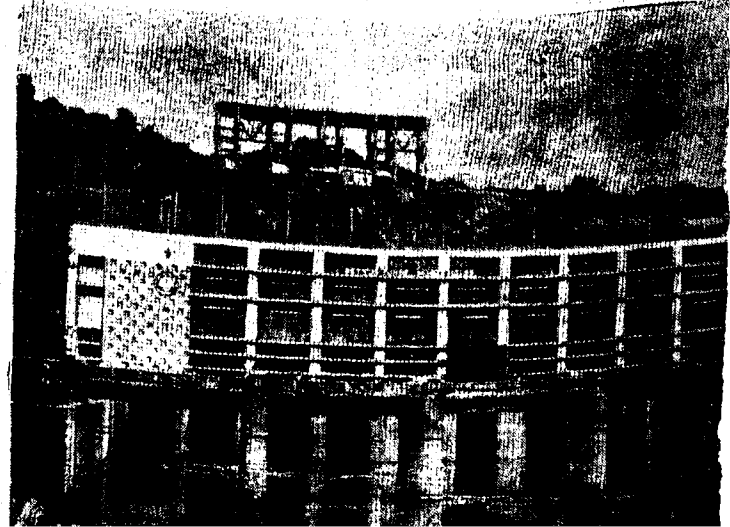
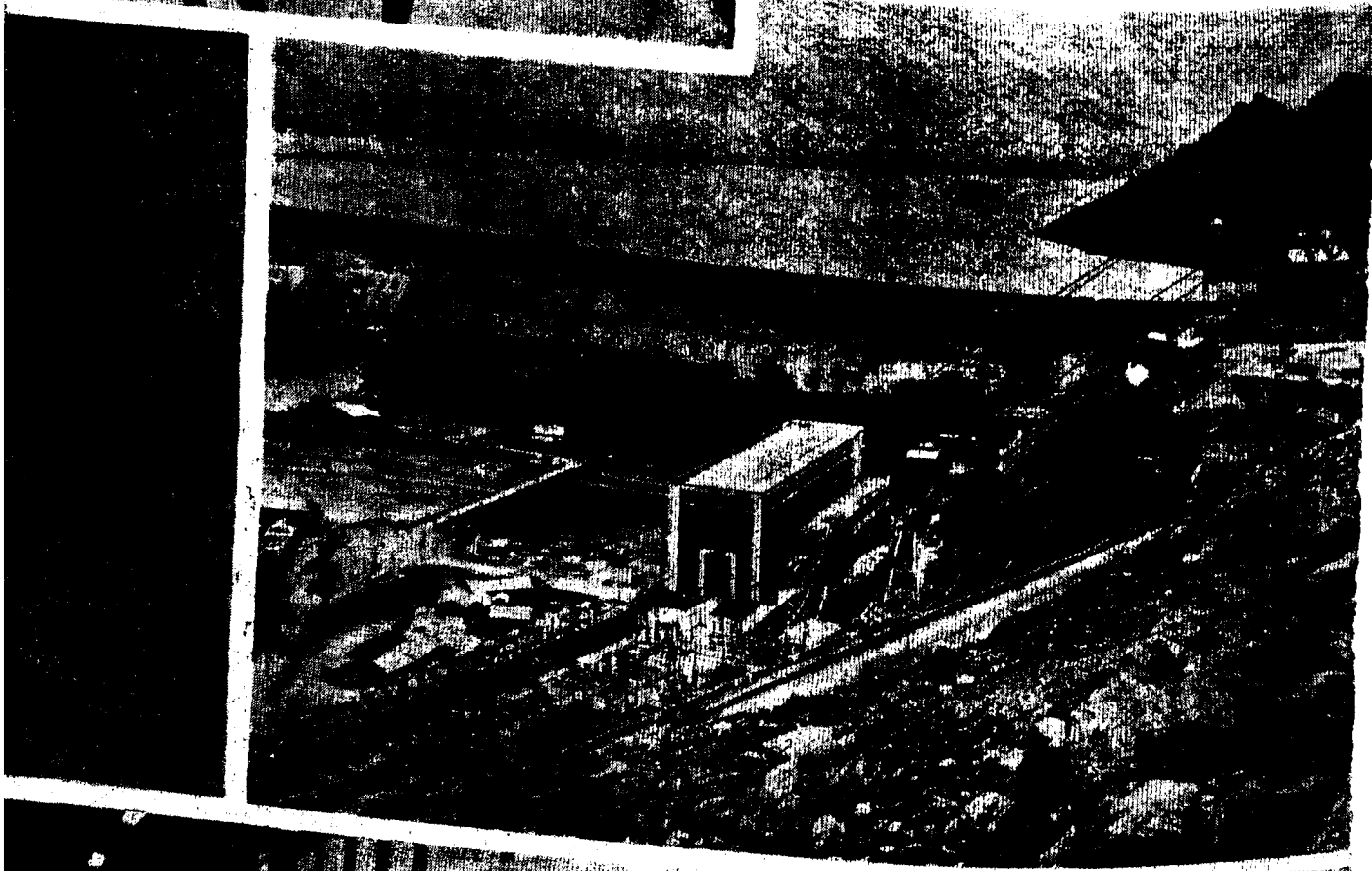
Our action is limited to making Pakistan realise that we will not tolerate any interference with the territorial integrity of India, of which Kashmir is a part.

—Sri Y. B. Chavan.



THE METTUR TUNNEL HYDRO ELECTRIC SCHEME.

1. Sri. M. Bhaktavatsalam, Chief Minister, inaugurates the scheme.
2. Panoramic view of the power house and Mettur Dam in the background.
3. The Chief Minister is inspecting the control room of the power house.
4. Front view of the power house.



PRESERVE WILD LIFE

SRI N. S. S. MANRADIAR,
Minister for Co-operation.

India's Wildlife is a vital natural resources of the country but unfortunately in a vanishing stage and hence in need of special attention. Its Wildlife, unique in variety and interest is the wonder of the world. It has been gravely diminished in the past and is seriously threatened at present. Its natural habitat which once covered more than half of its total land area has now been lamentably reduced to a fraction due to improper land use.

The disaster

There are two ways of destroying wildlife; one is indiscriminate shooting and the other destruction of its natural habitat. India's Wildlife has faced both the disasters. But still some of the species are surviving though many notable species have disappeared altogether from the land for ever. The two recent notable examples are the Indian Lion and the two horned Indian Rhinoceros. The population of Indian lions which once sprawled over an area of a quarter million acres in the North has now been reduced to a few hundreds confined to about six thousand acres in the Gir Forests of Gujarat State. The two horned Rhinoceros is completely exterminated due to indiscriminate shooting.

The recent excavations of Fossilized remains of the extinct animals in the Siwalik Range have brought to light the fabulous fauna of the country in the past. Hippopotamus, giraffes, pygmy horses, chimpanzees, orangutans, baboons, cheetahs and eleven different species of elephants roamed in the past in the Indian jungles, and today cheetahs are completely extinct.

If our indifference to Wildlife and their functions in the Scheme of nature continues, the animals commonly seen today will meet with the same fate as their predecessors.

The problem of Wildlife Conservation is a humane problem. Although man is considered to be the most perfect and highly evolved of the living creatures of the earth by virtue of his technical and artistic knowledge and achievements, there is no gainsaying the fact that he is the most destructive. By his indiscriminate and reckless exploitation of the natural resources for short sighted and quick financial gains, he has irreparably upset the delicate biological balance of nature which is now acting against his own economic interest.

Human nature being the same everywhere, what is true of the North is true of the South in the matter of destruction of the country's Wildlife heritage. Let us take the example on Chingleput district. This district which was once noted for its fascinating flora and fauna is now devoid of both. It has been recorded in the Gazetteer of Chingleput district written by a British Civilian in 1895 that the forests in this district sheltered tigers, wolves and the cheetah, the rivers and lakes Crocodiles. The plains on the western part of Madurantakam taluk nestled herds of black buck. Badgers were commonly seen in the forests around Madurantakam. The barren hill in this district going by the name of Pulikadu meaning tiger infested, still reminds us of its past glory. What was a reality 70 years ago is now a myth.

Our achievement

The Forest Department is now engaged in the arduous task of rehabilitating these denuded forests. Already a major portion of the district has been re-afforested and some Black Buck and Peafowl have been reintroduced to restore these forests to their pristine glory. It is hoped that the residents of this District will co-operate with the Forest Department and make their endeavours a success.

STAND UNITED

I would call upon the people of India to stand united in the face of aggression by Pakistan and demonstrate to the world that we are united.

—Vinoba Bhave.

I shall also review briefly our achievements in the field of Wildlife Conservation in Madras State. The Government of Madras has constituted a State Wildlife Organisation to look after the interests of Wildlife organization to look after the interest of wildlife which is a part and parcel of the Forests Department. The main object of this Organisation is to protect Wildlife particularly the vanishing species and ensure the perpetuation of the existing ones.

Some species like Tiger, Panther, Sloth Bear, Four-horned antelope, black Buck, Slow lorises, and Slender loris which were fastly vanishing have been afforded protection by prohibiting their shooting. New places of Wildlife interest have been explored and documented.

In addition to the development of the Wildlife Sanctuaries Deer Park, Guindy, and the Children's Corner, 16 Waterfowl refuges where migratory birds congregate during winter months have been established in several district namely, Chambarambakkam and Arappakkam lakes in the Chingleput district, Kavoripakkam lake in the North Arcot district, Veeranam lake and

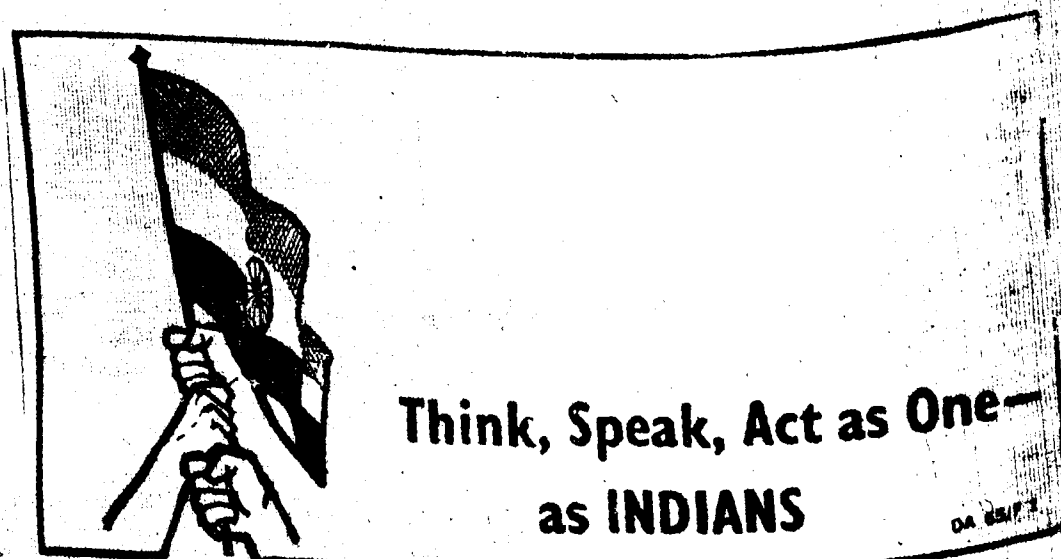
Kazveli swamps in South Arcot district, Point Calimere, Muthupet and Talainayar in Thanjavur district, Vaigai Reservoir in Madurai district, Nenmeni lake in Ramana-thapuram district, Kundakulam, Moonradaippu, Gangai-gondan, Seethaparanallur lakes in Tirunelveli district and Devarayan Eri in Tiruchirappalli district. The migratory birds namely pochards, Garganey Teals, Shovellers, shell duck, Pintains, Whistling Teals, Curlews, Barheaded ghoose and several other species resorting to these lake are given protection by prohibiting shooting.

Occurrence of Ash Colour bison has been spotted in the remotely situated Manjanipatti Valley of Coimbatore South Division. This area has also been protected against shooting.

Unique species

You must be proud of the fact that still Madras State is the home of some unique and rare species found nowhere in the world and even in India except the extreme South, Madras and Kerala. This is the Lion tailed Macaque inhabiting the remote forest regions of Madurai, Tirunelveli and Kanyakumari districts. By years of persecution on account of its rarity for sale in the foreign markets for display in the Zoos, this animal has become very shy. Naturalists from the biological research Institute in U.S.A. visit the habitat of Lion tailed Macaque to study its social behaviour. This rare species should be protected at any cost.

I have no doubt in my mind that with the growing Wildlife, consciousness both among the masses and the intelligentsia, it should be possible to protect and preserve the Wildlife of the country.



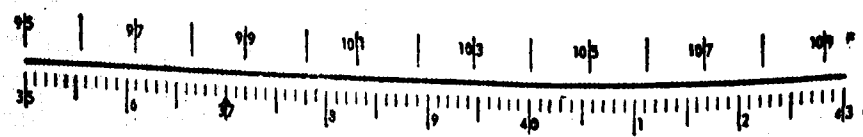
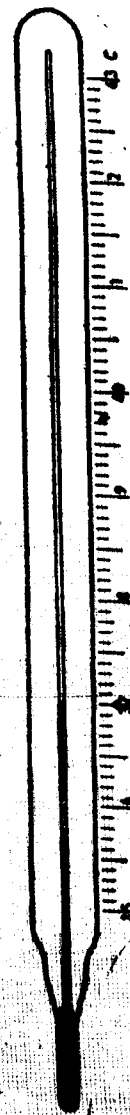
Chief Minister inaugurated the meeting of State Advisory Board National Savings.



The Consulting Institute's Survey Team which arrived Madras to conduct a survey of the Neyveli plant, called Sri R. Venkateswaram, Minister for Industries and Sri M. B. Ravatsalam, Minister, Secretariat, 26th April 1965. The team is discussing with the Minister Industries.

*Your
NEW*

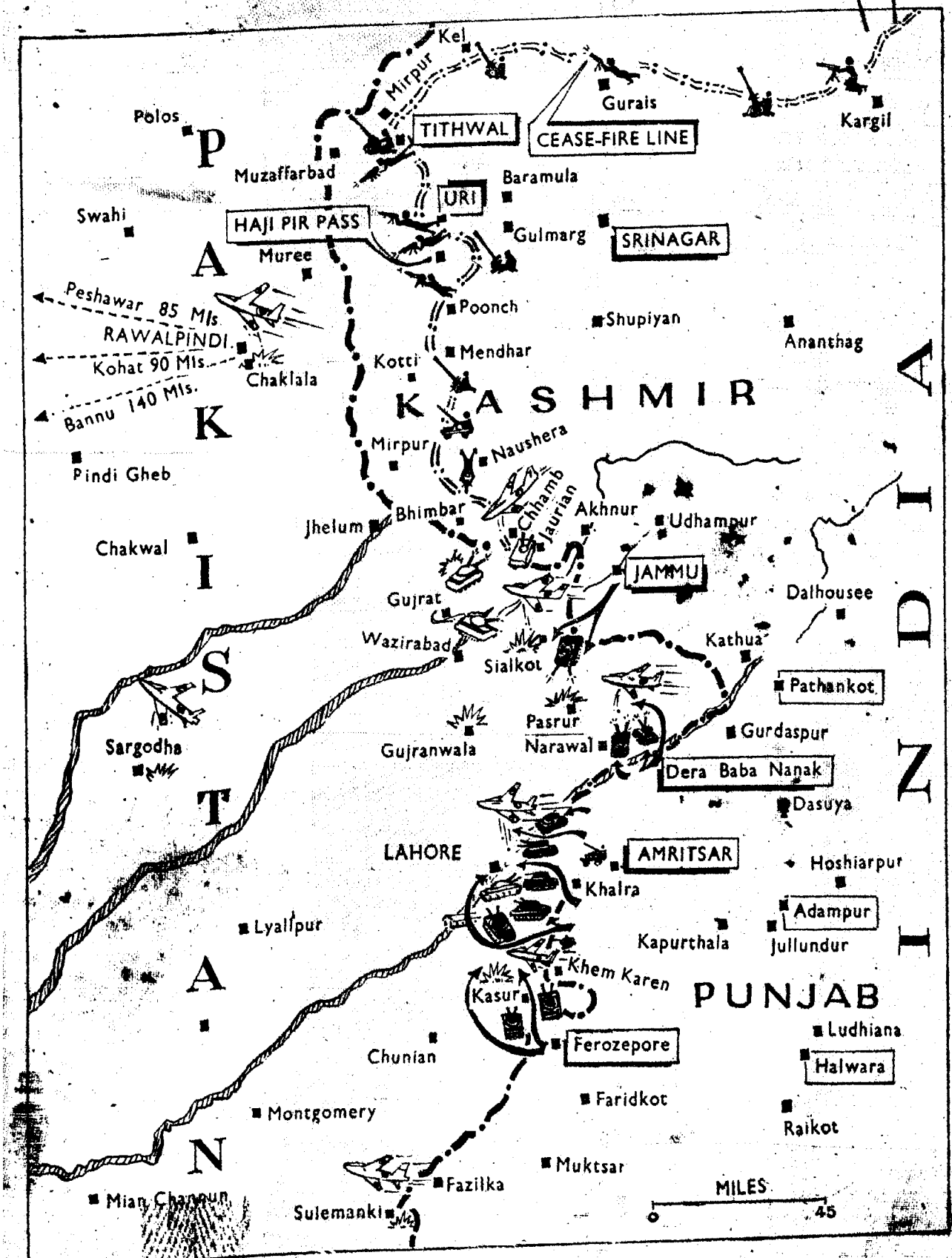
CLINICAL THERMOMETER



- ★ CLINICAL THERMOMETERS WILL BE GRADUATED ONLY IN CENTIGRADE UNITS AFTER APRIL 1966
- ★ RANGE OF THERMOMETERS WILL BE FROM 35°C TO 43°C
- ★ GRADUATION WILL BE AT EVERY 0.1°C
- ★ NORMAL HUMAN TEMPERATURE IS 37°C

DIRECTORATE OF METRIC WEIGHTS & MEASURES,
MINISTRY OF COMMERCE, GOVT. OF INDIA

DA 40/211



Coimbatore Home Guards set an Example

In the wake of Chinese aggression "Home Guards" were formed throughout the country as a second line of defence to help and prepare the people to face any situation that may arise in an organised and disciplined manner. In peace time they turned to other normal work such as medical relief, construction of roads and other social services. In this State Home Guards were organised throughout the State as in other States and they are rendering valuable service to the country. The Home Guards of the Coimbatore took up medical relief work with the doctors and nurses who have joined in it.

The Home Guards organisation in Coimbatore started with a modest batch of 1½ companies. However within a period of six months, the full sanctioned strength of 6 companies in Coimbatore including half-a-company of women and a company in Erode, completed basic training. The recruits included enthusiastic men and women from all walks of life—businessmen, lawyers, doctors, Government servants, employees in the private sector and teachers. Sri S. R. Nanjundan, an industrialist of Coimbatore who has taken a very keen interest in the organisation right from its inception was appointed as the Area Commander.

Welfare work

A scheme to start social welfare work by the women's wing of Home Guards, Coimbatore, was mooted by the

Deputy Area Wing Commander, Dr. M. Leela Meenakshi. Among the various welfare activities proposed in this scheme, it was approved to start initially welfare work in the village of Thudiyalur which is a suburb about seven miles from the Coimbatore City. To start with the programme, included free medical aid to the villagers and the starting of a Children's Training Centre with the object of teaching them personal hygiene, group songs, road sense, etc.

The welfare work was inaugurated on 14th January 1965 by Sri E.L. Stracey, Deputy Inspector-General of Police, Western Range, Presided over by Sri K. V. Ramanathan, I.A.S., the then Collector of Coimbatore, and the actual work of the unit started on 17th January 1965. The welfare unit works every Sunday afternoon from 2-30 p.m. The out-patients attendance at the free medical clinic has now increased from 50 in the beginning to 200 and is on the increase as the much needed free medical aids is catered to the villagers by this unit.

Dispensary at Thudiyalur

Since no building is available in the village for housing the dispensary at present the Village Panchayat School Building is being utilised for the purpose. The Headmistress and her staff help the unit in their work, particularly in the orderly handling of the large number of patients who gather for medical relief.

The unit has no funds for the purchase of medicines, dressings or instruments. Gifts of medicines from Doctors, pharmaceutical companies and few other donors are availed of for the time being. But these fall short of the needs and requirements of the clinic. There are some offers of gifts for the purchase of drugs and instruments from the charitable minded public and organisations. No aid has so far been received from the Government or local bodies. The Area Commander Sri S. R. Nanjundan has proposed to appeal to some of the notable big organisations such as Rotary Club, Lions Club, for the supply of necessary and immediate requirements of medicines and instruments to carry on the work properly and in a much larger scale.

The object

The object of the unit is to establish a permanent medical centre which will be able to cater the daily needs of the local people. So far 2,886 patients have been registered and treated free in this clinic. Their clinical investigations have been carried out at Coimbatore in the Municipal Public Health Laboratory. Special investigations and treatments, like radiation therapy, operations, etc., are carried out at the G. Kuppuswamy Naidu Memorial Hospital for Women and Children and at the Government Headquarters Hospital free of cost. The above institutions have come forward generously to help in the work of the unit.

The Children's Wing

This wing was started with about 20 children and now it has grown to 60 strong. Kindergarten trained



The children are ready to get free medical aid from the Home Guard of Coimbatore Medical Wing.

and basic trained teachers are serving in the children's wing. They teach personal hygiene, group songs, road sense, etc., to the children.

It is proposed later on to have a general immunisation programme for the children and give special training to the adults in family planning and dietetics.

Dr. C. K. Rajagopal from the Men's Wing of the Home Guards is helping the unit and giving his valuable aid in running the clinic. The encouragements given by the Area Commander, the Police Department at Coimbatore and the Thudiyalur public has greatly contributed in no small measure to the success of this welfare unit of the women wing of the Home Guards of Coimbatore.

NATIONAL AWARDS FOR TEACHERS

The Government of India have announced the names of 89 teachers—47 primary and 43 secondary—selected for this year's National Awards in recognition of the meritorious services rendered by them to the community.

Each recipient of the award will be given a Certificate of Merit and Rs. 500 cash at a special function to be held in New Delhi in due course.

Since the scheme of National Awards was instituted in 1958-59, 520 teachers—276 primary and 244 secondary—have received the awards till 1964-65.

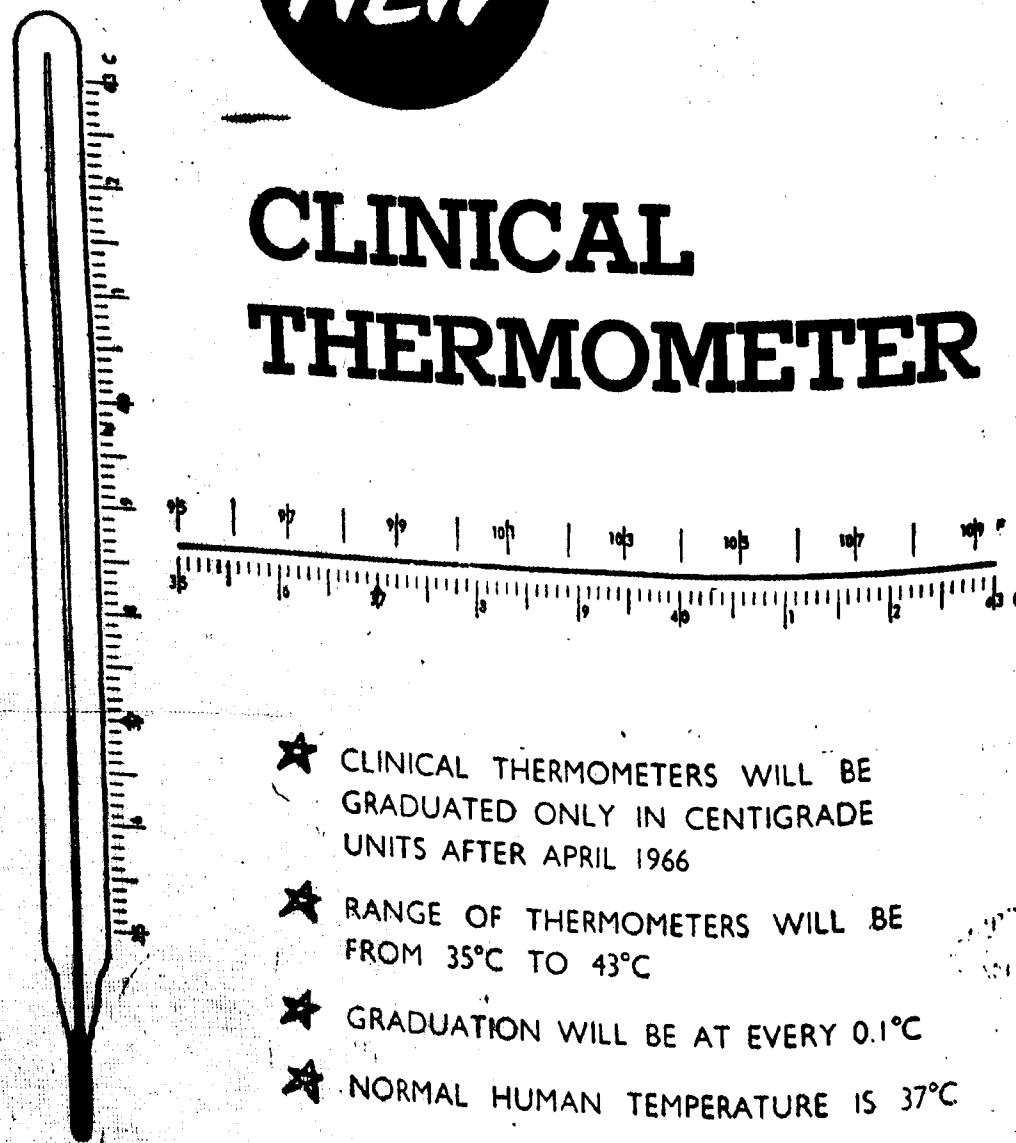
The following have been selected for the award from Madras State during 1965-66 :

Primary Teachers—Sri S. Neelakanta Pillay, Sister Amalorpava Mary and Sri S. Krishnamachari. **Secondary Teachers**—Sri M. Raja Iyer, Sri A. N. Lakshmana Rao, Sri J. B. Devasagayam and Sri K. Rajarathinam.

Left:—Dr. Leela Meenakshi, Home Guard of Coimbatore Medical Wing, examining the blood pressure condition of a patient.
Right:—Dr. C. K. Rajagopal, Home Guard of Coimbatore Medical Wing, prescribing the medicine to a patient after examining him.



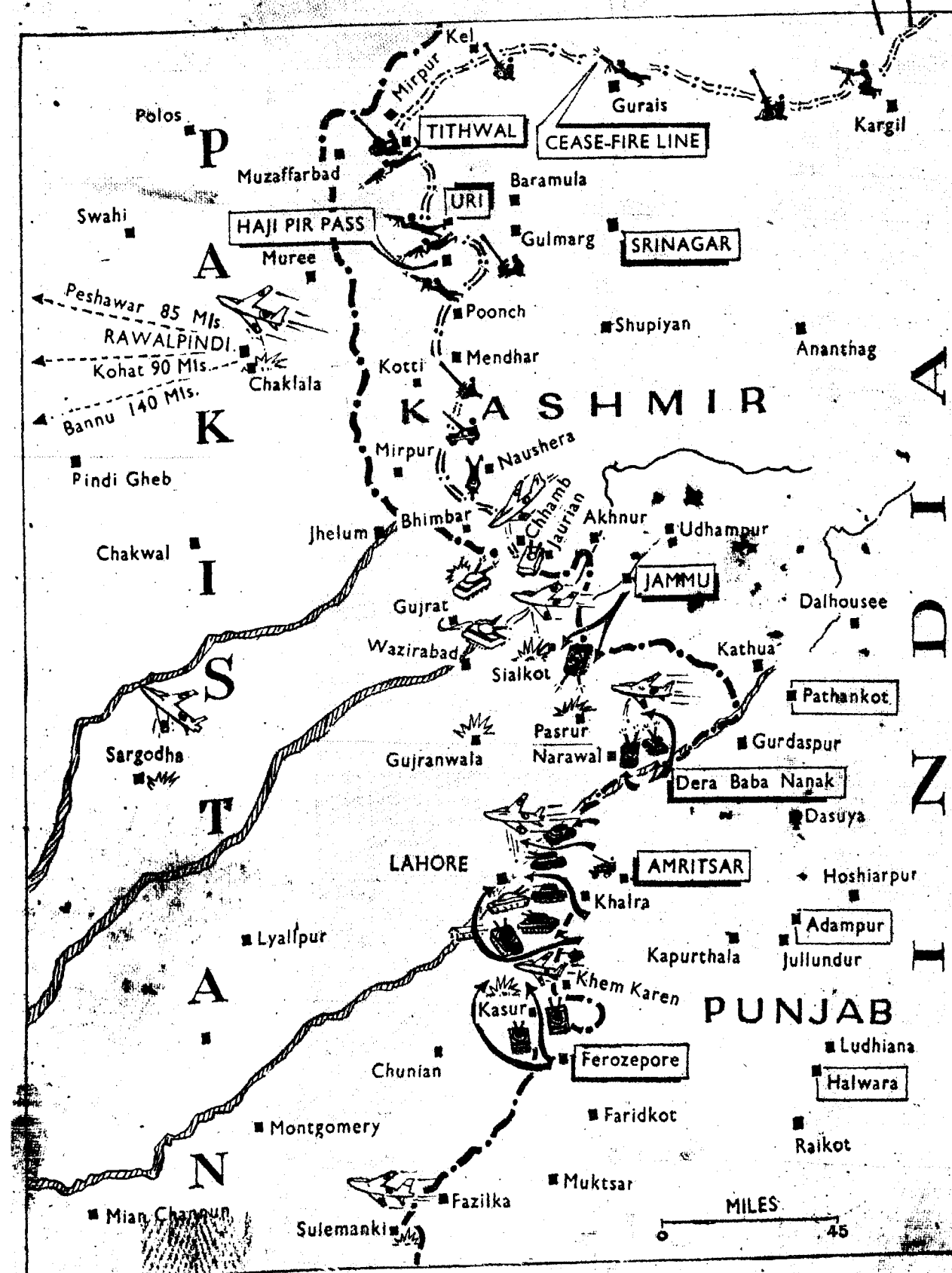
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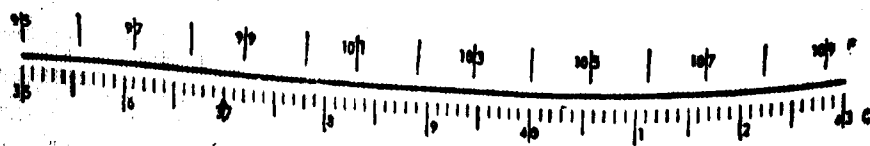
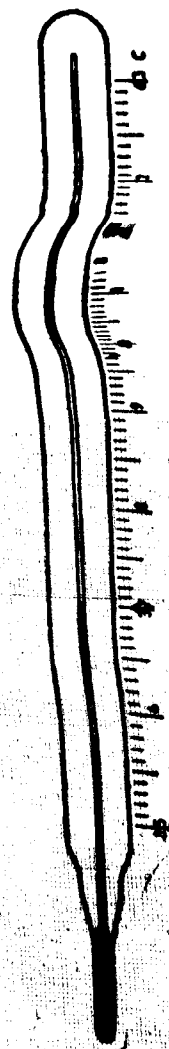
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**Your
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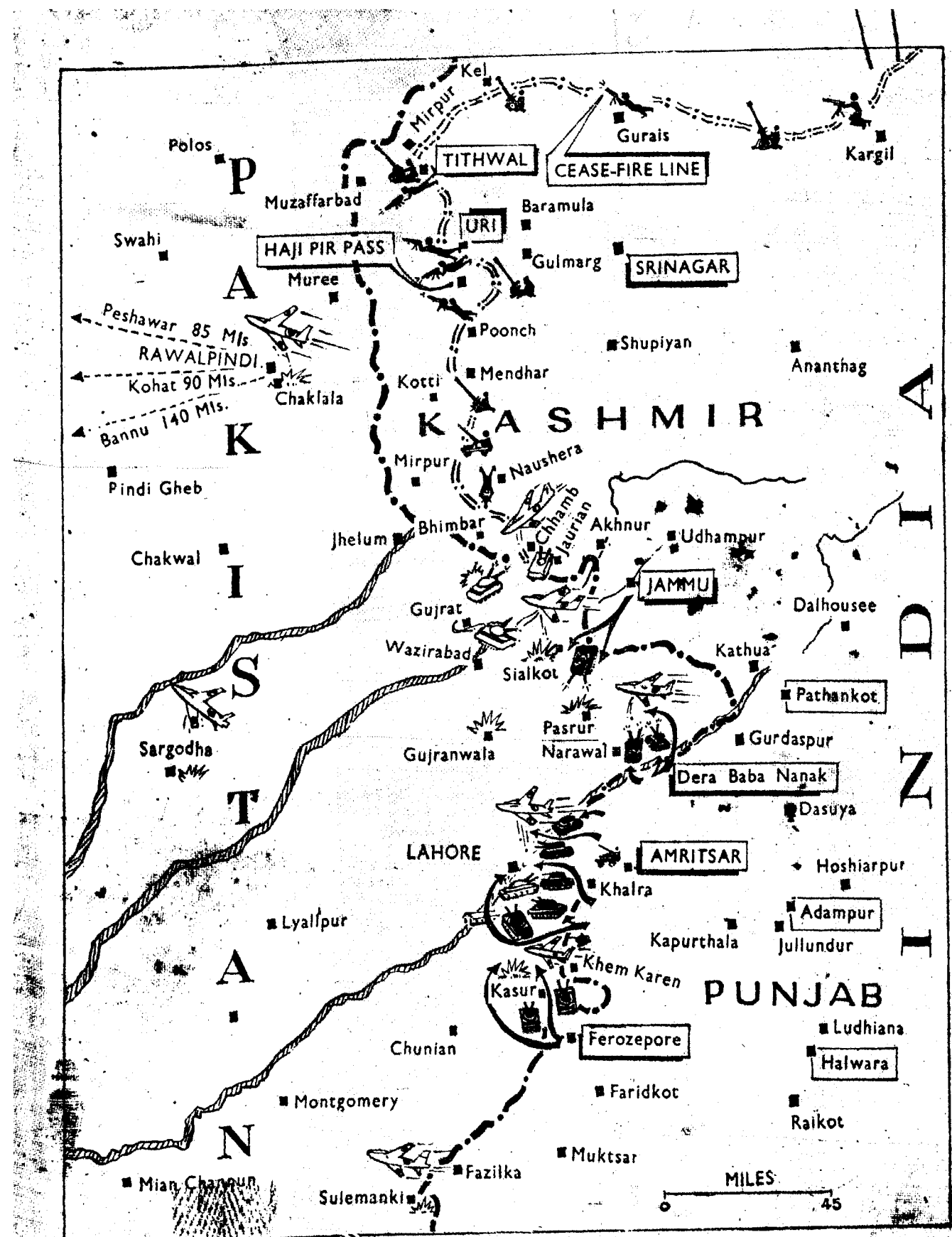
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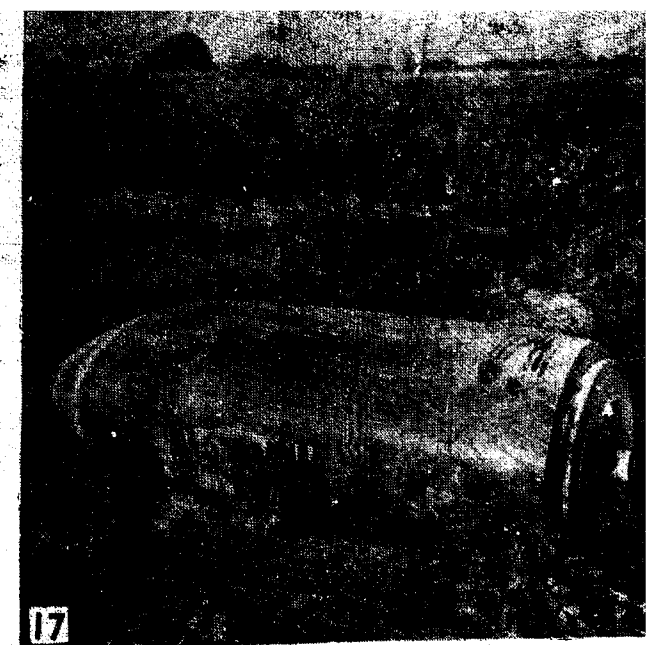
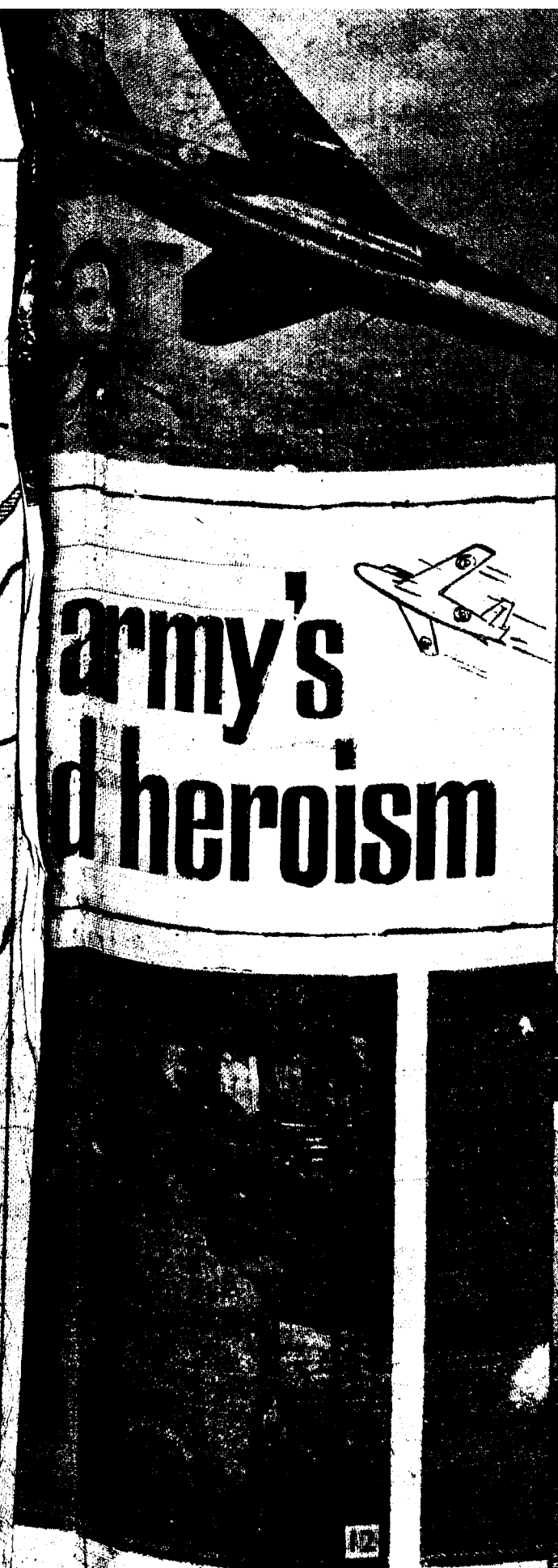
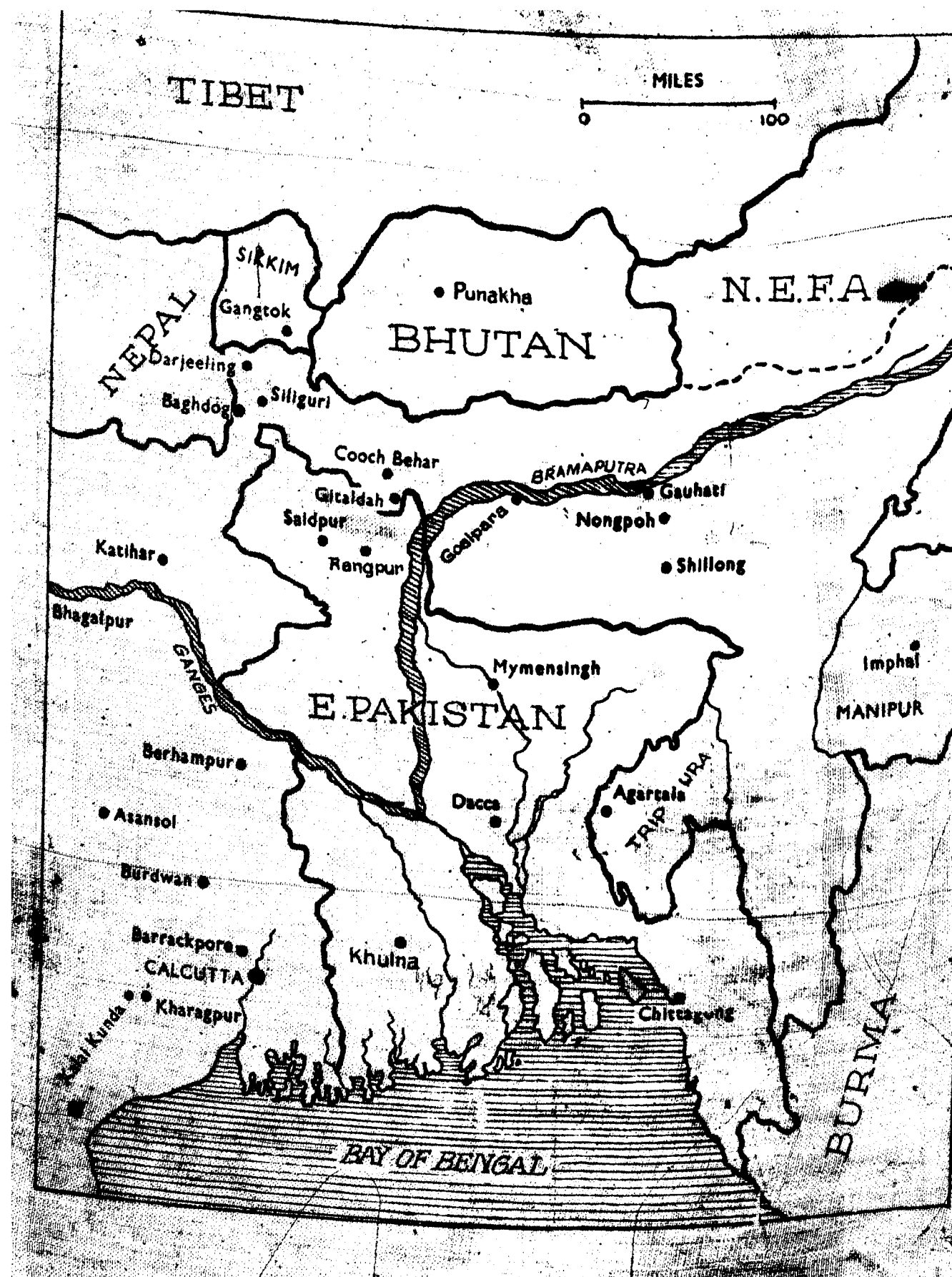


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DA 07/211





14. Some of the ammunitions captured from the enemy.
15. One of the so called Invincible Patton tanks of Pakistan destroyed by our army.
16. Picture of a Gurudwara destroyed by Pak. jets.
17. An unexploded 750 lb. bomb dropped by Pak. bombers.
18. Pak. has not spared even the U. N. Caribou aircraft.



Pakistan : 1947-1965, A Parallel

Except for one difference, that unlike 1947 the infiltrators were instructed to befriend the local Kashmiri population and to terrorise them in cases of non-co-operation, the pattern of Pakistan's veiled invasion of Kashmir in 1965 is the same as in 1947.

Pakistan Government's denials of complicity also bear the same mask.

On January 15, 1948, Pakistan's Foreign Minister, Sir Zafrullah Khan, in a letter to the Secretary-General of the United Nations emphatically denied "their giving aid and assistance to the so-called invaders or having committed any act of aggression". Today, Z. A. Bhutto follows in the footsteps of his predecessor in office by protesting innocence and disclaiming responsibility for the attack. Other leaders and the Pakistan press and radio have joined the chorus too.

The design in 1947

It was only after Pakistan had been found out by the world press and impartial observers that Sir Zafrullah Khan was obliged to inform the members of the United Nations Commission on Kashmir, months after the invasion, that "the Pakistan Army had at the time three Brigades of regular troops in Kashmir".

Today the pattern is the same. After a fortnight's vehement denials, the Pakistani President admitted involvement of Pakistan troops.

In 1947, the invasion of Kashmir, began as early as 22nd October, not by irregulars, not by a lot of hooligans, but under the orders of the then Governor-General, Mohammad Ali Jinnah. This time again reliable evidence shows that the instigation for the present wave of armed intrusions came from President Ayub himself. The puppet President of Pakistan - Occupied Kashmir, Abdul Hamid Khan, disclosed in Rawalpindi after his meeting with President Ayub on January 5, 1965, that he felt re-assured that Ayub "would take more drastic measures to bring about liberation of Kashmir."

The pattern for preparation of the mass scale raids and whipping up mass hysteria in Pakistan is also broadly on the same lines, though more intensive this time.

A special organization for intensive training of the raiders was set up at Murree (West Pakistan) under Lt. Gen. Akhtar Hussain Malik, General Officer Commanding the 12 Infantry Division of Pakistan, to conduct what was described "Operation Gibraltar". To emphasise personal interests President Ayub Khan addressed them personally to explain to them their task of creating confusion and chaos in Kashmir.

Premeditated attack

Hectic military preparations have been going on since the beginning of the present year to impart more intensive training to the armed personnel in guerilla warfare. A number of Pakistani officers have been receiving training in the guerilla methods from Chinese army instructors since September 1963.

By May 1965, arrangements had been finalised for active hostility. General Mohammad Musa, Commander-in-Chief of the Pakistan Army, paid two visits to the forward areas bordering the Cease-fire Line in May 1965. In his second tour on May 30, he was accompanied by his planning staff also. He met a number of senior field formation Commanders and their staff officers in a Conference to discuss with them the state of preparedness of Pakistan troops in the field. The Pakistan Commander-in-Chief was confident that all steps had been completed to deal with any eventuality.

At a meeting held in Abbottabad on May 29, a Ten-man Action Committee was set up to carry out subversive activities.

At a special function got up for the foundation stone laying ceremony of the Medical College at Chingleput, Sri M. Bhaktavatsalam, Chief Minister, Sri O. V. Alagesan, Union Minister of State in the Ministry of Chemicals and Petroleum and Smt. Jothi Vencatachellum, Minister for Public Health laid foundation stones for the College and Hostel Blocks and Staff Quarters, respectively.



1. The Vice President, Dr. Zakir Hussain comforting the wounded jawans in the Delhi Cantonment military hospital. 2. The Prime Minister Sri L. B. Shastri, receiving a cheque for Rs. 7,501 from the All-India Federation of Deaf and Dumb in aid of the National Defence Fund. 3. A mobile canteen to refresh our forces. 4. Sri L. B. Shastri receiving donation from Delhi Iron Merchants for the National Defence Fund. 5. Civilians cheering up our jawans.

6. A Police Officer congratulating a villager who captured a paratrooper dropped by Pak. 7. Two other villagers who have put brave fight in rounding up the Paratroopers. 8. In Madras, people contribute liberally to the National Defence Fund. 9. Even a Sadhu donates his Dr. S. Radhakrishnan talking to a jawan recovering from battle injuries in a military hospital. 11. The Prime Minister receiving donation from Golden Tobacco Company in kind.

An Ordinance setting up a Mujahid Force as an integral part of the Pakistani Army, was promulgated on June 8, 1965. The Ordinance was approved by the National Assembly on June 21 and the strength of the force was fixed at 1,50,000.

Attack on Kashmir

The final planning for the Kashmir attack commenced in Pakistan in the third week of May 1965, while negotiations for a peaceful settlement of the Rann of Kutch boundary dispute were in progress.

Simultaneously, non-official activity was also inspired on an all-Pakistan scale to prepare public opinion for hostile action against India.

(i) A so-called Kashmir liberation movement was hatched.

(ii) Tribal leaders, like Malik Spaingul, were made to hold out threats of guerilla warfare.

(iii) Pakistani officials sponsored a protest day to enlist popular support.

(iv) During the Provincial Assembly election campaign in West Pakistan in May, Jihad was openly preached against India and the Jamait-e-Mujahideen was got going.

(v) Majlis-i-Tahafuz-i-Pakistan observed "Jihad Day" throughout the country on May 21, 1965, with the same object quickly followed by a Protest Day after two days.

President's Mujahid Fund was launched in April and the National Bank of Pakistan and the United Bank gave large donations for the Mujahids.

The raiders were organized into eight "Forces" each of them composed of six companies of 110 men each, commanded by regular Pakistani Army Officers of the rank of Major. Each Company had at least three N.C.Os. and 19 Para Baluch of the Special Service Group.

Task of infiltrators

The tasks allotted to the infiltrators were destruction of bridges; disruption of lines of communication; raiding of Indian Army convoys, Headquarters, supply dumps, police stations and important installations; inflicting casualties on troops, civilian officials and V.I.Ps.

The targets selected by the raiders in Srinagar, Kargil and Baramulla were mainly military and even General Nimmo, United Nations' Chief Military Observer in Kashmir admitted that armed Pakistani crossings were "fairly massive".

Even though the objective was military, the raiders indulged in indiscriminate arson, looting and shooting of unarmed civilians, as it was done in 1947 and 1948.

There is also photographic evidence. An Associated Press photographer, an American, flew over a section of Kashmir in October 1947 and said that he saw more than twenty villages in flames. The villages, in an area ten miles long and ten miles wide, apparently had been set fire to by the Muslim invaders who were scouring the valley and moving in the direction of Srinagar. In a report in the New York Times, dated 10th November 1947, we read the following:

"Baramulla, India, 10th November—The city had been stripped of its wealth and young women before the tribesmen fled in terror at midnight, Friday, before the advancing Indian Army. Surviving residents estimate that 3,000 of their fellow townsmen, including four Europeans and a retired British Army Officer, known only as Colonel Dykes, and his pregnant wife, were slain."

This time Pakistani air strike on a prayer congregation in a mosque, in the Chhamb area, is exactly in the same reckless spirit.

Kashmir people

In 1947, the Kashmir population bravely came out in defence of Kashmir. Take one example Robert Trumbull in a despatch in November 1947 made the following report:—

"In Baramulla the towns-people told me of a young Muslim shopkeeper who had sacrificed his life rather than recant in his creed of religious tolerance. His martyrdom had taken place almost under the shadow of the Convent walls, and in the memory of the devoted Kashmiris he was fast assuming the stature of a saint."

"He—Mir Magbool Sherwani—must have been a sort of Robin Hood character, from the stories the towns-people told me, championing peasants who could not pay their exorbitant taxes, pitching into the police when he found them beating up some luckless victim, bolstering up the resistance of the people against their many oppressions."

This time again it was a Muslim Gujjar from a village near Srinagar, who first informed the Kashmir Police of the infiltrators' movements a few miles outside Srinagar.

Newspaper readers have seen numerous other reports of people of Kashmir State rising to the defence of their hearths and homes and in support of their Government.

This is the most heart-warming aspect of the tragic drama going on in Kashmir now. And this is the aspect which the Pakistan ruling clique is most anxious to keep away from Pakistan people who are being whipped into anti-Indian war hysteria.



The Surgical Instruments Plant Goes In to Production

SRI O. V. ALAGESAN,
Union Minister of State in the
Ministry of Petroleum and Chemicals.

The Surgical Instruments Project at Nandambakkam near Madras commissioned on September 1, 1965 is one of the three projects undertaken by the Indian Drugs and Pharmaceuticals, Limited, with Soviet collaboration and assistance. The other Projects are the Antibiotics Project at Rishikesh and the Synthetic Drugs Project at Hyderabad. The cost of all the three projects comes to about Rs. 47 crores.

The Surgical Instruments Plant at Madras is the first major project in the country devoted to the manufacture of surgical instruments. About 166 different types of instruments will be produced by this Plant.

The inauguration of the production of the Surgical Instruments Plant, is a proud day for Indian Drugs and Pharmaceuticals as this is the first of the three plants to go into production. I would like to express the hope on this occasion that the other two also, namely, the Antibiotics Project at Rishikesh, and the Synthetic Drugs Project at Hyderabad, will follow suit and go into production as per schedule.

Soviet collaboration

As you know, all these three projects have been undertaken with Soviet collaboration and assistance. The cost of all the projects comes to about Rs. 47 crores, including townships. The Soviet Government has made available most of the credit necessary to meet the foreign exchange cost of the projects. They have also provided the technical know-how and training facilities to Indian

technicians. Soviet experts have been associated with the construction of this project at all stages. What we see today is yet another shining example of Indo-Soviet Co-operative effort. I would like to express on behalf of the Government of India and on behalf of a large number of our people our appreciation and gratitude for the assistance rendered by the Government of Soviet Union, Messrs Technoexport and the Soviet technicians that have participated in the building of this project.

First major unit

This project is, indeed, the first major unit devoted to the manufacture of a variety of instruments used in general surgery, ophthalmology, gynaecology and other branches of medicine. The few units in the count that are engaged in the manufacture of medical appliances have hitherto been concentrating on such items



Sri O. V. Alagesan, Union Minister of State in the Ministry of Petroleum and Chemicals commissioned the Surgical Instruments Project near Madras. Chief Minister presided. They are seen inspecting the plant.

as operation tables, hospital furniture and other hospital requirements. There are, perhaps, a few small-scale units which have been attempting to make a few sophisticated instruments. But now, with the commencement of Commercial production at this plant, a great future is being opened in regard to the indigenous manufacture and availability of a variety of instruments.

We are at present importing yearly surgical instruments to the tune of about Rs. 75 lakhs. The 166 different types of instruments, and the 2.5 million pieces comprising them, that will be manufactured in the final phase of production in this plant will obviate these imports and meet most of the requirements of the country in that range. Their value in production has been estimated to be Rs. 2.7 crores.

Research Wing

I am glad to say that proto-types of these instruments received from the Soviet Union were distributed widely in the country and subjected to tests by leading surgeon. Most of them have been accepted as satisfying international standards and a few modifications to suit Indian conditions have been suggested by a committee of eminent surgeons. It is proposed to carry out the modifications in the designs of the particular types of instruments. I hope that in the coming years, as this factory develops the necessary skills, it may be able to introduce new items of instruments and also bring in new patents and designs, thus aiding the surgical skills of the country.

I also hope that the management of this plant will not only think in terms of progressively meeting the internal requirements, but think in terms of exporting their

wares at competitive prices to other countries. All this will require very vigorous research. It is only research that will enable us to keep abreast of the latest developments of technology in other parts of the world. I hope a research wing attached to the plant will be organised for the purpose in the near future.

An industry of this nature requires a very large number of sets of jigs, dies, tools and fixtures for operational purposes. The Soviet Union have been able to give only two sets of these and the tool room of the plant, which was commissioned in October 1961, has been engaged in multiplying these items several times. The main raw materials required for the plant, such as special steels, stainless steel, carbon steel, die and tool steel, etc., amounting to about 1,000 tonnes, have been initially imported from the Soviet Union. But our dependence for these raw materials on other countries should cease with the development of alloy steel and stainless steel production within the country.

Generally we hear criticisms that public sector projects take a long time to build and have very long gestation periods. I am glad to say that this unit of the Indian Drugs and Pharmaceuticals has adhered to schedule and is going into production right on time. I should like to congratulate all those concerned, Soviet and Indian, from the Project Administrator down to the smallest worker, for having achieved this happy result. I have no doubt they will continue to work hard and reach full production in record time.

Facilities for workers

I should like to take this opportunity to touch upon another aspect, namely, the social objectives that go with public sector projects. If the total cost of this project comes to Rs. 5.1 crores, as much as Rs. 1.5 crores represents the cost of township with all facilities such as school, dispensary, etc., meant for about 50 per cent of an ultimate strength of 1,200 workers. This comes to about 32 per cent of the cost of the project. Since the cost of these social overheads enters into the capital structure of the project, the economics of the project will continue to be affected by this.

Often unfavourable comparisons are sought to be made between public sector units, whose capital structure includes such social costs, and private sector units which are not troubled by any social conscience. Hence, I would venture to suggest that the State should come forward to provide the wherewithal for such housing schemes. This will enable us to assess the working of public sector units more realistically than is the case now.

I should also take this opportunity to thank the Madras Government for their continued co-operation and assistance in the building of this factory. Not only did they give about 200 acres of land free of cost, but were always ready to come to the assistance of the officers of the factory at all times. If the factory goes into production on time today, part of the credit should go to the Government of Madras, as it would

not have been possible but for their active help and assistance. I have no doubt in my mind that it is the policy of active assistance and a certain sympathetic attitude on the part of the State Government that have created the wonderful industrial climate in Madras today which is able to attract both private entrepreneurs and the Central Government to set up their projects here.

NO POWER CAN IMPERIL OUR FREEDOM

To-day when we are faced with a grim situation. Let us recall the words of our late Prime Minister, Jawaharlal Nehru, who, on a similar occasion, when our integrity and freedom were in danger, said:

"We explored avenues for an honourable settlement by peaceful methods. That was our policy all over the world, and we tried to apply it even in our own country. We know the horrors of war in this age to-day, and we have done our utmost to prevent war from engulfing the world. But all our efforts have been in vain in so far as our own frontier is concerned, where a powerful and unscrupulous opponent, not caring for peace or peaceful methods, has continuously threatened us and even carried these threats into action.

The time has, therefore, come for us to realise fully this menace that threatens the freedom of our people and the independence of our country. I say so even though I realise that no power can ultimately imperil the freedom we have won at so much sacrifice and cost to our people after long ages of foreign domination.

But, to conserve that freedom and integrity of our territory we must gird up our loins and face this greatest menace that has come to us since we became independent. I have no doubt in my mind that we shall succeed. Everything else is secondary to the freedom of our people and of our Motherland and if necessary everything else has to be sacrificed in this great crisis."

(Jawaharlal Nehru in his broad-cast to the Nation on October 22, 1962, when China mounted an unprovoked massive attack on India.)

Development of Automobile Industry in Madras

SRI V. RAMIAH, Minister for Food.

Madras is one among the few States which has a well developed network of Road Transport System in India. Along with this development some foundation has also been laid for the manufacture of automobiles such as trucks, buses, cars, motor cycles, tractors. Even more noteworthy feature is the development of a wide range of ancillary industries particularly in the Industrial Estates of the State. A major portion of the automobiles produced in this State is being supplied to the Army.

Madras State has not been perhaps in the forefront in business and industrial development. Nevertheless, we have realised the importance of development of roads and road transport, not only as a means of development, but also as a method of taking this development to the remote corners of the country, so that we are able to truly achieve a socialistic pattern of industrial development. While it is sometimes stated that the taxation of vehicles in this State is heavy, I am sure you will appreciate that we have used these funds wisely for the development of highways, village and district roads and for providing safe and comfortable travel, in a State which is not well endowed with other methods of transport.

Transport equipment

Along with road transport, naturally goes the manufacturing transport equipment. In this also, some foundations have been laid in the manufacture of trucks, buses, cars, motor cycles, tractors and other equipment. Even more importantly a wide range of ancillary industries has been developed, to supply various components and semi-finished items to the manufacturers. This is the way in which industry developed in modern countries abroad, and it is natural that it should be so here. I would, in particular, draw attention to the development of ancillary industries in the Industrial Estates that have been set up in Guindy, Ambattur and in other centres in the State. I can say with some pride that these have been considered to be object lessons in the experiments of development of Industrial Estates. I would specially bring to your notice the very original conception of an

Industrial Estate, completely tailored to the requirements of one industry, and in which private industry has itself taken all the initiative. I refer to the K. R. Sundaram Iyer Industrial Estate. This consists of more than 20 units manufacturing a variety of components used for the manufacture of petrol engines, as well as motor cycles and scooters. This has given self-employment to a number of small and medium entrepreneurs, and has also dispersed technical skills over a large number of people.

Such an experiment has great significance for our country, because in addition to large factories with a number of machines and workers under one roof, small and medium shops functioning in their own conducive surroundings, will encourage the spread of enterprise and technology wider and more effectively and in addition provide a number of new nuclei for future development.

In many of these developments the industries department of the Madras Government have given every encouragement and help to the Small Scale as well as Large Scale Industries. I can say that it is a policy of this Government to give such encouragement and I can give the assurance that any reasonable help and assistance that you may need in the future will be forthcoming in ample measure.

Gaps and deficiencies

Let me now turn to some of the things to which we should give thought as we are entering the Fourth Plan. There are some gaps and deficiencies which we

must try to cover. These are particularly in the field of agricultural machinery and road construction equipment. Clearly, we must expand the manufacture of agricultural tractors. We must establish capacities for power tillers, so that the small farmer who cannot afford to have a tractor, is able to cultivate his small field using a power tiller, rather than using a couple of bullocks, involving obvious disadvantages of fodder throughout the year, risk of mortality, etc. There has been remarkable development in agricultural production through the use of power tillers in countries such as Japan and Thailand especially in rice cultivation. It seems to me that this must be attended to as a priority matter. In the field of agricultural implements also, I feel that there should be not only a wider range of equipment, but also manufacture at different centres widely dispersed in different parts of the country, because these are things required by farmers all over the country and which can readily be manufactured by local enterprise, skill and materials, with modest investment. Certainly the State Government, through the means of the Agro-Industries Corporation that we are proposing to set up and by other means will render every help in this field.

Trailers and attachments

In road transport, I think greater attention should be paid to the use of trailers and attachments. We should set up capacities for the manufacture of these items, so that with the same motive power, we are able to transport more goods. This will also involve less strain on road surfaces, as well as cost of bridge work. Perhaps this may also give some benefit to the user in regard to incidence of cost and taxes.

One other aspect to which I would like to draw attention is the maintenance of equipment. While we have been laying some stress on manufacture of finished products, we have not perhaps devoted the same degree of attention to economic utilisation and maintenance of equipment. By this, I mean not only availability of spare parts in adequate quantity at economic prices at various centres, but also equipment for washing, oiling, greasing and such other devices by which the life and performance of machinery is prolonged and improved. I am aware that in this State perhaps there is some sense of consciousness about the need for maintenance and economic utilisation of equipment, even so, I think we have a long way to go. I think but we should have more garages, more service centres, more maintenance shops and better equipment at these places. I should like to see service centres at reasonable distances along highways and maintenance shops at Taluk and Community Development Centres. Here again, we shall certainly give whatever help we can to encourage these developments. In the desperate situation of foreign exchange that we are facing, it is absolutely vital that every piece of equipment is used to the best advantage and for the longest possible period.

I have only one more thing to say. We all know the desperate situation that we are facing in our borders. Vehicles and transport equipment constitute the basic structure of modern army. This industry has therefore a most important part to play at this juncture. I am sure that you will discharge your responsibilities as we all shall and be prepared to work and sacrifice for our country.



Sri V. Ramiah, Minister for Food, inaugurated the meeting of the Development Council for Automobile and Ancillary Industries at Rajaji Hall, Madras.

REMODELLING THE IRRIGATION SYSTEM OF CAUVERY DELTA

Thanjavur district proudly called the "rice bowl" of Madras State is one of the districts where the Intensive Agricultural District Programme was implemented in India. It covers the more or less the whole area of the Cauvery delta. As such the judicious utilisation of the Water resources of the Cauvery is a sine qua non for the success of any programme. This has been considered in detail at the Agricultural Seminar organised in Thanjavur district.

The first phase of remodelling the cauvery the irrigation system of the cauvery delta was attempted simultaneously with the construction of Mettur Reservoir. Firstly, following the Cauvery Committee recommendations, during the period 1928 to 1932, regulators were constructed in the Cauvery Delta on the main rivers and bed dams were converted into regulators. In the second important period between 1932 and 1939, three types of work were undertaken. Remodelling of sluices irrigation through regulators and provision of direct source of supply in places of supply-cum-drainage channels. Bunds were strengthened and sluices were remodelled. New regulators were provided and bed dams were converted into regulators select channels were remodelled and direct sources of supply provided for irrigation. After 1940, many of these works were done on an ad hoc basis to meet the specific problems that were brought to notice by ryots under maintenance. Under Special Minor Irrigation Programme also such ad hoc items of works have been continued. The problems in the Fourth Plan project are in continuation of and in line with the remodelling works effected all along. Only instead of their being attempted piece-meal and ad hoc they are brought together with an eye on the improvement of the whole system.

Future Programme

This project envisages the following items of works: (1) Improvement to the main rivers to increase the current capacity of rivers by bringing the banks to required standards so that 30 per cent of the extra capacity over the maximum required supply can be forced in whenever available and to help flush the system periodically, and maintain the rivers in good regime; (2) lining of the rivers in stretches where they traverse

completely in porous soil with sandy bed resulting in heavy seepage loss; (3) construction of new regulators across the main and branch rivers, to effect command with the designed discharges and conversion of existing bed dams into regulators to head up water for command; (4) separate supply and drainage channels and (5) providing regulating or control arrangements for the sluices in the main channels.

Pilot schemes for remodelling two channels, the Govinda Cauvery and the Rajan channel, have been sanctioned at an estimated cost of Rs. 3 lakhs and Rs. 2.20 lakhs respectively. The results of the pilot study will be watched and incorporated in the comprehensive scheme to be taken up in the Fourth Plan.

Panchayat Unions' Role

At present the Government's obligation is only to maintain 123 'A' class channels and the masonry constructions thereon. The 'A' class channels are major channels each irrigating more than 2,000 acres in all, or 1,000 acres covering more than five villages. In the interests of food production and for better efficiency and regulation and control of irrigation, it may be expedient to widen the sphere of responsibilities of the Government. Government can take up improvement of masonry structures and the provision of new sluices not only in the 123 'A' class channels but also in other 'A' class channels particularly because of their long neglect. This will be feasible only on a phased programme and on an order of priorities based on the relative importance of channels and the extent irrigated by each and the number of villages they serve.

The Panchayat Unions can contribute more effectively to the agriculture and irrigation improvements

and maintenance and extensions under them. At present 40 out of 36 Panchayat Unions in the district have surplus budget. There can be no better way of utilizing this surplus than in attending to the 'B' and 'C' class channels, masonry construction works, as silt clearance work is already being done by the Panchayat Unions on a contributory basis. A separate irrigation fund budget too has been suggested. With these Panchayat Unions may be set to repair and remodel all the masonry constructions in 'B' and 'C' class channels strictly according to the technical advice given by the Public Works Department. Once this remodelling is completed the total expenditure on maintenance and operation will become much less. A suitable permanent organization to work within the Panchayat Union may also be devised. An appropriate maintenance provision can also be included in the Panchayat Union Budget.

Crop Pattern

At present water is utilized by flow from field to field. This results in large wastage by drainage, and may also, it is suspected, wash off the manure and fertilizer applied to the upper fields. A pilot scheme for changing the present pattern of field to field irrigation by fixing distributaries, for each field or small irrigation bothies both for irrigation and drainage or separately for each sphere needed, may be tried on the model of Godavari Irrigation which is a new system. Whether this is feasible and economic and what would be the agriculturists' reactions are points that may be dealt with.

The agricultural practice that is being followed in the delta will have also to be taken into consideration

in the proposals for modernization. The general practice is to grow a long-term crop which is commenced in July and harvested in January. In about one-third of the delta area two crops are raised between June and January. Thus there is an overlap of the two cropping patterns and maximum pressure is felt at the time of transplantation. Difficulty is not felt during normal years; but distribution of water becomes a greater problem during years of sub-normal South-West Monsoon as the current year. Large quantities are sent down the rivers without commensurate benefits. A system of water management and suitable crop pattern will have to be evolved by which economy in use of water can be effected.

It should be emphasised that a mere remodelling unaccompanied by any change in the irrigation habits of the ryots will not lead to the desired results and may even defeat the object of remodelling. It is therefore necessary to educate and persuade ryots on the economic use of waters as a pre-requisite to and during the remodelling work. In a few typical cases, it is found that the outlay on the remodelling of 'A' class channels which are proposed to be taken up works out in proportion to the total estimate, to 34 to 58 per cent or 50 per cent on the average, the outlay on 'B' and 'C' class channels being the other half. It goes without saying that the effect of improvements of 'A' class channels and provision of sluices for 'B' off-takes will itself make a significant factor on the sufficiency of supply and on the restoration of duty to design and in saving of water. To the extent this is accompanied by education and propagation of the attempted scope for diminished utilization of water for paddy, the tangible



Sri C. Subramaniam, Union Food Minister, who inaugurated Soil Testing Laboratory at Aduthurai is seen talking with the officials. Chief Minister (back to the camera) is also in the picture. (Right) Interior view of the Soil Testing Laboratory.

economy in supply will also lead to extension of first crop or even of the ayacut. The experience that in years of inadequate supply and controlled irrigation (as in 1963), yield has appreciably increased, is also worth recapitulating. It will be desirable to bring home these facts to the ryots by a persistent effort and patient extension work and educate ryots in the remodelling.

At present the surface flows from the Mettur Reservoir do not sometimes reach the delta at a sufficiently definite and predictable time. In some years opening has to be post-poned due to insufficient carry-over-storage or for want of adequate monsoon rains and extensions of supplies beyond the original date of closure, etc. The delayed supplies lead to late cultivation of Kuruvai and consequently, the possible interference to standing crop from the North-East Monsoon.

Filter points

To encourage Kuruvai seedlings being-raised prior to the opening of Mettur Reservoir, a scheme of sinking filter points tube wells has been implemented. The filter point is a device for pumping out water from sandy sub-strata. Coarse sand which is a good water bearing strata is quite necessary for efficient functioning of a filter point and therefore its construction is restricted to river beds and areas lying in proximity to perennial sources.

Paddy Yield Trends—Thanjavur

Year	Yield per acre
(1)	(2)
	LB.
1950-51	1,530
1951-52	1,536
1952-53	1,465
1953-54	1,626
1954-55	1,715
1955-56	1,524
1956-57	1,660
1957-58	1,861
1958-59	1,974
A—1959-60	2,008
1960-61	2,016
1961-62	2,264
1962-63	2,024
1963-64	2,019
B—1964-65	2,385

B—A—377 lb.

377 lb. over 14.0 lakhs of acres—2.40 lakhs tons of paddy.

2.40 lakhs tons of paddy valued at Rs. 400 per ton, comes to 9.60 crores of rupees.

INPUT OUTPUT RATIO

Total Expenditure on Package } 69.73 Lakhs.
Programme during Five-Years.

Gross Additional Value Resulted } 9.59 Crores.
in 1964-65 with Annual
Potential for the Future.

Benefit Ratio of Package } 1:14
Programme.

Expenditure on Extension Staff } 49.98 Lakhs.
only.

Benefit Ratio of Extension Work } 1:19

1:19 ratio is more realistic in terms of benefit accrued to the Farmers as expenditure on Buildings, Transport-vehicles, Tractors, Laboratory and Implement Tractor-Workshop are permanent Assets.

Nurseries raised and irrigated by filter point help transplantation immediately on release of water from Mettur after preparing the fields with regular river supply. Government also are giving loan and subsidy to install pumps at these filter points.

Government has also sanctioned a crash programme to sink 2,000 filter points in the delta area. Action is also being taken to extend electric supply to these filter points.

Tackling Drainage

As it is, the area where the first crop (Kuruvai) is grown in about 3 lakhs of acre is scattered all over the delta area. This necessitates the functioning of all the rivers, channels, branch channels, etc., throughout the delta during the Kuruvai season. This results in wastage of water due to transmission. Zoning the Kuruvai cultivation may lead to economic use of water. It may be possible to divide the delta into suitable zones, and rotational supply in a cycle of three years undertaken. But all these suggestions can be processed only if adequate understanding, response and co-operation from the ryots is forthcoming.

The broad lines on which the problem of drainage is proposed to be tackled are indicated below.—

(i) Diversion of upland drainage now draining into Vennar.

(ii) Improving the southern river Paminar to function as a drainage carrier in the same way as Coleroon in the North.

(iii) Opening more outlets into the sea by means of straight cuts.

(iv) Pumping excess water into the river estuaries and keeping the bars open into the sea.

(v) Dealing with isolated low pockets according to necessity.

Schemes under consideration

There are schemes under consideration to build up reservoirs on the upland drainages like Sholahampatti vari and Mudalamuthu vari and hold back the flood waters for beneficial use. Also soil conservation measures are proposed to be undertaken in their catchment areas. These measures will mitigate the conditions of floods entering the delta from upland areas.

As regards drainage in the delta proper, this is a serious problem. The delta is like a "Bowl" with only a few outlets into the sea. Even these outlets are closed by bars during the major part of the year preventing free flow of drainage into the sea. Though irrigation supplies are reduced or cut off during the rains the drainage of rain water from the fields has no pre flow or has only sluggish flow through existing outlets. It may be necessary to pump out the waters into the sea. The U.S. A.I.D. Team which studied the problem has also recommended pumping. Its recommendations are (i) to drain the 16,000 hectares (40,000 acres) in "lower delta" with batteries of high volume low head pumps, operating out of well-designed collection galleries. The water would be discharged into levied channels emptying into the sea; (ii) a ground water survey should be undertaken and if has survey reveals the presence of water in large quantities, batteries of wells could be developed with capacity to furnish water as needed in selected portions of the delta from November to June; (iii) the drainage system in the delta cannot be fully planned until plans for pumping underground water for irrigation have been completed. It is entirely possible that the drainage problem and much of the flooding hazard will be done away with by ground water pumping which will draw down the water table.

Pre-requisites

Though the problem looks simple and easy of solution there are many pre-requisites. First, a ground water survey is necessary and this is proposed to be taken up shortly. Disposal of drainage with battery of pumps is a new experience and may be prohibitively costly

especially when high volume pumps are to be imported. For forming embankments or levees to lead away the water, good soil is normally not available in the localities. Only sand may have to be used with concrete lining.

Some small schemes using the drainage water for irrigation by pumping have already been executed and some more are under execution and under investigation. But this is hardly adequate to meet the volume of drainage for disposal. A full-fledged investigation and plan is necessary and has been proposed.

In the Fourth Plan a tentative provision of Rs. 50.00 million is made for carrying out drainage improvements in the Cauvery delta pending framing of suitable schemes. It is expected that standing crops which get affected over vast areas would be saved and increased yield will be possible. But no pre-conceived benefit-cost-ratio can be answered by such schemes needed to cure the fundamental requirements of an age-old irrigation system. The main criterion should be the production of additional food grains. Large sums of money will have to be spent which may be beyond the financial resources of the State. It may therefore be necessary to approach the Central Government for suitable financial assistance and to invoke available A.I.D. programmes.

The Cauvery delta is the biggest block of irrigated area in Madras State. Hence every effort to improve its efficiency and solve its problems is called for. Benefits of each work individually will be felt in the system and collectively should help manage the use of water economically and beneficially and lead to higher yields and extension of irrigation to what little extent savings can result.

YIELD

1959-60 Base Year Yield per } 2,008 Lb.
Acre.

1964-65 Average Yield per Acre. 2,385 "

Increased Yield per Acre .. 377 "

Additional production for the } 2.40 Lakh
District—14 lakhs of Acre. Tons.

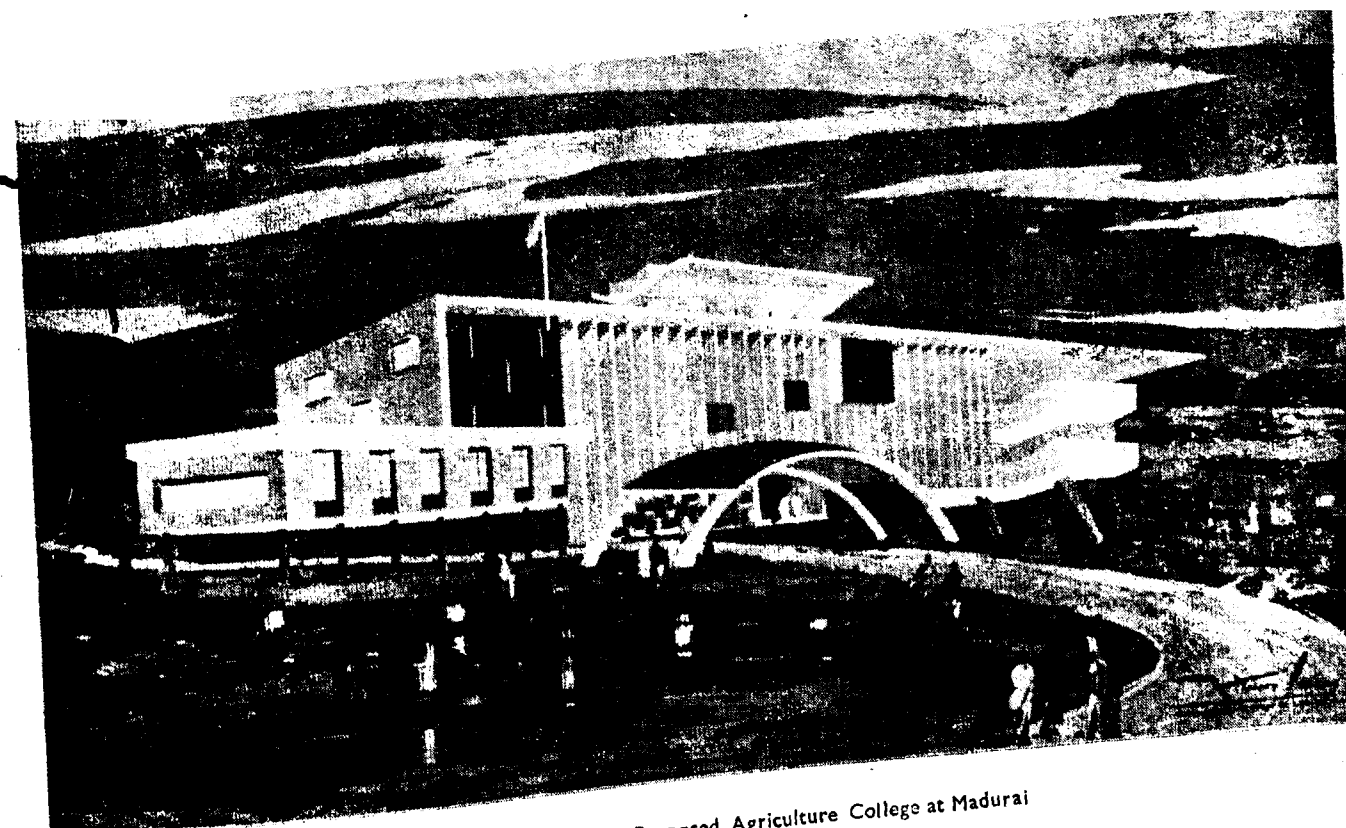
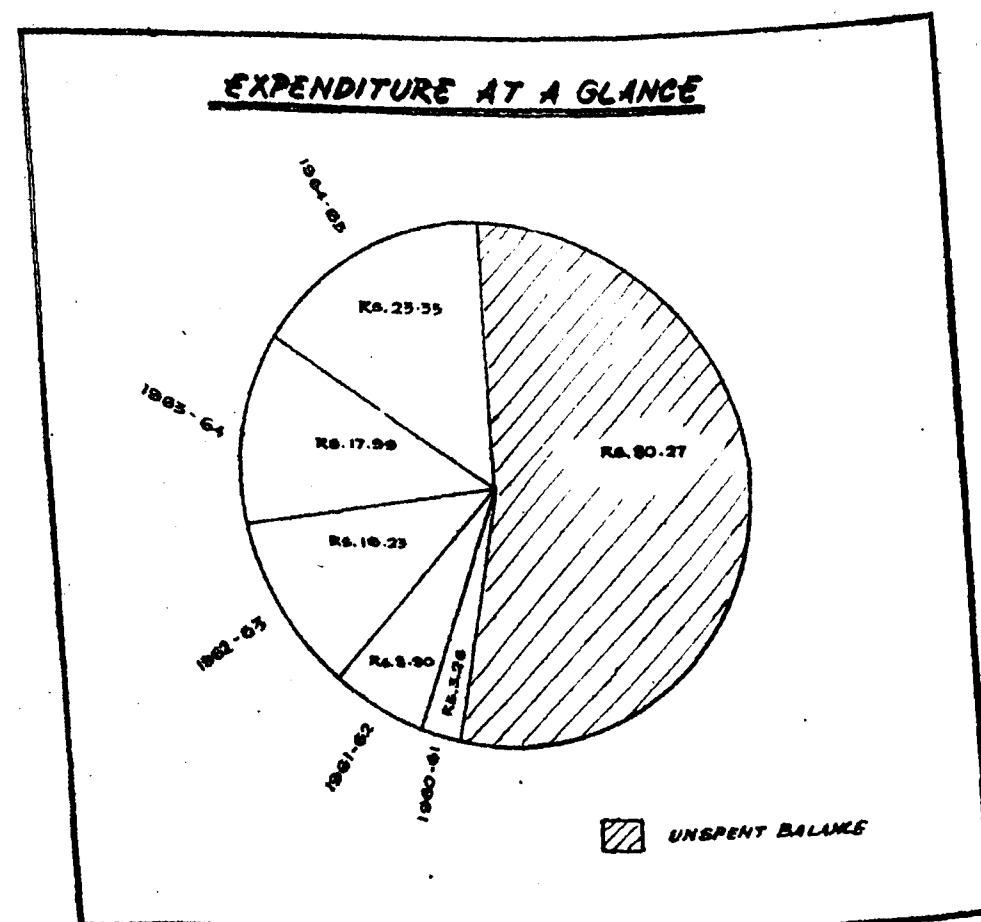
Gross Additional value for the } 9.59 Crores.
District.

Agricultural Seminar: Recommendations

The three-day agricultural seminar which was inaugurated by Sri C. Subramaniam, Union Minister for Food and Agriculture, at Thanjavur in August 1965 made specific recommendations to step up agricultural production, with particular reference to intensive cultivation of rice. In his concluding remarks, Sri M. Bhaktavatsalam, Chief Minister of Madras, explained the significant role played by the small farmer in improving the national economy. He assured that the farmers would be given incentives to produce more. It should be ensured that the farmer got a fair return for all his labour. Government had, therefore, fixed a support price for his produce, he added. He also said that a pilot project to study the feasibility of a crop insurance scheme will be taken up during the Fourth Plan.

The seminar which had split itself into three groups at a plenary session approved all the recommendations made by each group. One of the major recommendations made was the setting up of private seed corporations for the production and distribution of improved varieties of seeds. It was also suggested that Government should enact a quality control legislation in this regard. Regarding soil analysis, it was urged that mobile units with portable kits should be provided for large scale soil testing facilities throughout the country. This will save wastage of fertilizers and fruitless expenditure. It was also suggested that some incentive or compulsion was necessary for growing green manure and that suitable organisations should give technical advice for compost manufacture.

INTENSIVE AGRICULTURE DISTRICT PROGRAMME, THANJAVUR.



An artist's sketch of the Proposed Agriculture College at Madurai

As regards fertilizers, it was urged that experts should evolve fool-proof methods to prevent their wastage due to defective application. Deep placement of fertilizers and its method will have to be studied and cultivators suitably educated by demonstrations and talks. Pest control, which the seminar recognised as a community problem, had to be effectively done. The setting up of a pest control organisation which could be most useful during epidemics was suggested in this connection. It was also suggested that a tractor pool should be maintained in each district with a suitable central workshop so that a fleet of tractors may be hired out for an area. The seminar also urged that suitable provision should be made for the large scale manufacture of farm implements in this country.

Multiple cropping

Regarding the scope for the multiple cropping, it was recommended that a pilot scheme covering an area of about 100 acres with a short duration Russian variety which matures in 120 days and had been developed at Coimbatore might be introduced.

The seminar felt that co-operative irrigation societies might also be formed for sinking bore-wells with Government aid for bringing additional area under commercial

crops. To cover a large area under this category it was recommended that groundnut seeds farms might be organised in various regions to meet the demand of

PACKAGE EXPENDITURE 1960-'61 to 1964-'65

Sanctioned Budget for the I.A.D.P.	Rs. 150.00 lakhs.
Amount utilised in Five Years.	Rs. 69.73 "
1. Extension Personnel	Rs. 45.79 lakhs.
2. Soil Testing Laboratory and Implement Workshop.	Rs. 3.87 "
3. Transport and Tractors	Rs. 12.91 "
4. Quality Seed Programme.	Rs. 0.52 "
5. Bench mark and Assessment.	Rs. 2.40 "
6. Demonstrations	Rs. 4.24 "



Sri M. Bhaktavatsalam, Chief Minister, inaugurated the Agriculture College at Madurai.

quality seeds. It was recommended that a detailed survey of the coastal belt should be undertaken to study the prospects of raising extensive coconut.

Special emphasis had to be laid on raising fodder crop for improvement of the cattle generally. Fodder development had to be taken up as an important aspect of development of animal husbandry. Farmers should be encouraged to take up subsidiary industries like dairying, poultry and bee-keeping. Cattle feed units may be established in suitable areas. The cattle feed may be sold at reasonable rates. A scheme should be evolved for introduction of good breed of stalled goats for eventual replacement of existing goats found to be a menace in the rural areas.

Concerning the proposal for modernising the Cauvery and Vennar channels at an estimated cost of about Rs. 12 crores under the Fourth Plan, the consensus of opinion was that the scheme should be extended to the other parts of the Cauvery delta. As a measure of economising water, it was suggested that zoning the Kuruvai cultivation area would be the best possible course to economise in the use of water. It was pointed out that with the filter points and bore-wells so far sunk and proposed to be sunk, the seedlings required for Kuruvai can be raised even prior to the release of Mettur waters and the transplantation can commence on the release. A ground water cell has been created for assessing the ground water potential and its possible utilisation. It may be possible to sink a large number of deep bore-wells to extract the ground water which can be utilised as stand-by at times of scarcity, for raising seedlings in the early part of the irrigation season and also to supplement supply at the end of the irrigation season. It was recommended that at points which are not successful as a filter point, the tube-well may be converted into bore-well by going deeper. The unit may also be suitably strengthened with adequate testing equipments and winches wherever necessary and Government of India may help expedite the supply of the necessary equipment to intensify the programme of filter points and more particularly of the exploitation of ground water under the ground water cell.

MADRAS CITIZEN'S RESOLVE

The citizens of Madras rallied at the historic Tilak Ghat in Marina on 9th September 1965 to condemn the Pakistani aggression. The Chief Minister of Madras Sri M. Bhaktavatsalam presided over the meeting in which leaders of various political parties and men in different walks of life took part and pledged their whole hearted support to the Government in the grim battle against Pakistan. The meeting saluted our valiant Defence forces which were exhibiting great heroism and courage in throwing back the aggressors in defence of the country and pledged its support to the defence forces.

The Pledge read out by the Chief Minister, on the occasion said that, "this meeting of the Citizens of Madras affirms its solemn resolve to support the efforts of the Nation to repel the aggression by Pakistan against our country."

"This meeting salutes our Defence Forces who are showing great courage and heroism in throwing back the aggressors and in defending the country and pledges its support to them."

"This meeting highly commends the firm action taken by Sri Lal Bahadur Shastri, Our Prime Minister, at this critical hour and pledges its resolve to stand united by our Jawans under his inspiring leadership."

"This meeting appeals to every citizen to make a resolve to work in disciplined and efficient manner to support the Government in all its all-out efforts to defend the country against aggression."



1. A view of the gathering at the citizens' rally.
2. A view of the women's procession which rallied at Rajaji Hall to pledge their support to repulse the aggressor from our soil.
3. At the women's rally Chief Minister received donation from various associations in aid of the National Defence Fund.
4. Another view of the gathering which attended the rally.



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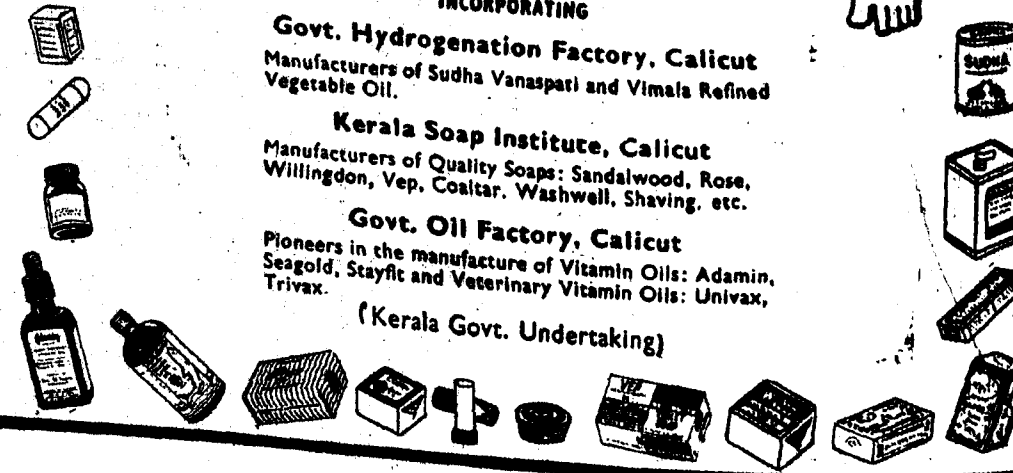
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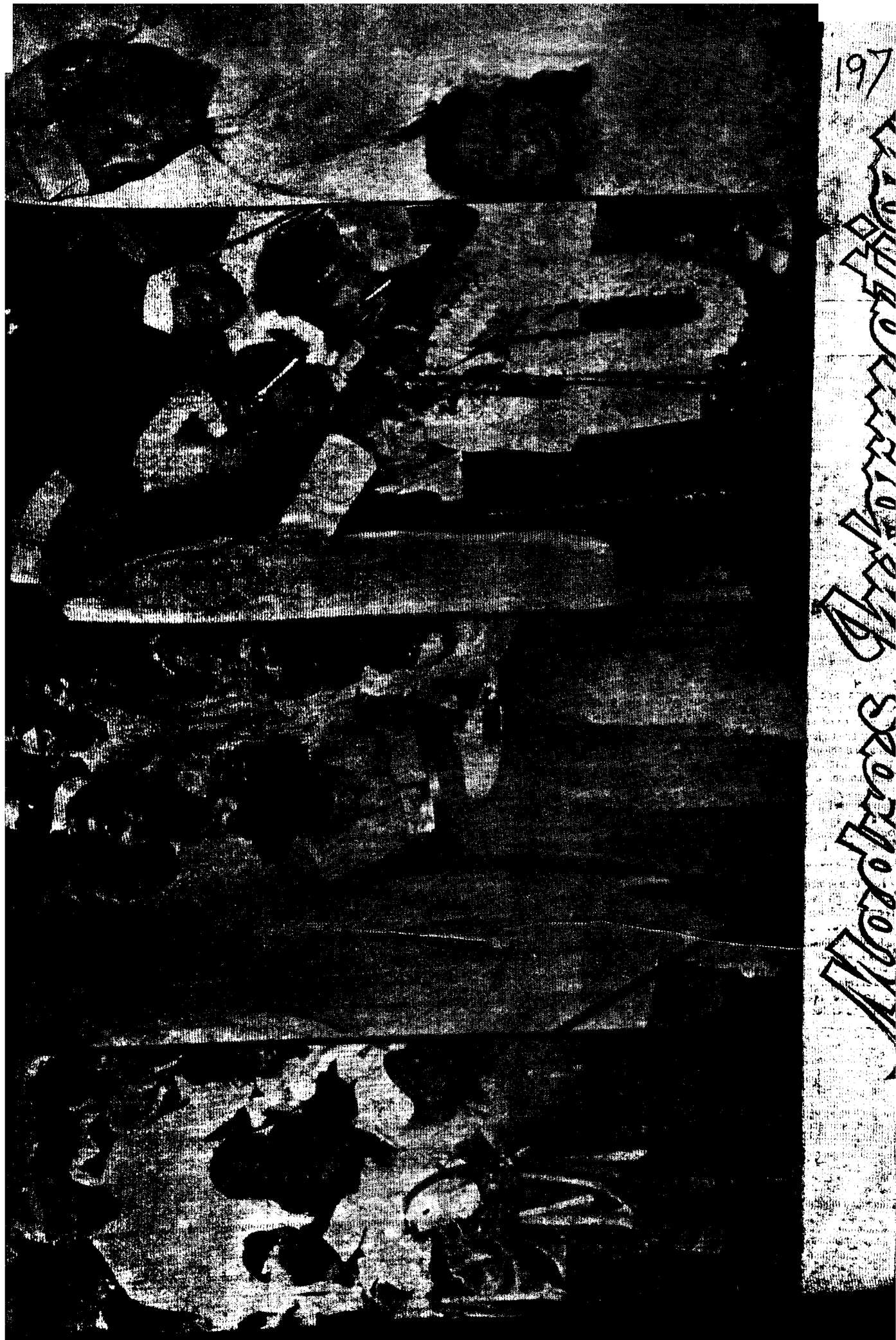
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Willington, Vep. Coaltar, Washwell, Shaving, etc.

Govt. Oil Factory, Calicut
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Seagold, Stayfit and Veterinary Vitamin Oils: Univax,
Trivax.

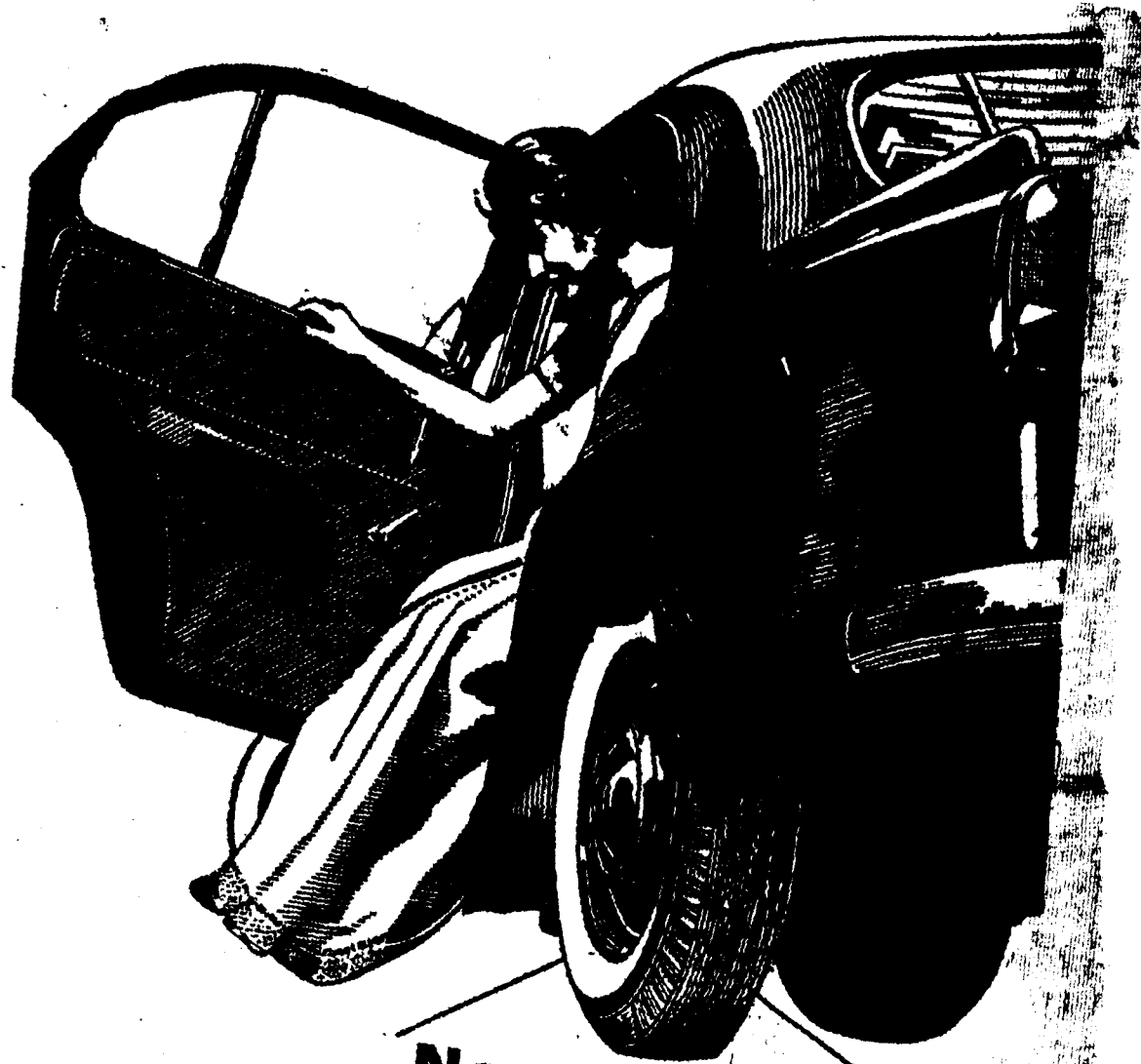
(Kerala Govt. Undertaking)



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NEHRU'S VISION OF INDIA

Our beloved leader Sri Jawaharlal Nehru wanted India to strive for high ideals and lead the world in the years ahead. He toiled all his life to prepare the India of today to take up this great responsibility. Except the destiny of India and its sons and daughters nothing was so dear to him. Wherever he went he educated his countrymen of India's past heritage and their responsibility in building up an India for the posterity that is worthy of its tradition.

This year when we celebrate his birthday on 14th of this month as Children's Day, in the context of the present threat to our way of life, it has a special significance for us. Here we give below his views on our past heritage, the need for the unity of the people, safeguarding our nation from external threat, economic development, etc., compiled from his speeches so that all of us—young and old alike—will have an understanding of what we should do in this critical hour. Only by doing so we can pay homage to this great son India.

To endeavour to understand and describe the India of today would be the task of a brave man. To describe tomorrow's India would verge on rashness.

What is India? That is a question which has come back again and again to my mind. The early beginnings of our history filled me with wonder. It was the past of a virile and vigorous race with a questing spirit and an urge for free inquiry and, even in its earliest known period, giving evidence of a mature and tolerant civilization. Accepting life and its joys and burdens, it was ever searching for the ultimate and the universal. It built up a magnificent language, Sanskrit, and through this language, its arts and architecture, it sent its vibrant message to far countries. It produced the Upanishads, the Gita and the Buddha.

Through the ages

Gradually deterioration set in. Thought lost its freshness and became stale, and the vitality and

exuberance of youth gave place to crabbed age. Instead of the spirit of adventure there came lifeless routine, and the broad and exciting vision of the world was cabined and confined and lost in caste divisions, narrow social customs and ceremonials. Even so, India was vital enough to absorb the stream of people that flowed into her mighty ocean of humanity and she never quite forgot the thoughts that had stirred her in the days of her youthful vigour.

Subsequently, India was powerfully influenced by the coming of Islam and Muslim invasions. Western colonial powers followed, bringing a new type of domination and a new colonialism and, at the same time, the impact of fresh ideas and of the industrial civilization that was growing up in Europe. This period culminated, after a long struggle, in Independence and now we face the future with all this burden of the past upon us and the confused dream and stirrings of the future that we seek to build.



Chief Minister's Birth-Day JAWANS WELFARE DAY



Jawans are our brethren. They fight for our country. While they are in the front line fighting for our country, the duty of every citizen to look after their Kith and Kin, very thought, that the nation is behind them and their lives are taken care of, would enable the jawans to fight men with added courage. In Madras therefore, we have led to celebrate our Chief Minister's birthday as "Jawans are Day". On this day students rally was organised at Krishna Mission High School, Myapore, M. C. Muthiah High School, Purasawalkam, St. Gabriel High School, G.T. and Presidency College grounds, Marina, where contributions totalling Rs. 1,82,000 and gifts worth Rs. 50,000 colleges have contributed Rs. 1,25,021.60 towards N.D.F.

The Chief Minister arriving at the M. C. Muthiah High School, Purasawalkam. 2. Sri N. D. Sundaram, Director of Higher Education, presenting Rs. 25,021.60 to the Chief Minister. 3. The Chief Minister inspecting the N.D.F. Collections at Khadi Gramodyog, Madras. 4. Sri M. Bhaktavatsalam visiting the gifts of Jawans and their families at the exhibition at St. Gabriel High School. 5. The Chief Minister presenting to one member of the jawan's family. 6. Principals of colleges called on the Chief Minister on his birthday.



MADRAS Information

Vol. XIX NOVEMBER 1965 No.

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THIS MONTH'S COVER:

On the 14th November, Children of India pay their homage to Pandit Jawaharlal Nehru who, sharing with them their freshness and their cheer, toiled all his life to create an India where Children could have all the facilities and opportunities to Develop on lines suited to each one's nature and aptitude and grow into healthy and purposeful citizens. This month's cover presents Jawaharlal amidst children whom he loved and who returned that love in abundance.

[Price 20 Paise.]

We have all these ages represented in us and in our country today. We have the growth of nuclear science and atomic energy in India, and we also have the cow-dung-age.

In the tumult and confusion of our time, we stand facing both ways, forward to the future and backwards to the past, being pulled in both directions. How can we resolve this conflict and evolve a structure for living which fulfils our material needs and, at the same time, sustains our mind and spirit? What new ideals or old ideals varied and adopted to the new world can we place before our people, and how can we galvanize the people into wakefulness and action?



We have deliberately laid down as our objective a socialist pattern of society. Personally I think that the acquisitive society, which is the base of capitalism, is no longer suited to the present age. We have to evolve a higher order more in keeping with modern trends and conditions and involving not so much competition but much greater co-operation. We have accepted socialism as our goal not only because it seems to us right and beneficial but because there is no other way for the solution of our economic problems. It is sometimes said that rapid progress cannot take place by peaceful and democratic methods. I do not accept this proposition. Indeed, in India today any attempt to discard democratic methods would lead to disruption and would thus put an end to any immediate prospect of progress.

The mighty task that we have undertaken demands the fullest co-operation from the masses of our people. The change we seek necessitates burdens on our people, even on those who can least bear them; unless they realize that they are partners in the building of a society which will bring them benefits, they will not accept these burdens or give their full co-operation.

India today

India to-day presents a very mixed picture of hope and anguish, of remarkable advances and at the same

time of inertia, of a new spirit and also the dead hand of the past and of privilege, of an overall and growing unity and many disruptive tendencies. Withal there is a great vitality and a ferment in people's minds and activities.

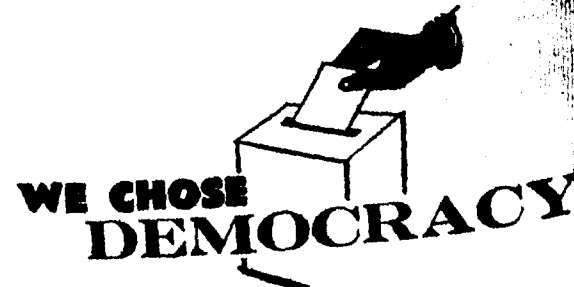
It is a remarkable thing that a country and a people rooted in the remote past, who have shown so much resistance to change in the past, should now be marching forward rapidly and with resolute steps.

Tomorrow's India will be what we make it by today's labours. We have started on this pilgrimage with strong purpose and good heart, and we shall reach the end of the journey however long that might be.

Essential Principles

What I am concerned with is not merely our material progress, but the quality and depth of our people. Gaining power through industrial processes, will they lose themselves in the quest of individual wealth and soft living? That would be a tragedy, for that would be a negation of what India has stood for in the past and, I hope, in the present time also as exemplified by Gandhiji.

Can we combine the progress of science and technology with this progress of the mind and spirit also? We cannot be untrue to science, because that represents the basic fact of life today. Still less can we be untrue to those essential principles for which India has stood in the past throughout the ages.



Deliberately and after long argument we in India adopted a Constitution based on parliamentary government. The fact that nearly eight years of the working of our Constitution have not in any sense made us waver in our allegiance to it indicates our strong faith in it. We prize the parliamentary form of government because it is a peaceful method of dealing with problems. It is a method of argument, discussion and decision, and of accepting that decision, even though one may not agree with it. However, the minority in a parliamentary Government has a very important part to play. Naturally, the majority, by the mere fact that it

is a majority, must have its way. But a majority which ignores the minority is not working in the true spirit of parliamentary democracy.

In a period of dynamic change, the institution of parliament has to function with speed. Does the parliamentary form of government enable a country to move with speed when speed becomes essential? Take an emergency like war. When a war occurs, parliaments continue to function, but with certain limitations because of the emergency. A great deal depends on the conditions of the times, on the environment and on the problems which a country has to face. Having approved of parliamentary democracy as the right approach, we have to see how to temper it and how to fit it in, so that it can answer the major questions of the age.

Parliamentary Government is a democratic conception. It means the gradual widening of the franchise till it becomes adult franchise. It is only in very recent times that any country has had adult franchise. The effects of adult franchise are being felt in full only now. This political change having fully established itself, it has become obvious that a political change by itself is not enough.

Economic democracy

From political democracy we advance to the concept of economic democracy. First of all, that means working for a certain measure of well-being for all, call it Welfare State. Secondly, it means working for a certain measure of equality of opportunity in the economic sphere. Every country, whether it is communist, non-communist or anti-communist, is going that way.

We can hardly have a political democracy without mass education. In other countries full-blooded political democracy came after education had spread a good deal as a result of the economic revolution which had prepared the ground for it. But in most Asian countries, certainly in India, we have taken a huge jump to hundred per cent political democracy without the wherewithal to supply the demands which a politically conscious electorate makes. That is the essence of the problem in all the Asian countries. All our political life is really concerned with how rapidly we can bridge this hiatus between desires and their fulfilment. India's (Second) Five-Year Plan is an attempt to bridge the hiatus. We have to think not merely in some academic way of the form of government which we should have, but in terms of a political structure which will fulfil the demands

made upon it. If the political structure cannot do so, it means that it has become out of date and may have to go.



All over India, whether it is our Five-Year Plans or our Community Schemes or our dancing and music or our literature, there is a certain vitality. A powerful life force is acting not on a new or inexperienced people, but a race with thousands of years of experience. All that had happened was that we had forgotten much of that experience. We have to renew our acquaintance with it, and also to gain acquaintance with the new experience of the Western World which has helped to build a magnificent civilization out of science. Western civilization today has many faults which have led it into conflict and war, but it has, nonetheless, been a magnificent civilization. It has brought higher standards to the people of the West through science and technology. It has produced magnificent literature, great music, great art. It is a great civilization and we have to learn much from it. But we cannot learn anything from it if we forget what we are, and uproot ourselves. Therefore, while we must maintain our roots in our soil and fore, while we must learn much. The problem of our country, we have also to learn much. The problem today for you and me and all of us is how to keep this great experience, this great culture of India, this great thought of India, how to maintain it, preserve it, nourish it, and how to plant on to it the dynamism and science and technology and thought of the West.

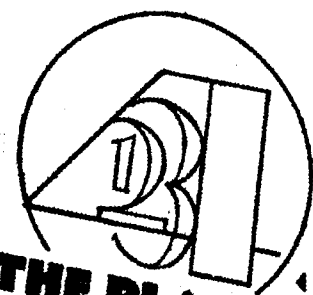
Emotional integration

We can see disruptive forces at work in India. Some people are deliberately disruptive. Others are unconsciously disruptive and they become parochial or provincial or communal. They forget the large purposes that we have in view, forget the great destiny before India, forget that India aims high, that India never aimed low.

We should not become parochial, narrow-minded, provincial, communal and caste-minded, because we have a great mission to perform. Let us, the citizens of the Republic of India, stand up straight, with straight backs, and look up at the skies, keeping our feet firmly planted on the ground and bring about this synthesis, this integration of the Indian people. Political integration

ight help from all friendly countries. This help that given is unconditional and without any strings. It es not, therefore, affect directly our policy of non- gnment which we follow. Those countries which ve helped us have themselves recognised this and made clear that they do not expect us to leave that policy.

Much has been said about our unpreparedness. The ne real fact is that our whole mentality has been govern- d by an approach of peace. I hope that our nation, much less my humble self, will never be brutalised because it is a strange idea that one can only be strong by being brutal. I reject that idea completely. Our strength lies in other factors. I hope that India, which is essen- tially a gentle and peace loving country, will retain that mind even though it may have to carry on war, with all its consequences, to the utmost.



ON WITH THE PLAN

The basis of the Plan is to strengthen the nation, and to increase production. Nothing is required more than production when you have such a problem to face. I am leaving out the military aspect, which is for our experts and soldiers to deal with. But the civil aspect is an essential part of any war effort (of this kind). The civil aspect is important, production is important, training of technical personnel is important.

It becomes important to look at the Plan as an essen- tial part of our effort. Therefore, all idea of giving up the Plan, which some people in their short-sightedness suggest is very wrong. However, we shall have to examine the Plan, stick to essentials and somewhat slow down those things that are not essential now.

We are in the middle of our Third Five-Year Plan. There can be no question of our giving up this Plan or reducing any element of it. We may adapt it to the new requirements here and there. But, essentially the major projects of the Plan must be pursued and implemented, because it is in that way that we shall strengthen our country not only in the present crisis but in the years to come.

I hope, therefore, that no conflict will arise in any persons mind whether we should go ahead with the Third Five-Year Plan or devote ourselves to the war effort. The Plan is part of the war effort. The principle thing is for us to devote ourselves to forge the national will to freedom and to work hard to that end. There is no time-limit to this. We shall carry the struggle as long as we do not win, because we cannot submit to the aggression or to the domination of others.



VICTORY WILL BE OURS

The conflict may continue, for long. We must prepare ourselves mentally and otherwise. We must have faith in ourselves for it and I am certain that that faith and our preparations will triumph. No other result is conceivable. Let there be this faith and fixed determina- tion to free our country from the aggressor.

What then are we to do about it? We must steel our wills and direct the energy and resources of the nation to this one end. We must change our procedure from slow moving methods of peace time to those that pro- duce results quickly. We must build up our military strength by all means at our disposal.

But military strength is not by itself enough. What we really want is the whole people mobilised for this effort doing their separate jobs whether it is in the field, the factory or the battle field thus combining to- gether and strengthening the nation and bringing success to us. We have to be armed, therefore, not only by weapons of warfare but by weapons of agriculture and industry as well.

Price of Freedom

We do not minimise our task. Let no man minimise it or have illusions about it. It is not a thing which we can deal with by momentary enthusiasm. It is a long effort that we require a difficult effort and we shall have to go out to do our utmost.

We shall have to carry a heavy burden, all of us, what- ever our vocations may be. The price of freedom will have to be paid in full measure and no price is too great for the freedom of our people and our Motherland.

The burden on us is going to be great. We must add to our savings by the purchase of Bonds to help the finance production, and meet the increasing cost of National Defence. We must prevent any rise in prices and we must realise that those who seek to profit at a time of national difficulty are anti-national and injure the nation.

Our duty

We must avoid any panic because that is bad at any time and there is no reason for it. We have behind us the strength of a united nation. Let us rejoice because of this and apply to the major task of today that is preserving our complete freedom and integrity and the removal of all those who commit aggression on India's sacred territory.

Do not believe in rumours. Do not listen to those who have faint hearts. This is a time of trial and testing for all of us and we have to steel ourselves to the task. I want to make a pledge here and now that we shall see this matter to the end and the end will have to be

Vigilance and Sacrifice

The independence and integrity of a country can be protected only through the sacrifices and vigilance of the people.

—Jawaharlal Nehru.

victory for India. "Jai Hind" has truly acquired a new and vital meaning for us in the special context of the present—"Victory to our Land".

There has been a great deal of expression of determi- nation of India—a great enthusiasm which has hearte- ned us—People, even poor people, have been contributing to our Defence Fund and in many other ways people have shown their determination. I hope this will continue in an ever increasing measure. We will not waver.

We are going ahead whatever happens with the firm conviction in the righteousness of our cause and that success and victory will be ours. I want you to join in this conviction and not to be down-hearted at any time. And let us all say today, with the real meaning

"JAI HIND".

DONATE LIBERALLY

The Chairman of the Citizens' Central Council, Shrimati Indira Gandhi, has set up a Kashmir Committee with a Relief Sub-Committee. It has started functioning and the office is situated in Rashtrapati Bhavan, New Delhi. All donations in cash or kind for relief of those who have been uprooted or other- wise distressed in Jammu and Kashmir will be greatly appreciated.

The Relief Sub-Committee appeals to the citizen of India to donate in money and in kind, specially woollen clothing and blankets, generously. These donations can be sent to the Citizens' Central Council at the above address. Consignments will be carried free of freight on the railways. Cheques should be made out in the name of the Chairman, Citizens' Central Council.

has already taken place to some extent, but what I am after is something much deeper than that—an emotional integration of the Indian people so that we might be welded into one, and made into one strong national unit, maintaining at the same time all our wonderful diversity. I do not want this diversity to be regimented and taken away, but we must be wary of losing ourselves in petty quarrels. We may often have to accept somebody else's opinion even though we do not like it; that is the way of democracy. That is how we functioned in the Congress movement for forty years. Gandhiji was no autocrat. He could have imposed his will on anybody but when he did impose it, it was only through his love and affection and through the regard we had for him and for his wisdom. Often we argued with him, fought him, and sometimes even convinced him of our point of view.

The main thing we have to keep in mind is the emotional integration of India. We must guard against being swept away by momentary passion, whether it is religion misapplied to politics or communalism or provincialism or casteism. We have to build up this great country into a mighty nation, mighty not in the ordinary sense of the word, that is, having great armies and all that, but mighty in thought, mighty in action, mighty in culture and mighty in its peaceful service of humanity.

AT THE CROSSROADS

We are at the cross roads of history and we are facing great historical problems on which depends our future. So, whether we are big men or small, we have to undertake the work of big men because only big people—big in mind, big in vision, big in determination—can face big problems. This is the first point I should like to impress upon you to realise the extraordinary character of what has happened, which has changed or will change our whole national outlook and our history. If we are to face this adequately, as we have every intention of doing, then we have to think in a big way. We have to forget many of our problems which normally pursue us and see this big problem which governs us all.

It may be—and there are some indications that it will be—that in solving the big problem we shall almost automatically solve many of our smaller problems, conflicts, controversies, etc. At the same time, it is

clear that this big problem will require a tremendous effort on the nations part and those of us who have been placed by fate and circumstances in a position of governmental authority, whether at the Centre or in the States, have a great responsibility which all of us put together can and will shoulder.

Chinese threat

The Chinese invasion, in its quantity and quality, came almost like a thunderbolt, and reactions in India have also come like a thunderbolt. The response of the people all over the country, of all classes, of all areas, has been truly magnificent and wonderful. Most of the problems and conflicts that filled our newspapers have become things of the past. That itself shows the stuff that our people are made of. It is one thing to get entangled in small matters, but another to rise above those matters, when a big crisis comes. While much has happened in the past to depress us, what has now happened has heartened me and, I am sure, heartened all of you.

We might say that this terrible shock has occasioned almost a new birth of the Indian spirit and the soul of India awakened again, after some sleep. All that we, who are privileged to serve India, can say is that we shall do our utmost to be worthy of this responsibility and not to allow any personal, group or other considerations to come in the way. Constitutionally there might be a Central Government and the State Government, but actually we are all one.

THREAT TO OUR SECURITY

China, which had claimed and still claims to be anti-imperialist, is pursuing a course today for which comparisons can only be sought in the eighteenth and nineteenth centuries. The very champions of anti-imperialism, that is the People's Government of China, are now following the course of aggression and imperialist expansion. No self-respecting country which loves its freedom and integrity can possibly submit to this challenge. Certainly India, this dear land of ours, will never submit to it whatever the consequences.

I must confess that the Chinese attempt to make falsehood appear to be the truth and the truth to be the falsehood has amazed me. To say that we are committing

aggression on Chinese territory is a kind of double talk which is very difficult for a man of my simple mind to understand. We are committing aggression on ourselves! We are committing aggression on the soil of our own country! And they defend it by coming over the mountains into our territory! It is really extraordinary to what length people can go to justify their misdeeds.

Pak's attitude

I was surprised and grieved at some of the statements of the President of Pakistan. I do not expect him to say things which I like or which we may approve of, but in the context of some of these statements and the way in which India was made the subject of his attacks in foreign countries did seem to me very peculiar and undesirable. It is not normally done, more especially by Heads of States. It showed a mental approach which I thought was deplorable. The approach was one of hatred of India, dislike that India should make any progress, and generally a basic policy which did not think positively of Pakistan but negatively of what should not happen to India.

President Ayub Khan has said that if the Kashmir question is settled according to his liking, then all would be well. I am convinced more than ever that this question of India and Pakistan is not dependant on Kashmir and on what happens to Kashmir. It has deeper roots, unfortunately, in the minds of the rulers of Pakistan. If the Kashmir question was removed from the scene, even then the Pakistan authorities—I do not think the people are concerned in this—would fiercely attack India because their whole policy is anti-Indian, based on dislike of India and envy of India making progress. This is the basic policy of Pakistan and it is difficult to deal with it. One can judge our policies and their policies. We do not go about talking about Pakistan all the time. We may occasionally refer to it. We do not curse Pakistan. We want friendship with Pakistan and its people. We want Pakistan to progress, while in Pakistan the major subject of debate is always India, dislike and hatred of India. This is extraordinary. They have developed a complex. Instead of looking after Pakistan's progress, which we would welcome, they think their progress consists somehow in denigrating India.

Rulers of Pak

It is very difficult for us to deal with this kind of mental complex but you can see how it has come about. The whole origin of Pakistan was not based on a positive concept. It was based on the concept of hatred. The brave people of Pakistan, who fought for independence shoulder to shoulder with us, suddenly found themselves ruled by people who had taken no part in the indepen-

dence struggle. They had taken part against independence. People who had supported the British rule became the rulers of Pakistan. They had no roots in the independence movement. They had opposed it. Socially speaking, they belonged to the big landlord class. The result was that there was enormous difference between what took place in India and what took place in Pakistan. Before we came into the Government, we had some kind of an economic policy, an agrarian policy, a policy in regard to landlordism and the like. And the record of the past twelve years has been an attempt to bring about these changes in India, and the attempt continues.

In Pakistan, there was no such background. The only background was hatred of India, dislike of India and fear of India. Why fear? India would not attack them, both because our whole background is against such a course and because our minds are full of the Five-Year Plans and our economic planning. We wanted peace to develop our country. But the Pakistani authorities had no such thing to fill their minds. The only thing there was, was hatred and fear of India.

A Contrast

Kashmir comes in, because in Kashmir they are the guilty party. People from Pakistan or through Pakistan came to Kashmir, invaded Kashmir and committed arson, rape and every kind of crime. Kashmir acceded to India, legally, practically and in every way. That is a position which has been accepted by the Commission which the United Nations served here. When the issue dragged on at the U.N., it was decided by the Kashmir Government, in consultation with us, that they could not stop the progress of the people of Kashmir.

In spite of all difficulties, Kashmir has made very considerable progress. In education, it has made remarkable progress considering that it started almost from scratch. In other spheres too, such as power development, and some small industries and medium industries, it is making progress. Look at the two pictures; on one side you have been making progress; on the other you have that bit of Kashmir which is under Pakistan occupation doing practically nothing except singing songs of hatred. The difference is amazing. When people in Pakistan talk about plebiscite, etc., in Kashmir it does rather surprise one that a country which has given up the whole business of elections should advise another country to have plebiscite and elections.

A situation has, therefore, arisen which calls upon all of us to meet it effectively and preserve the freedom and integrity of our Motherland. In this task, in defending our frontiers and our Motherland, we have



Millions of hearts beating as one.
Small rivulets flowing into a mighty river.

Such is our free society of many
communities living together in
peace and harmony. This society is
worth preserving, worth fighting
for. Remember, your neighbor is
as important to this society as you.

**ONE GREAT COUNTRY
ONE GREAT PEOPLE**

DA 6/74



Food Production Drive and the District officers

In a broadcast to the nation last month the Prime Minister, Sri Lal Bahadur Shastri, called upon the people to work with the same dedication, the same zeal and the same determination which inspired and motivated the warrior in the battle front. He said that the preservation of freedom was not the task of soldiers alone. The whole nation had to be strong.

Our long term objective must be to achieve self-sufficiency in food not by self-denial but by producing enough within our country in order to feed and build up a nation which is healthy and strong. Dependence on food imports is not only bad for the economic health of our country but it undermines also our self-confidence and self-respect. We have to stand on our own legs and a beginning has got to be made right now towards self-sufficiency in food. The food front today is almost as vital as the military front. The officials at district level have an important roll here.

The events of the past few weeks have roused the entire nation to a new and deeply felt awareness of its responsibilities. Foremost among them is the preservation of our freedom. We were suddenly faced with an unprecedented challenge, but this was met swiftly and effectively. The brave Indian soldier and the air-man provided the answer. Who were these brave warriors to whom crippling injuries were of no consequences who courted death with a smile, so that India may live with freedom and honour? They were our sons and our brothers.

They have shown the way and we are all so proud of them. But the task is not yet done. In fact this is a task which is continuous and which will always have the first call on our resources and on our lives.

The preservation of freedom, my countrymen, is not the task of soldiers alone. The whole nation has to be strong. We all have to work in our respective

spheres with the same dedication, the same zeal and the same determination as inspired and motivated the warrior in the battle front. And this has to be shown not by mere words, but by actual deeds.

The one lesson which we all must learn and whose implications we must all accept deep down in our hearts is that for the preservation of freedom we must have the necessary internal strength and that we must be as self-reliant as possible. We have to build up our economy in such a manner as to be self-sufficient in certain essential sectors.

Food production

I wish to speak to you about the all important subject of food production. I consider self-sufficiency in food to be no less important than an impregnable defence system for the preservation of our freedom and independence. Our long term objective must be to achieve

People Contribute Liberally



If anybody hitherto had any doubt about our lack of unity or sense of purpose what is now going on all over the country should certainly serve as an eye opener. We witness everywhere a desire to safeguard our country's freedom and integrity. People support the Government in its efforts to throw back the aggressor with firm determination. The people of Tamilnad were always in the forefront. In keeping with their tradition they—men and women alike—have come forward to contribute to the National Defence Fund. Students, workers, professionals, businessmen, to mention only a few all are contributing to the National Defence Fund in an unending stream. They also contribute in kind. These contributions are being handed over to the military authorities for distribution among Jawans.

1. Sri J. K. Kamaraj, A.L.C.C. President, presenting gifts to a Military Officer for the Jawans.

2. Chief Minister receiving Rs. 22,788 (one day salary) donated by the Government Servants in Dharmapuri division.

3. Sri N. S. S. Manradar, Minister for Co-operation, presenting a sum of Rs. 1,53,943-95 to the Chief Minister for National Defence Fund on behalf of the Officers and Staff of the Madras State Khadi and Village Industries Board.

4. Representatives of the Pathan Society of Madras, presenting Rs. 15,496 for the National Defence Fund.



To National Defence Fund



5. Smt. Jothi Vencetachellum, Minister for Public Health receiving Rs. 10,001 towards National Defence Fund from Sri K. A. Thangavelu, cine artiste, raised through a cultural performance by V. O. Chidambaram Pillai Desiya Valibar Sangam.

6. Students and Staff of S. I. E. T. Women's College contributed Rs. 6,500.

7. Sri M. P. Nachimuthu presenting a cheque for Rs. 10,001 on behalf of the Tamilnad Handloom Weavers' Co-operative Society. Sri S. V. Ramasamy, Union Deputy Minister for Railway presided over the function (sitting with spectacle).

8. Sri Sahul Hamid presenting to the Chief Minister a rifle at Kancheepuram.

9. Smt. T. A. Varghese presenting a cheque for Rs. 8,001 on behalf of the Gandhinagar Ladies Club, Adyar.

10. Director of State Transport presenting a cheque for Rs. 6,103 collected as Re. 1 per car for tarring of the headlights during black-out.

11. Sri M. Bhaktavatsalam presenting gifts parcels for Jawans worth about Rs. 20,000 on behalf of the Committee for "Troops' Amenities and Welfare of Jawans Families" to an Air Force Officer.





Sri P. Kakkan, Minister for Home, looking at the vegetables grown under the vegetable development scheme.

self-sufficiency in food not by self-denial but by producing enough within our country in order to feed and build up a nation which is healthy and strong. Dependence on food imports is not only bad for the economic health of our country but it undermines also our self-confidence and self-respect. We have to stand on our own legs and a beginning has got to be made right now towards self-sufficiency in food. The food front today is almost vital as the military front.

General aspect of Agriculture

The measure of the present deficit in our food production is provided by the quantum of annual imports. These imports, however, constitute less than eight per cent of the foodgrains that we consume in the country. Surely, it should not be impossible to make good this deficit provided we can make an all out effort. Let us make a beginning straightway. The Rabi sowing season is upon us, and this is the most crucial period of the agricultural year. On what we are able to do now, will rest the fortunes of our country in the coming year. Our aim, our objective, our slogan should be: "Two grains should now grow where only one grew before".

When it comes to agriculture, my brother cultivators know much more than I do. I shall therefore confine myself only to some general aspects of this matter. Firstly, increase in agricultural production would mean intensive cultivation and raising of more than one crop on a plot of land, where only one grew before. If two crops are already being taken, then we must strive for even a third. This is not at all difficult with proper rotation. We must also try wherever possible to grow some minor crop along with the major crop.

As you are aware, our overall supplies of fertilisers are inadequate. Foreign exchange being so scarce, we would not be able to import enough to meet all our requirements. We have, therefore, to make good this deficiency by concentrating all attention on increased composting, per unit of material. Compost has higher nitrogen and other nutrient contents than ordinary cowdung manure. All steps should, therefore, be taken to utilise our resources to increase composting to the maximum extent possible. Under the existing circumstances, this is absolutely indispensable for securing a substantial increase in agricultural production.

Irrigation

The success of agriculture as you know, depends on irrigation. It is a pity that all areas have not got the irrigational facilities, they require. But wherever such facilities are available, they must be put to the most economic and maximum possible use. Advance action for the utilisation of full irrigational potential should be taken. This year the rainfall all over the country has been below normal. The Rabi crops are naturally threatened with lack of moisture. This should not, however, deter us from making brave efforts for achieving the goal that we have set before us. The requirements of irrigation should be met by digging temporary kutchas wells, if traditional sources of irrigation are not able to meet the demand of our high targets.

In the present emergency every area should try to grow whatever cereal or oilseed or other useful crop that can grow in the area with the availability of water and other climatic conditions. Every bit of land should be cultivated. Even in cities, every little plot of land, every bit of garden that can be made available, should be used for growing of vegetables. A well-kept kitchen garden should be a matter of pride to every household that has the space for it; and much can also be done in raising quick growing fruit trees like banana and papaya.

Equitable distribution

So far I have been talking about the need for a determined endeavour to increase substantially the production of food within the country in order to attain self-sufficiency. Obviously, the production of food is, not an end in itself. The objective is to feed all the people. We must aim at equitable distribution. Here again, it is the cultivator and the farmer who can be of the greatest help. They have to feed the workers in factories and mines, landless labourers who work for wages, the city dwellers and above all,

the men of the Armed Forces, who are defending our frontiers. My farmer friends, you may certainly keep enough for your requirements. But you must consider your national obligation to make the rest available to accredited agencies. You have already been assured a fair price.

Farmers and traders

I want to address myself especially to the bigger farmers, who are better off and who have some holding capacity. I would ask them earnestly to come forward and to help the nation by marketing the entire surplus which they may have. This is the best service they can render to the country in these days of emergency. Withholding of supplies causes distress and this, I am sure, every one would want to avoid. I would ask all the farmers to adopt the slogan—'produce more and market more'. There should be organisations in every village to enthrone the Kisans, and I hope the village Panchayats and producers' co-operatives will take the lead in this. In our freedom struggle the Kisans of India played so notable a part. I am confident that they will stand by the country in its present hour of need.

I would also appeal to the traders not to withhold supplies. Above all, they must ensure that the essential shopstuffs are made available to the public at reasonable prices. I am glad that the trading community has tried to keep down the prices and I am hopeful that in these difficult days, they will continue to display the same public spiritedness. A great responsibility devolves on them at this time of emergency.

It is equally necessary that the consumer must not hoard foodgrains but purchase only what he needs for his immediate requirements. There is no need for extra purchases. There must be equality of sacrifice and the consumer can help a great deal by exercising self-restraint.

Restraint on consumption

While we are specially thankful to the United States of America and to some other friendly countries for the food which they have been giving us as aid, we must be prepared for a situation when we may not be able to import all that we need. If there is enough food, each one of us will eat adequately. If, on the other hand, there is shortage, each one must be willing cheerfully to make a sacrifice.

While we are trying to step up the production of food within the country, the attainment of self-sufficiency would naturally take some time. In the intervening

period, there must be restraint on consumption. Conspicuous consumption must be strictly avoided not only in respect of cereals but also of other food-stuffs. Parties, dinners and lunches are not in tune with the time at all. At weddings, there should be no exhibition of ostentation. There is no need for many dishes to be served. Hotels and restaurants also have to keep in line with the present day requirements. Austerity is the need of the hour and it must be encouraged by strong public opinion.

I would like to say a special word about the housewife and the vital role she has to play in the present emergency. Our women can help in inducing a change in the dietary habits of the people by introducing in the family diet items that are grown in the area but are not consumed. We may have our menu partly in wheat and partly in other cereals like maize, barley, bajra or gram. The lady of the house should economise on the consumption of cereals and make a conscious effort to eliminate wastage which unfortunately one does come across even these days. In well-to-do families, where the diet can be supplemented by items like vegetables, fruits, meat, fish and poultry, every effort has to be made to cut down on the consumption of cereals. I wish such families would plan at least some cereal free meals every week. The women of India have always made their own contribution in the service of the country—let them in this vital matter of austerity and conservation of food, again take the lead.

District Plan

As I said earlier, the next Rabi season will commence shortly and the coming three or four weeks are, therefore, of great importance. First and foremost you have to sow all available land and no patch should be regarded as too small for the purpose. For assisting you, in every possible way, the whole machinery of the Government is being geared up. I am requesting the Chief Ministers to issue immediate instructions to the District Officers for launching a food production drive within their Districts.

In this the Community Development Organisation will have to play a vital role. There has to be and there must be a well coordinated effort to provide seeds, fertilisers, water and other requirements in the best manner possible. A scheme for the whole district has to be drawn up and groups of villages have to be entrusted to officials whose responsibility it would be to keep in close and direct touch with the farmers and to do everything possible to resolve their difficulties. The entire

team in a District has to work with a sense of dedication in the same manner as a soldier on the battle front. The District Officer should regard himself in all humility as a commander who has to organise this drive and achieve the target which must be clearly laid down. He should delegate all his routine work to some other senior officer of the district administration, reserving his own attention and energies almost exclusively for work connected with agricultural production. The success of these efforts will not be in doubt if officials would apply themselves to the task not merely as a part of their duty but also as a part of the deep obligation which they owe to the country at this crucial hour.

We live in fateful times. The dangers that threaten us have not yet passed. In this moment of crisis, our Jawans have shown the way, can our Kisans lag behind? The Jawan is giving his blood, he is staking his life for the country. I am asking the Kisans to give their toil and their sweat. Let them also go out in their millions to the fields that are waiting to be sown, and with enthusiasm, endeavour and enterprise make every effort possible to increase the production of food. Whatever may befall, let us so conduct ourselves that even by suffering and by sacrifice we succeed in making this country of ours self-sufficient, self-reliant, self-respecting and strong.



Collectors Conference was held at Rajaji Hall on 11th September 1965, Chief Minister presided. Other Ministers also participated.

Dharmapuri 14th DISTRICT OF MADRAS

A manageable charge for the head of the District is a pre-requisite for the maintenance of efficiency for the District Administration. The duties of the District Collector has increased considerably after independence. They are now more difficult, delicate and more complex than in the old days.

The Administrative Improvement Committee appointed by the Government in November 1961, felt that for the maintenance of administrative efficiency at district level, the heavier districts should be bifurcated into manageable proportions. Hence it recommended a complete territorial bifurcation of Salem District since it was one of the largest districts in the country and the largest in the State both in area and population.

Consequent on the recommendations of the Committee the Government has appointed in June 1962, Sri S. Krishnaswami, I.A.S., to draw up a detailed scheme of bifurcation for the Salem District with the intention of implementing the scheme in the same year and the Special Officer has submitted his report by the end of October 1962. However due to the National Emergency caused by the Chinese aggression, the scheme could not be executed as planned. Finally the district has been bifurcated into Salem District and Dharmapuri District on 2nd October 1965 - the Gandhi Jayanthi Day.

The taluks of Dharmapuri, Krishnagiri, Harur and Hosur constitute the Dharmapuri District. This new district will be 2410.34 square miles in extent and its population according to the Census of 1961 is 13,15,389. There will be 16 Development Blocks and 590 Panchayats in the new district.

Geographical feature

Nature has divided the Dharmapuri District into two tracts commonly known as Balaghat and Baramahal. The first is a part of Mysore table and resembles Mysore in its general features. This table land extends over a large portion of Hosur and Krishnagiri taluks. This plateau has an average elevation of about 3,000 feet above sea level. The Baramahal is an extensive

basin intermediate between the Mysore table and the plains. This portion comprises parts of Hosur and Krishnagiri taluks besides the taluks of Harur and Dharmapuri.

The district is bounded on the north and west by the Mysore Plateau and River Cauvery, and on the east by the hill ranges of Javadis and Shevroys. The Thoppiar river and the eastern ghats form the natural boundary in the south between Dharmapuri and Salem Districts. The Thoppiar and Manjavadi passes used to be the only two mountain passes through which one could reach Salem District from across the Thoppiar River and the Ghats. Of course, now, there are good motorable roads.

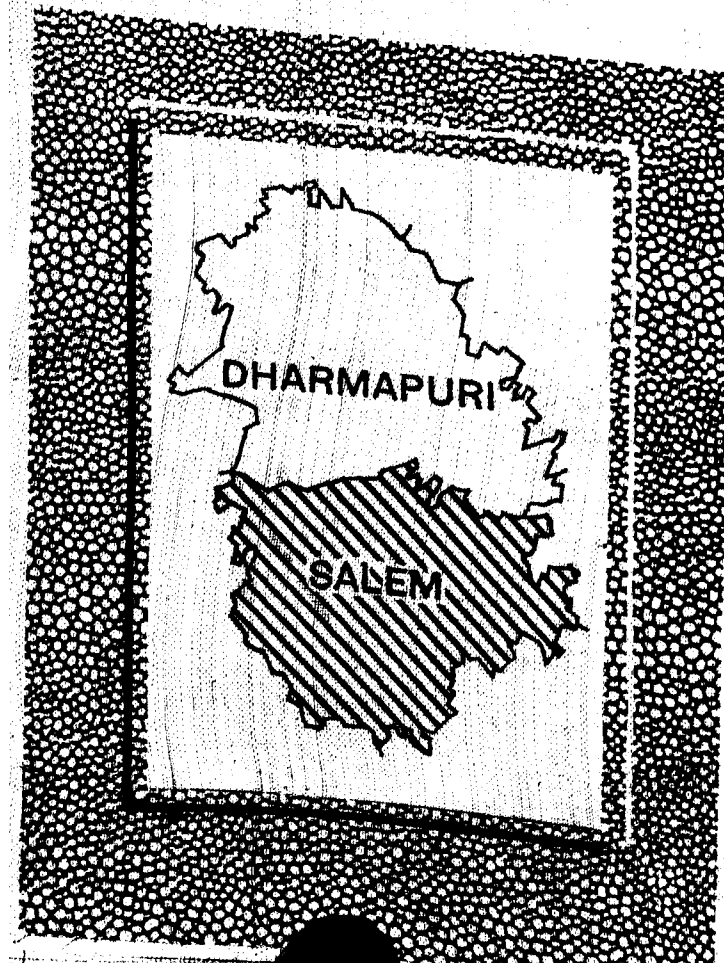
Predominantly agricultural

The main rivers of the district are Swethanadhi and Ponnai. Though river Cauvery runs along the western boundary of the district it is not beneficial to the district because it runs on a lower level compared to the general elevation of the landscape in the district. The district is intersected by numerous hill ranges and valleys running parallel to one another rising from 3,000 to 4,000 feet above sea level. Due to the mountainous character of the district rainfall differs from place to place. The average rainfall is about 83 centimetres a year. Compared to Salem District, Dharmapuri District maintains a more pleasant climate throughout the year due to its elevation.

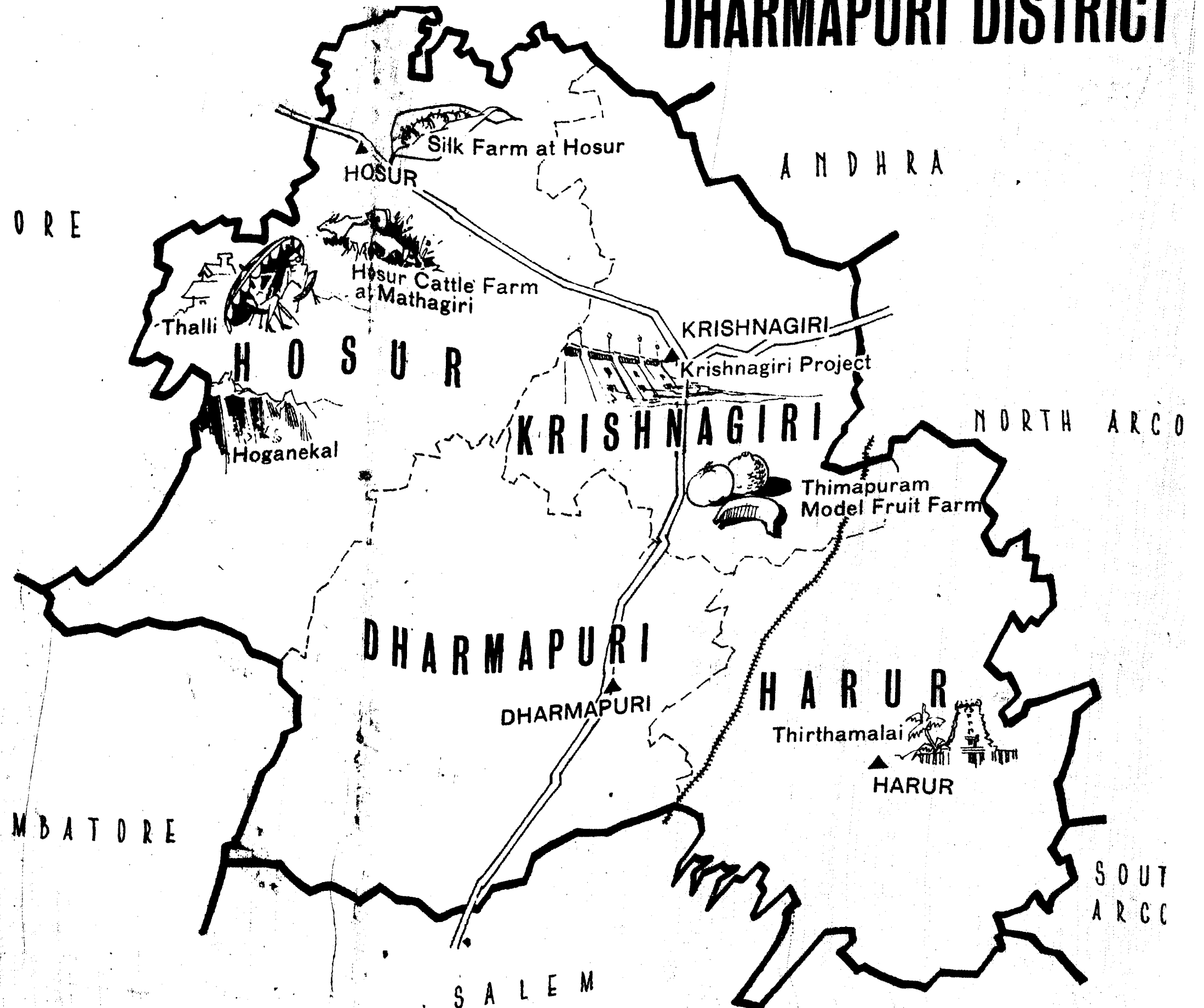
The new district will be predominantly an agriculturist area. The district is dry in character. The only major Irrigation Project is the Krishnagiri Reservoir Project and the Badethalav tank system near Krishnagiri. There are a good number of Minor Irrigation Tanks. The bulk of the population, therefore, depend on dry cultivation. Ragi, cumbu and cholam are cultivated in large extents. Hosur taluk is considered to be the granary of Madras State in Ragi cultivation. In the irrigated areas paddy and sugarcane are raised. The district is also a large producer of tamarind and it is noted for its

DHARMAPURI DISTRICT

NATIONAL HIGHWAYS ==
RAILWAY -+ -+ -+
TALUK HEAD QUARTERS ▲



MYSORE



remarkable varieties of mango. Dharmapuri has very fine avenues, all with tamarind trees. The main language spoken is Tamil with a sizable population of Hosur taluk who speak Telugu and Canarose. The staple food of the people is rice, ragi and cumbu.

In olden days

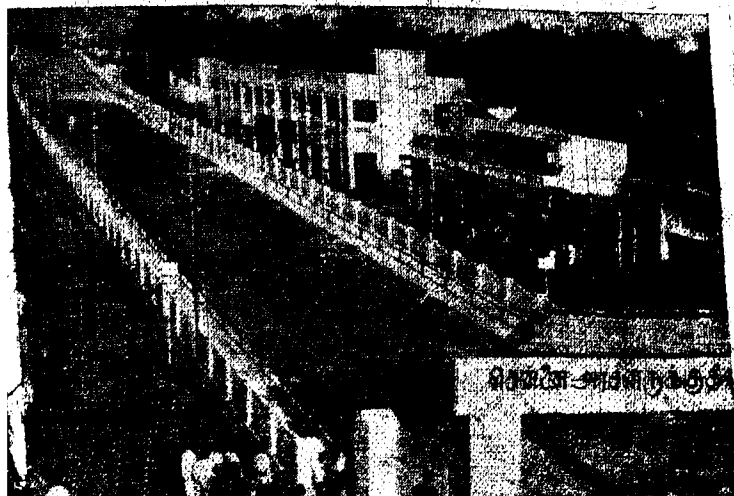
The area covered by the new district was in the olden days called 'Thagadur Nadu'. It was originally ruled by the Kings belonging to 'Athiyar' dynasty of whom Athiyaman Neduman Anchi was a famous king who ruled it during the first and second century A.D. Dharmapuri was his capital and it is said that he constructed a fort four miles south of Dharmapuri which was known as Athiyamankottai. The present name of Athiamankottai appears to be the derivation from Athiamankottai. The famous Tamil poetess Avvai was patronaged by this King Athiyaman Nedumananji.

Subsequently this area came under the rule of Mysore Kingdom under Hyder Ali and Tippu Sultan. After the Mysore Wars, the area was annexed to the British Rule. Dharmapuri was the headquarters of Sir Thomas Munroe (then Captain) in different capacities for about seven years.

Land of patriots

Dharmapuri has not lacked behind the nation during the freedom struggle. At the beginning of this century everywhere there was an awakening and a spirit of nationalism and patriotism pervaded the whole country. Sri T.N. Thirthagiri Mudaliar born in Annasaharam in Dharmapuri taluk took active part in the freedom struggle. He was a daring personality and an extremist. He was imprisoned for one and a half years in 1906 and for two years in 1916 for treason by the British Government. At his request Swami Vivekananda visited

A view of the Kodambakkam over-bridge recently declared open to traffic by the Chief Minister of Madras.



Dharmapuri in 1901 and Gandhiji in 1921. He spent some time in Pondicherry in exile. Since he took active part in the non-co-operation movement, he was sentenced many times. In jail he dragged (oil press) chekku along with Sri Subramania Siva. He rendered medical help to his co-prisoners with his experience in medicine. In later years, he served as the President of the Salem District Congress and died in 1934. In memory of this great patriot, the Dharmapuri Municipal ground has been renamed as 'Thirthagiri Chathukram'. The samadhi of this patriot under a banyan tree on the way to Annasaharam from Dharmapuri is one of the place which adds glory to this new district.

Subramania Siva was another political leader of the time who lived in Dharmapuri. In that part of the country he infused a new spirit, a new awakening among the people. A devoted worker as he was he won the respect of all. He decided in 1923 to establish an Ashram named Barathashramam and a temple dedicated to Baratha Matha in Papparpatti near Dharmapuri and to carry out his programme from there. Desabandhu Chittranjana Das laid the foundation stone for the Ashram. Siva was a writer, an orator and above all a great patriot. His speeches, writings, songs and dramas kindled the people of Tamilnad and imbued in them national spirit. Again and again he toured the country and surely his untiring work had a telling effect upon his health. Realising his fast deteriorating health, he intended to end his last days in Papparpatti itself. At the age of 41, he died. The place of his samadhi about a mile from Papparpatti on the Pennagaram road has become a place of inspiration to the generations to come. It is situated in a five acre land and is known as Bharathipuram. Besides his samadhi is Sri Cinnamuthu Mudaliar's samadhi who was the benefactor of Siva. In Papparpatti there is today a High School named after Subramania Siva. Many other leaders also hail from Dharmapuri and thus it has already earned a name of its own.

Places of interest - Hogenakal

The District has many places of interest. Hogenakal waterfalls is one of the beauty spots in the "Megathattu" hills of Dharmapuri District and is an attractive picnic spot. The Cauvery river, bounds the Dharmapuri taluk on the west and is joined by the Sanathkumaranadi, which flows through the north-western portion of the taluk. Near the junction of these rivers are the falls of Hogenakal or the "smoking rock". The falls lie about nine miles west of Pennagaram. The nearest towns are Dharmapuri, Salem and Erode at a distance of 25, 40 and 50 miles respectively. The Cauvery, at this spot, flows in a broad

strong stream, but within a short distance, the stream is divided into two by a large island. The main body of the water flows towards the right and the channel suddenly becomes constricted and the river plunges into a deep chasm which it has carved out. It is from the clouds of spray that eternally overhangs this cauldron that the name Hogenakal or "smoking rock" is derived. The foot of the hill can easily be reached from below the island.

Krishnagiri, Hosur, Thali

The Krishnagiri Reservoir built across the Ponnai river at a cost of Rs. 172.43 lakhs is worth a visit. There is a beautiful park and the climate is very pleasant. It is situated at a distance of six kilometres from Krishnagiri. About 9,000 acres of land has been brought under irrigation by this project.

Since the Hosur taluk is 3,000 feet above sea level, the climate is such that it provides an ideal summer as well as health resort throughout the year.

The Hosur Cattle Farm at Mathagiri, four miles from Hosur, was started in 1924. Before that from 1828, it was under the control of Army Remount Depot. It is the biggest of its kind in the State with an area of 1,646 acres of land of which 955 acres provide for grazing. There are twelve sections in the Farm, viz., central lines, pasture, garden, dairy, poultry, piggery, sheep, veterinary hospital, clinical laboratory, workshop, soil conservation and stores.

Thali, a small town situated near a lake has a fine climate. It is from this lake the Sanathkumaranadhi starts. This town is an ancient one. It has been ruined



A view of the Government Arts College building at Ponneri near Madras recently inaugurated by the Chief Minister of Madras.

in the battle between Hyder Ali and Tippu Sultan. There is also a ruined fort. This town earned the name "Little England" from the British people by its beauty and climate.

Thimmapuram, Thirthamalai

The aim of the Model Fruit Farm established at Thimmapuram in Krishnagiri taluk is to guide the farmers in the proper development of fruit gardens. It also multiplies and distributes fruit plants to farmers at concessional rates. Vegetable seeds are also distributed to the public.

There is a Siva temple at Thirthamalai hill, nine miles north of Harur taluk. Every year in the month of Masi (February-March), a big festival is being conducted in this temple. There is a small falls in this hill which is said to have health giving properties. The hill also contains iron ore. About seven miles from here is the holy Hanumanth Thirtham. It is believed that this holy water cures several diseases.



Sri M. Bhaktavatsalam, Chief Minister of Madras, released a Tamil Shorthand Manual at Rajaji Hall.

IF LIES COULD ONLY WIN WARS

Propaganda as a weapon of war has come to stay. But the use of that weapon varies from country to country. Some use propaganda to bolster the morale of their soldiers and civilians and to put their claims before the world and as such their propaganda is conducted according to certain rules. But there are others who apply only one rule to their propaganda: truth is sin and lies win wars. And the bigger the lie, the greater the victory. The Nazis set the pace in this respect, but some of their disciples, their successors in the brotherhood of dictators, have improved upon the Nazi techniques.

Pakistan's invasion of India on August 5, 1965, was based on a lie and since then it has had to resort to an unending succession of lies to sustain the theories propounded by it.

The August 5 invasion was only a local uprising against Indian oppression. The raiders were "freedom fighters", "Patriots" and "Nujahids". The clandestine radio, blaring forth its falsehoods from Pak territory, was the "Voice of Kashmir", the organisation set up to conduct the thinly veiled invasion of Jammu and Kashmir was a Revolutionary Council. When not a soul stirred in the State of Jammu and Kashmir in support of the raiders and they got a licking at the hands of our security forces, India was accused of suppressing the people's glorious fight for freedom. When the raiders, in desperation, started looting innocent villagers and setting their houses on fire, it was India that was victimising the people of Jammu and Kashmir.

And as lies beget more lies, the process continued. Pak propagandists tried their hard at introducing little vanity for the benefit of their audience. Their next attempt was to dish out large chunks of hypocrisy dressed in sloppy sentiment. The Sikh soldiers were a tough lot for the Pak army and were inflicting telling blows on them. An appeal was, therefore, addressed to them that Pakistanis and Sikhs were brothers, both victims of Indian imperialism, that Sikh religious places were dear to the heart of every Pakistani and nothing could be farther from the thoughts of Pakistani pilots than desecration of such places. While the sop was being doled out to the Sikhs, the thoughtful Pakistani pilots were unloading bombs

on Gurudwaras, and on Amritsar, the sacred city of the Sikhs. Since this was contrary to the professions of great solicitude for the Sikhs, Pakistan totally denied all responsibility for the bombings. It must have been the Indians who perpetrated such an atrocity and then blamed it on Pakistan.

Truth is, after all, a sin and lies win wars.

The Gurkhas, too, came in for attention. These valiant soldiers had to be weaned away from their chosen path of duty. The Government of Nepal, therefore, was made to protest against their use by India. Nepal, however, refuted the allegation forthwith. The lie was neatly nailed.

The trouble with the Sikhs and the Gurkhas was that they shot to kill and it was certainly not good for the health of the Pak army.

Then came Pakistan's open aggression in the Chhamb sector and India's defensive action in the Lahore area. The invincible Pakistan army had to win and the claims of Indian casualties and damage to Indian armour and Air force had to be in keeping with its supposed invincibility. Indian tanks, faced by the mighty Pattons, just disintegrated on the battlefield and Indian planes offered themselves to be shot down by the dozen. Add up the claims and there is no Indian Air Force and the Indian Army stands grievously truncated instead of still being ready to meet the Pakistani challenge.

The process of proliferation of lies continues.

India is throwing out Muslims from Kashmir. This statement comes at a time when India is looking after 80,000 refugees, mostly Muslims, who are victims of Pak aggression in Jammu and Kashmir.

And, then, India is ill-treating Pakistanis captured during the fighting. The representative of the International Red Cross has a different story to tell. He is satisfied that captured Pak personnel are being looked after well. Can the same be said of Indian soldiers taken prisoner by Pakistan?

These are only some instances of Pakistani propaganda. If India does not always take notice of Pak lies, it is because she does not want to lend them the dignity of a denial.

HEROS WELCOME TO JAWANS AT MADRAS

Jawans from Madras, with the rest of the army, a valiant fight against the aggressive Pakistan's army. Some of them injured in the battle front have been brought to Madras for medical treatment. The people of Madras gave them "Heros welcome" when they arrived at the Madras Central Railway Station. Among other leaders Sri V. Ramiah, Minister for Food, received them at the station.



1. Sri V. Ramiah, Minister for Food, receiving the Jawans at the Central Station.

2. The Food Minister is offering sweets to the Jawans.

3. Sri M. Bhaktavatsalam, Chief Minister, consoling the Jawans convalescing at the Military Hospital, Madras.

4. Sri K. Kamaraj, A.I.C.C. President paid a visit to the Military Hospital where the Jawans are undergoing medical treatment.



Civil DEFENCE

Sri Gulzarilal Nanda, Union Home Minister, addressing a conference of State Directors of Civil Defence and Commandants of Home Guards, said in New Delhi that the Pakistani aggression did not come as a "surprise to us". Based on the information available to the Government we had anticipated that we were going to face a situation of this kind and we had begun making preparations in that direction, he said.

Sri Nanda said that it was this anticipation which necessitated the holding of Home Ministers' Conference in June last when we considered the questions of internal security schemes, civil defence and Home Guards. Although it was in 1963 that the nucleus for civil defence work was started, it was from June last that the effective civil defence measures were taken and within this short time remarkable progress was made all over the country.

He congratulated the Civil Defence departments in meeting the unprecedented situation with vigour and speed.

Dark designs

Referring to the present situation, Sri Nanda said that it was a "precarious cease-fire" considering the number of violations occurring every day. It could not be said with any amount of definiteness as to how long the respite from obligations entailed by active

warfare would last. This aggression was a product of dark designs of Pakistan in collusion with China. We countered that attack effectively and there is a convincing victory for India. But there is no time to be complacent; there may be much more order for us. We have to gear ourselves completely to meeting any test that may be imposed upon us in the future. We were now fresh from the experiences of the past few weeks and we should draw lessons from it and prepare ourselves to face much stiffer tests.

Punjab, Jammu and Kashmir, Rajasthan and Gujarat had suffered the main brunt of Pakistani aggression although other States also came under severe strain. He congratulated the State Governments and people of these States for bravely and courageously facing the situation.

Sri Nanda said that certain assessments had been made of the enemy's strength, his preparedness and intentions. Civil Defence arrangements, like arrangements in other directions, were made on these assessments. We should now check the validity of these assessments in the light of our experience and make adjustments and preparations to meet future challenges.

Indiscriminate Bombing

Referring to indiscriminate bombing of civilian population and places of worship such as church, the mosque and the gurdwara, the Home Minister said it had to be assessed whether it was intentional or whether they were unskilled in their job; were they were hitting targets or missing them.

For civil defence purposes arrangements had been made for protection of vulnerable places, military targets and vital installations. We should now give a fresh look to those problems and find out what other places need to be covered under civil defence arrangements and in what manner.

Regarding paratroopers, he said proper instructions should be given and measures taken to deal with paratroopers and saboteurs. People should be trained

to be on guard and to maintain constant vigilance. He said that the administration and the people had shown their determination to do all that was necessary to meet any emergency. There was a patriotic upsurge in the country and the time was most favourable for us to do our best to safeguard the integrity of the country.

Rumours, he said, could be most harmful and must be countered effectively. If there was only one place for providing information telephone lines could be jammed. So, decentralised arrangements should be made for scotching rumours.

About the "self-appointed volunteers" the Minister said that there had been reports of over-enthusiasm displayed in some areas. He said that there was enthusiasm among the people and everybody wanted to contribute his share. What was needed was guidance to channelise this enthusiasm into proper directions. People should be educated in correct civil defence

measures. They were willing to play their part if they were told what was expected of them.

Constant training

To the Directors of Civil Defence and Commandants of Home Guards he said that they must maintain high standard of efficiency through constant training and supervision. There should be a regular review of needs and resources and vigorous steps should be taken to maintain civil defence arrangements in trim condition.

Sri Nanda said that the targets fixed for various civil defence measures, including recruitment and training of Home Guards, must be fully and speedily achieved. There was no point in fixing a target and not achieving it. He emphasised that these tasks should not be taken in a routine fashion. The emergency continues in a real sense and civil defence must be intensified to meet situations that may arise in future.

A view of the N.C.C. students procession of the students rally held at Tiruchy.



Sri K. Kamaraj at the Khem Karan front when he paid a visit to forward areas on 20th October 1965. He is shown a captured Patton tank.

THE METTUR TUNNEL Hydro-Electric Scheme

The river Cauvery is intimately associated with the life of the people of Tamilnad. Many a poet has sung its praise. In fact the very civilisation of the people has flourished on the banks of this river. People utilised the river Cauvery for navigation and its waters for irrigation from ancient times. And it is in this tradition that the Mettur Dam was constructed across the river in Salem district some thirty miles north-west of Salem town during 1925-34 for making the best use of the waters not only for irrigation but also for power generation. The dam is 170 feet high above bed of the river and just about a mile long. The reservoir has a net capacity of 93,500 m.c.ft. at full reservoir level of 790-00 and is mainly intended for irrigation purposes.

Purpose of the Scheme

There are two sets of irrigation sluices in the old dam—the high level sluices have 8 vents, each 10 feet 6 inches wide and 16 feet high—the low level sluices have 5 vents, each 7 feet wide and 14 feet high. Four hydro-electric pipes each 8½ feet diameter (sill level 640) and of capacity 1,000 cusecs each, with a total capacity of 4,000 cusecs, have been embedded in the dam initially for generation of power under varying heads from 60 feet to 160 feet. These pipes are now feeding four

Gandhi Jayanthi Day was celebrated at Rajaji Hall on 2nd October 1965. Hundreds of people took part in the celebrations. A view of the prayer meeting is seen here.



hydro generators each of 10,000 K.W. capacity in the old Mettur Dam Power House. At present the average irrigation discharge is about 20,000 cusecs or five times the average power discharge possible through these hydro-electric pipes. All the irrigation requirements over 4,000 cusecs are therefore discharged through the high and low level sluices without generating any power. The Mettur Tunnel Scheme is planned to utilise this irrigation discharge in full for generation of 200,000 K.W. of power during the irrigation period of July to January.

When the Third Plan Schemes were formulated in 1961 this scheme was included and the Government of India approved the installation of only two units of 50 M.W. each with the power station building and water conductor system completed for all the four units.

Subsequently in 1963, the Planning Commission sanctioned the installation of the two additional units also during the Third Plan period itself to meet the power deficit in the State.

Scheme in detail

The scheme comprises of the following:—
(1) A leading channel of about 120 feet in length out on the foreshore of the Mettur Reservoir terminating at the tunnel intake shaft of about 100 feet in depth.

(2) A concrete lined pressure tunnel of 45 feet diameter horse-shoe shape and about 1,235 feet 3 inches long and a surge shaft of semi-circular shape of 154 feet diameter and 226 feet deep.

(3) Four penstock tunnels each to accommodate penstock pipes of 21 feet 6 inches internal diameter and capacity of 5,000 cusecs each.

(4) A power station with four vertical Kaplan turbines each couples to a 50,000 K.W. generator connected to its bank of step-up transformers 11 KV/230 K.V.

(5) A transmission system of two 230 KV lines to Salem and Singarapet to link the new power house with the existing grid.

This power plant of 200 M.W. capacity is the biggest so far constructed in Madras Grid and the power house building is the biggest so far built in the Board.

The estimated cost of the entire scheme excluding transmission lines, works out to Rs. 1182 lakhs. A net revenue return of 13 per cent is expected.

Soviet help

The 4 numbers 50,000 K.W. generating sets, power transformers and associated switchgear are supplied by the Government of the U.S.S.R. under India-U.S.S.R. Trade Agreement with V/O Machinexport of Moscow.

Even though power can be generated only during the irrigation period of seven months, by a careful integrated operation of the Grid, the full energy potential during this period will be utilised fully to conserve the storages at the Pykara and Kundah basins which are not tied up with irrigation.



A view of the General Purpose Workshop which was inaugurated by the Chief Minister of Madras on 11th October 1965.

The scheme on completion will add an energy potential of 587 million per annum and improve the power position in Madras State to a great extent and would accelerate the Industrial and Agricultural development of the State.

STATE SEED FARMS IN THANJAVUR

Serial number. (1)	Name of the division. (2)	Name of the State Seed Farm. (3)	Area of the farm. (4) ACRES.
1	Thanjavur	Kattuthottam	48.21
2	Pattukkottai	Pattukkottai	36.15
		Nattumangalam	131.62
3	Mannargudi	Orathur	49.93
		Keranthi	54.38
		Kanchikudikadu	53.02
		Nedumbalam	61.68
4	Kumbakonam	Deevambalpattinam	92.72
		Sakottai	30.82
		Maruthanallur	55.35
5	Nagapattinam	Moongilkudi	47.63
		Sikkil	56.50
6	Mayuram	Thirukadayur	45.64
		Nagamangalam	78.35
			842.00

SCOPE FOR MULTIPLE CROPPING IN THANJAVUR DISTRICT

In the context of the present war against an unscrupulous aggressor it is but appropriate that a three-day Agriculture Seminar should have been inaugurated in Thanjavur in August by Sri C. Subramaniam, Union Minister for Food. Increasing food production is an integral part of the defence preparation of the Country. Among other subjects, the scope for multiple cropping including mixed farming in Thanjavur district and the facilities required for it was also discussed at the Seminar.

The term multiple cropping is referred to when attempts are made to raise in a field two or more crops whose growth phase will be overlapping each other. This is a device generally followed in regions where the soil condition permit raising of more than one crop thereby realising more profit. There should be compatibility between the crops raised in respect of duration and growth habits. There should not be acute competition with each other in respect of sun-shine, water and plant food.

Multiple cropping

In short, the multiple cropping programme aims at growing crops in overlapping succession even before the earlier sown crop comes to harvest, engaging the land to the maximum period utilising maximum inputs and devoting the entire time of the farmer towards the most efficient utilisation of his holding.

In the strictest sense of the term, multiple cropping is not in practice anywhere in our State. However, the common systems of cropping available in our State are (i) mixed cropping, (ii) intercropping and (iii) double cropping.

According to the description given above, there is very little scope for multiple cropping in wet land areas of Thanjavur district. It is due to the fact that water will be standing in the fields for about seven to eight months in the year and for the remaining period, the

fields remain dry. There are no suitable crops which will fit in for cultivation in overlapping success under the existing conditions. However, for crops under lift-irrigation, multiple cropping may be possible. This aspect can, therefore, be investigated in detail.

Mixed cropping

The practice of mixed cropping involves sowing more than one crop simultaneously in the same fields, mostly in dry regions where the rainfall is uncertain, with the main object of realising some income from the lands even if the seasonal conditions should be adverse. The crops mixed are such that they can come up with limited quantity of rainfall and tolerate abnormal or subnormal conditions. This is an ingenious system evolved after long experience by the farmers particularly in the dry regions of the State. The crops mixed are of different durations and growth habits, including the penetration of root system. The main object is to ensure that even if one crop failed, the other should survive and give some income to the farmer. The mixed crop will come up with the fertility available in the lands which is also supplemented to some extent by the application of additional plant food. Some of the outstanding examples of mixed cropping are cotton and coriander (in Tirunelveli district), cotton and thenai, redgram and cholam and pulses, and groundnut and redgram. The preparation of the land is common to the crops grown



A Three-day Agricultural Seminar was inaugurated by Sri C. Subramaniam, Union Minister for Food, at Thanjavur.

comprising the mixture. They are invariably sown in rows behind a plough or with the help of a seed drill or the principal crop will be broadcast and the subsidiary one sown in lines.

Paddy being a crop grown in standing water (under surplus moisture conditions), there are no suitable crops which can be mixed and sown along with paddy to give higher returns. The nearest approach to this system is Udu cultivation which is practised in certain eastern parts of the district where conditions are not favourable for raising two crops one after the other.

Under lift-irrigation, mixed cropping is already in vogue in respect of groundnut-redgram and groundnut-ragi. Other alternatives may also be explored.

Under dry conditions

Under dry conditions, mixed cropping is practised in respect of groundnut and redgram, varagu and redgram, ragi and redgram and pulses mixed with cholam or cumbu.

In these tracts, there is great scope for intensifying mixed cropping if bore-wells or open wells sunk and irrigation facilities are provided. The deep bore-well scheme is now operated by the Agricultural Department. The Collector, Thanjavur, has now addressed the Government to issue orders for transferring this scheme also to the Revenue Department for implementation as in the case of "Filter Point Scheme".

Wherever there is a long duration crop in a field extending over several months, planted at appreciable distance, a crop of lesser duration is sown in between the rows with the object of utilising the space left over, and at the same time utilising the moisture and plant food available in that area. Incidentally the farmer can also realise an income which will be most welcome for meeting the cultivation charges for the main crop which is generally very high. Planting vegetable in a banana garden, planting vegetables in a tapioca field, raising groundnuts, vegetables or even paddy in a coconut top, raising onions or vegetables

in a sugarcane field are some of the typical examples of intercropping.

This practice is not possible in the paddy crop for the reasons given already, viz., surplus moisture conditions and the cultural practices that are necessary for the paddy crop which will not permit any other crop to be raised along with it.

Intercropping

Intercropping is being practised in the banana coconut areas. Raising vegetables is common in the banana fields. Raising a minor millet crop is also prevalent. But they are not being done very extensively. These practices can be extended over a considerable area.

Intercropping in coconut tops with groundnut, vegetables, gingelly and green manures like kolinji, sunhemp, pilligesera and sesbania is being practised here and there. Special efforts have to be made for extending this practice over larger areas. Raising onion or vegetables in sugarcane fields in early stages of crop growth may be tried.

Under rain-fed conditions, intercropping, though not in practice at present, can be undertaken particularly in mango and cashew nut tops in the initial years and in coconut tops even in later stages. The useful introductions can however be sowing redgram, minor millets, green manure and seasonal vegetables, taking advantage of the seasonal rains.

The total area under coconut is about 40,000 acres in this district. Major portion of this area is under tope (plantation). So there is much scope for developing

Chief Minister Sri M. Bhaktavatsalam and Union Food Minister who have participated in the Agriculture Seminar held at Thanjavur are looking at a sheaf of corn.



intercropping in coconut tops in tracts like Pattukottai, Adhinattinam and Muthupet areas. There is already a special programme for sinking open wells in these areas. The wells are being constructed with suitable subsidy and loans.

By adoption of intercropping system on an intensive scale, it is hoped that at least an additional area of about 100,000 acres can be brought under green manure and groundnut crops. A scheme should be formulated for procuring and supplying improved groundnut seeds at the appropriate time.

Double cropping

Attempts made in a holding to grow more than one crop in a course of a year is commonly referred to as double cropping in Thanjavur district after one paddy crop, a second paddy crop is raised in all favourable areas where irrigation facilities are available. In certain areas crops like groundnut or short duration cotton or vegetables are being grown in paddy lands, which system is generally known as utilisation of summer fallows.

Double cropping is already being practised in paddy cultivation in this district, known as Kuruva and Thaladi. The rest of the area is cropped only once under Samba paddy. For stepping up production, it is necessary to convert more of this single crop area into double crop areas. This has of course many problems like availability of irrigation water, manures and fertilisers, enough labour, suitable strains of paddy, etc. Wherever conditions are favourable, double cropping is readily adopted and area is increasing year by year. Under the present conditions calling for increased food production, all possible steps have to be taken for increasing the double crop area.

In samba as well as thaladi fields it is a common practice in this district to sow green and blackgram as a catch crop in the standing paddy crop just before harvest which will give a fairly good income in favourable seasons with negligible investments.

In a considerable area, instead of pulse crops, green manure crops like pilligesera, kolinji, sesbania, daincha, etc., are grown to supply sufficient organic matter to the soil. The seeds are sown in the standing crop of paddy 10 to 15 days before harvest.

Fallow period

The net irrigated area under cultivation in this district offers great scope for more intensive cultivation particularly during the fallow period after the harvest of

paddy crop and before the canal water is let in. The extent to which the fallow lands are cropped at present is negligible. In the new delta area groundnut crop is being sown in a small area. In the old delta area besides raising a pulse crop or a green manure crop, the land is not being utilised otherwise for a more profitable purpose. Another method of approach is to introduce a paddy crop of very short duration as a first crop, to be followed by a medium duration paddy crop in the existing single crop samba areas within the existing period of irrigation.

Work is already underway on these lines and a paddy culture of 80 days duration has been isolated and is under trials. After the short duration first crop of paddy, a medium duration variety like ADT. 8, ASD. 5 or Co. 30 can be fitted in.

The area under cultivation of short-term and long-term paddy crop in this district is as follows:—

	ACRES.
Kuruva	275,000
Samba	925,000
Thaladi	225,000
	1,425,000

Crash programme

There is a crash programme for sinking 2,000 filter point tube wells in the delta area before 30th September 1966. So far, 700 successful filter points have been sunk. The Government have also undertaken to emerge most of the filter points. In Pattukkottai and Orathanad taluks and in the upland areas of Thanjavur and Mannargudi taluks, there is a scheme for sinking 1,000 open wells before March 1966. So far, 300 wells have been sunk during the current year. As a result of these, the total area under kuruva is likely to go up by another 10 per cent to 15 per cent and the thaladi extent will also go up correspondingly.

With the aid of filter points, summer crop can also be raised after the harvest of main paddy crop in the delta areas. A ryot can cultivate summer crops on an extent of 5 acres with the aid of a filter point 2½ acres of cotton and 2½ acres of gingelly, vegetables, pulses and kolinji. There is scope for fertilising pulses also. Pulses like black and green gram are being sown before the harvest of paddy crop. They come up with the residual moisture. At present, pulses are grown on an extent of 73,120 acres. After the sinking of filter point tube wells under these two schemes, it is likely that an additional extent of about 10,000 acres can be

easily brought under pulses. Further the present yield of pulses is low for want of wetting at the appropriate time. The yield will go up with the provision of irrigation facilities. Suitable schemes will have to be evolved.

In tracts like Pattukkottai, Orathanad, Aranthangi and portions of Mannargudi and Thanjavur taluks more area can be brought under groundnut in single crop wet lands. In these areas there is scope for raising cotton also, preferably Russian varieties. The present area under cotton is nearly 200 acres.

There is scope for raising full crop sesbania also during summer in garden lands with the aid of filter points.

With the available supply of water under garden land conditions, raising more than one crop in rotation is common practice. Invariably a millet crop is raised to supply grains to the family followed by a money crop like vegetables or groundnut. There is scope for extending these practices in the districts. Suggestions made for growing crops under lift irrigation in rice fallows will hold good for this also. This can be discussed at the group discussions.

Under rainfed conditions there is no scope attempting double cropping unless irrigation facilities are provided by sinking wells, etc.

Mixed Farming

This involves both crop and animal husbandry. There is scope to improve mixed farming under several items. There is a crash programme for the development of poultry. The salient features are—

(a) For a flock of 100 layers of exotic variety of birds, a loan of Rs. 1,000 is being granted. For every additional 100 layers an additional loan of Rs. 1,000 is also granted. The loan will be paid only in kind and not in cash.

AGRICULTURAL STATIONS IN THANJAVUR

1. Regional Research Station, Aduthurai.
2. Soil Testing Laboratory, Aduthurai.
3. Banana Research Station, Aduthurai.
4. Deep Water Rice Research Station, Talanayar.
5. Saline Resistant Research Station, Peravurapi.

(b) A breeder will be given 15 pullets and 2 cockerels. A subsidy of 25 per cent of the cost or Rs. 25 whichever is less will be given for a unit of 20 adult birds. Poultry breeders will be given a subsidy of Rs. 50 each for improving their poultry houses or for the construction of new poultry houses. The above crash programme is to be intensified.

Grass slips are to be provided free for planting in suitable areas. Guinea grass has to be grown in the villages in grazing ground and other suitable porambokeas.

Bee-keeping

There is considerable scope for development of flora Apiary in the district on account of availability of flora. Special concessions will have to be given by way of sale of subsidised bee-hives on a large scale, supply of equipments and by appointment of suitable technical personnel.

A comprehensive farm plan for horticulture, dairy and poultry should be prepared as in the case of I.A.D.P. Loan (short term and medium) should be given departmentally to each farmer on the basis of his total farm requirements. The village level workers and the extension officer (Animal Husbandry) are to assist the farmer in planning his needs with reference to his capacity and capability. A comprehensive farm plan is to be prepared.

Tobacco is now being grown in a small extent in coastal belt of the district. It comes up well in sandy tract. Tobacco grown in Manamalkudi area has shown that there is vast scope for bringing large areas under tobacco provided the ryots are given an ad hoc loan of Rs. 100 to Rs. 200 for sinking shallow wells. So a special shallow well scheme for the grant of the above loans may be introduced in a coastal belt of this district.

Land Utilisation in Thanjavur district.

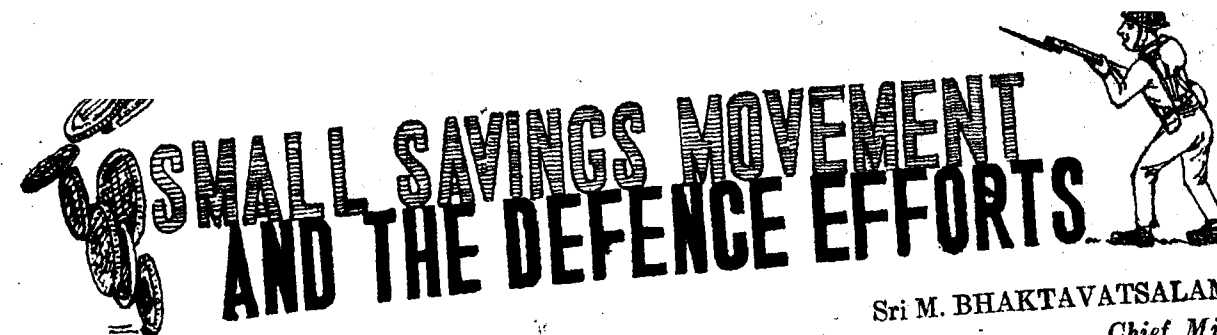
1 Total geographical area	2,392,974 acres. (3,470 sq. miles)
2 Total cropped area	1,877,592 acres.
3 Net area sown	1,453,009 "
4 Land put to non-agricultural uses	483,146 "
5 Cultivable waste	96,126 "
6 Barren and uncultivable land	78,532 "
7 Permanent pastures and other grazing lands.	15,693 "
8 Forests	31,766 "
9 Land under miscellaneous tree crops and groves not included in the net area sown.	93,756 "

The present area under tobacco cultivation is about 1,500 acres. With the introduction of the special shallow well scheme, the extent under tobacco cultivation can be doubled.

Raising of vegetables like bhendai, trinjala, etc., on field bunds is already in vogue. There is scope for intensifying this practice on a large scale. Castor can be sown as a border crop in sugarcane, banana, groundnut, etc., both under dry and garden land conditions.

A scheme for the production of sufficient sesbania seeds for large scale border planting of kuruvai paddy area, for green manure and samba paddy area for seed production may be considered by provision of subsidy of Rs. 100 per acre of pure sesbania crop.

Large scale propagation of glyricidia along suitable bunds, waste lands and canal banks deserves consideration.



Sri M. BHAKTAVATSALAM.
Chief Minister.

It is nearly six months since I met representatives of Chambers of Commerce and other leading citizens of Madras and solicited their active co-operation in popularising the Small Savings movement in the City. The collections under different forms of Small Savings Securities have been a little more encouraging in the current year than in the last, but as usual, the districts Particularly the Southern districts—have done significantly better than the City.

While speaking to you last, I had laid special stress on the need to step up small savings collections in the context of mounting outlays on developmental programmes. The needs of defence now overshadow those of development. The aggressive posture of Pakistan and China on our borders poses a serious threat to our hard won freedom and territorial integrity. The massive attack planned by Pakistan with all her modern and sophisticated equipment has been met successfully, and the battle carried into her territory with considerable damage to its military potential. Through the fighting qualities of our Jawans and the rare sense of unity and determination which our large secular democracy had displayed in its hour of trial we have frustrated the well laid out plans of the enemy. But there is no room for complacency as Pakistan's provocative violations of the cease-fire and the intemperate utterances of her leaders so clearly demonstrate. The present crisis has brought home to us the need for self-reliance and self sufficiency in vital sectors of our economy, and for further strengthening of our defence potential.

Determined Action

Eternal vigilance on our frontiers is the price we should cheerfully pay for our freedom. As an independent and self-respecting Nation, we should not grudge the mounting expenditure on Defence. Even in normal times the defence of the country costs on the average about Rs. two and a half crores every day. This outlay will have to be further stepped up in view of

the continuing hostility in opportunistic alliance of Pakistan and China. We will not be worthy of the sacrifice which our brave Jawans have made in the battle front, if we do not support their patriotic efforts with determined action on the home front. I need hardly point out that defence in modern times is not limited to the battle field. The defence effort in its comprehensive sense has to extend to the factories, the fields, and the offices. The Jawans must be provided with a continuous supply of materials which call for large investment. It is only through significant step up of production in the agricultural and industrial sectors that we can assure adequate supply of goods and services to the defence forces, without seriously impinging on civilian consumption. The large outlays called for in fulfilling a defence oriented plan will have to be matched by adequate savings through restraints on consumption, if further aggravation of inflationary forces at work in our economy is to be avoided.

Economic Capability

As our Prime Minister has warned us, the struggle with Pakistan is going to be a long and grim one and we have to be fully prepared for it. The conflict is really between two ways of life—theocracy and dictatorship on the one side and secularism and democracy on the other. We should remember that in this essentially long-term struggle the relative economic capabilities of the two countries, will be of crucial significance. The economic aid received by Pakistan from foreign countries is larger in per capita terms, than what India has got from friendly countries. Pakistan has also got its military hardware without paying for it. These two favourable factors have enabled Pakistan in the last Plan—its Second Plan which is just over to supplement its domestic savings with foreign aid and step up its investment to about 17 per cent of its national income, which is a little more than we have been able to achieve largely because foreign aid for India's economic Plan has been on a much

YOU ARE A SOLDIER TOO—

What are you doing to meet the challenge?



The foundation stone for the Kanya Gurukula Orphanage was laid by the Chief Minister at Thiruvotriyur.

smaller scale. We should therefore save more and invest more in order to keep up with Pakistan. Though our economy is more diversified and broad-based than that of Pakistan, we should step up our rate of investment if we are to maintain the lead which is currently in our favour.

Plan Re-oriented

Our Plan is being re-oriented to support defence effort. So far as the State Government is concerned, by far the most significant direction in which it can assist defence effort is by taking energetic action for stepping up food production. We have taken up a vigorous programme for sinking of wells in the current year and on present trends, as against the normal target of about 4,000 wells, we should be able to complete 10,000 wells. We are also intensifying the programme for extension of power for lift irrigation. In order to hold the price line in the present emergency, we have had to streamline our Civil Supplies organisation and introduce statutory rationing in the City. All this entails additional expenditure which is quite as essential as direct expenditure on defence. Not all the additional resources needed for meeting this expenditure can be raised through taxation; part of it can and should be raised through the less painful process of mobilising the savings of the people through voluntary but co-ordinated efforts.

The small savings of a large number of people rich and poor if skillfully garnered can provide the sinews of defence of our mother land. When our Jawans have sacrificed their lives for the defence of the country, we who lead comparatively sheltered lives, should not hesitate to sacrifice a small part at least of our normal consumption and thus save and lend more for the defence of the country. The message that through savings people can help to provide the food, the equipment and the armoured vehicles required for the defence in the frontiers should be taken to every home and

this small savings movement should become a nation-wide movement involving all-citizens, rich and poor alike.

Save more

The people of the city as representing the elite of the State have a responsibility in giving a lead to the rest of the State in this as in other spheres. The response from the City to the National Defence Fund has been generous and spontaneous. If we organise properly and make a proper approach, I have no doubt that the response to investment in different savings securities will also be equally good. A citizen, who save more at this juncture not only helps his own family, but also the larger family which is his country. We have therefore drawn up an intensive campaign for mobilisation of small savings in the City during a period of fortnight. The campaign will end on the 14th of November, which as you are aware is also the birthday of our revered late Prime Minister, who more than any one else stressed the values of socialism and democracy which we are trying to defend in our struggle with Pakistan. The programme as chalked out by a Committee of non-officials contemplates staging of cultural shows with the help of eminent artistes spread over a period of 8 to 10 days. It has been proposed that the admission to the cultural show should be in the shape of defence securities in the name of the person concerned. We are also proposing to bring out a souvenir, the advertisement of which will be sold against defence Securities. I have no doubt that businessmen will take advantage of this and contribute to the Defence effort.

Progress of National and Per Capital Incomes
National and per capita incomes for the years 1950-51, 1955-56 and 1960-61 to 1964-65 are given below:—

Year.	National income at 1948-49 prices (Rs. 100 crores).	Per capita income at 1948-49 prices (in rupees)
(1)	(2)	(3)
1950-51	88.5	247.5
1955-56	104.8	267.8
1960-61	127.3	288.2
1961-62	130.6	284.3
1962-63	133.1	289.8
1963-64*	139.1	314.4
1964-65†	149.3	

* Preliminary.

† Quick.

(Based on 1941, 1951 and 1961 population census figures.)

Home Guards AND THE PUBLIC IN EMERGENCY



In times of war the morale of the civilian population is as important as that of Jawans. Lest the country's effort to mobilise resources for the war will be jeopardised, it is here the Home Guards render invaluable service to the nation. Their prime task is to keep up the morale of the people very high and to nip in the bud any attempt of unsocial elements to create trouble. They disseminate correct information among the public and train them as to how they should behave before, during and after an air raid and in other allied matters without any fear or panic. Home Guards of Madras had a practical training as to how they should help the people during an air raid on 7th October. On the occasion the Chief Minister released a publication on "First-aid, Home Nursing and Fighting."

1. After a mock air raid Home Guards rushing to render first-aid to civilian. 2. Rendering first-aid. 3. A civilian voluntarily offering his blood to help wounded persons. 4. Wounded persons are being removed in stretchers to the hospital. 5. The indisposed women who were injured in the raid being rendered first-aid. 6. Women defy air raid warning given by the Home Guards.

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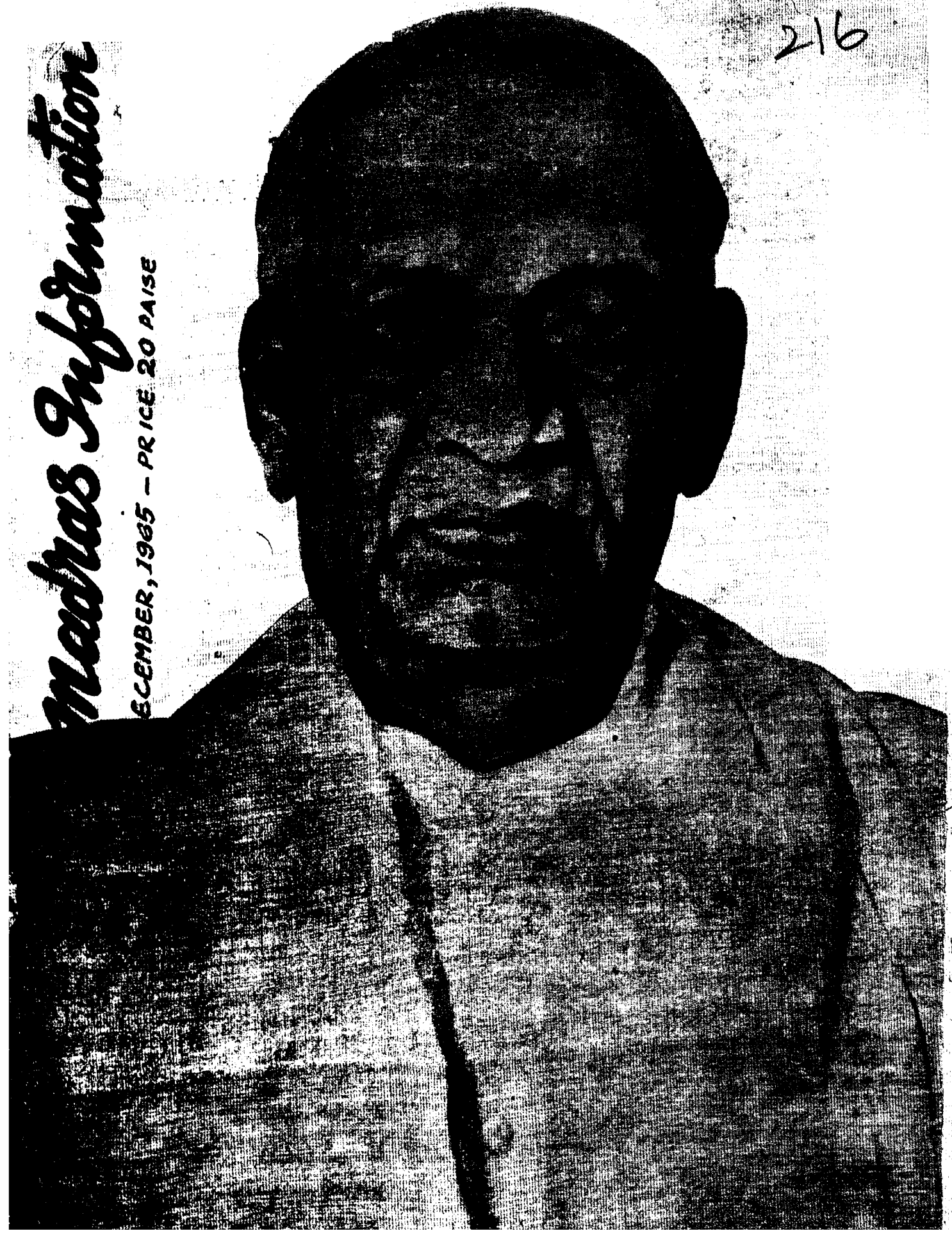
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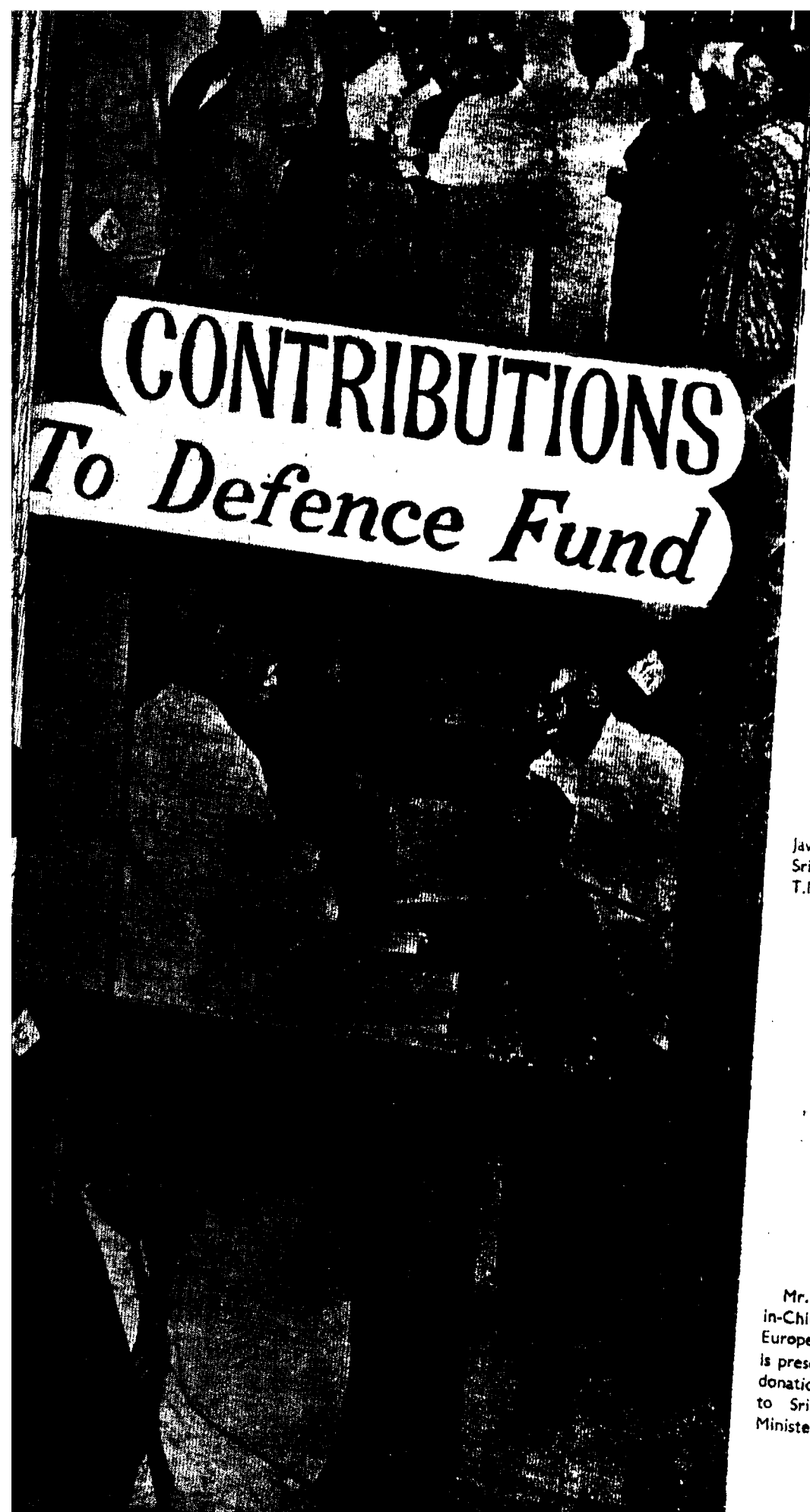
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The South Indian Film Stars' Association donated Rs. 15,000—a portion of the collection in the Film Stars Cricket Match arranged by it, to the National Defence Fund. The Chief Minister is handing a cheque for the amount to Group Captain Sri Sathyanathan.

Sri R. Gopal presenting gifts for the Jawans to the Chief Minister Sri M. Bhaktavatsalam on behalf of the T.N.C.C. labour wing.

Mr. L. C. Pearson-Joseph, President-in-Chief, Anglo-Indian and Domiciled European Association of Southern India, is presenting a cheque for Rs. 1,001 as donation to the National Defence Fund to Srimathi Jothi Vencatachellum, Minister for Public Health.

No price is Too High To Pay for Freedom

CITIZEN'S DUTIES

1. To render all possible help and assistance for the defence personnel.
2. To increase the production of his factory.
3. To intensify efforts for increased production of agricultural and small-scale industrial commodities to make his State self-sufficient.
4. To avoid all strikes and lock-outs that may hamper production.
5. To maintain the price level of all essential commodities and curb the tendencies of hoarding and profiteering by conforming to the various legislative and other popular measures.
6. To maintain the supply lines of essential commodities.
7. To contribute generously in the form of money and gold for the war effort.
8. To inculcate the highest sense of duty and responsibility.
9. To join the various organizations set up for the defence of the country.
10. To prevent anti-social and anti-national activities of the fifth columnists.
11. To observe strict austerity in consumption of food, clothes and other essential goods and save for the National Defence Fund.
12. To avoid unnecessary travel so that more important and essential movement may not be hampered.
13. To keep up the morale of the people and prepare them for sacrifices.
14. To check rumour-mongering and to disseminate true and faithful news and information.
15. To join or help Citizens' Committee, N.C.C., Territorial Army and Lok Sahayak Sena and Rifle Clubs.
16. To pray for the victory of our Motherland in this struggle and set aside all differences of caste, creed or party.

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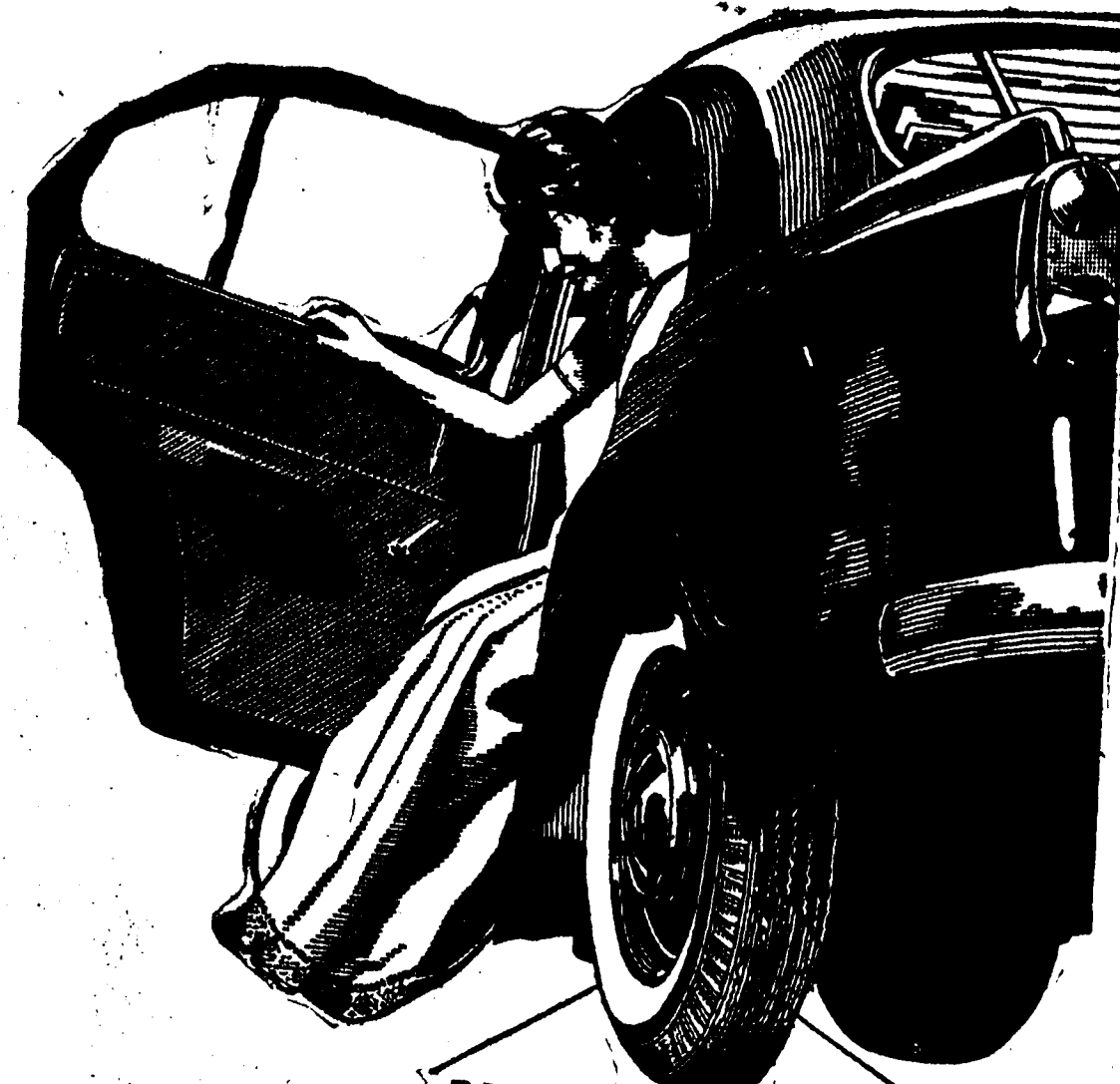
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THIS MONTH'S COVER :

The nation pays its homage to the memory of Sardar Vallabhbhai Patel who takes his rank among the makers of modern India. When in the days that followed the advent of Freedom and the partition of India, forces of disintegration were trying to assert themselves, the Sardar stood against them with indomitable will and brought about the Unity of the Country, with the courage and strength of a Titan. India will remember him and his unparalleled work for all time.



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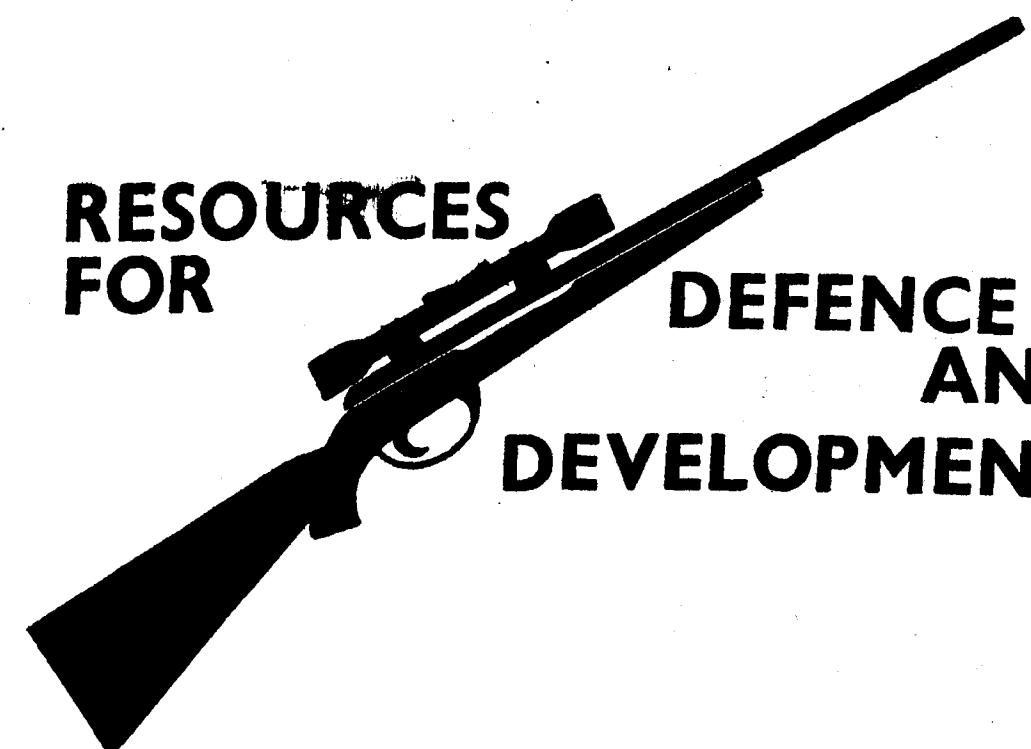
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RESOURCES FOR

DEFENCE AND DEVELOPMENT



SRI M. BHAKTAVATSALAM,
Chief Minister.

The promulgation of cease-fire has not signalled the dawn of peace on our frontiers. In view of the repeated violations by Pakistan of the cease-fire, the nation has to remain in the perpetual state of preparedness to meet any eventualities. As the Prime Minister has warned the nation, the struggle with Pakistan will be a long and grim one, and we cannot afford to become complacent.

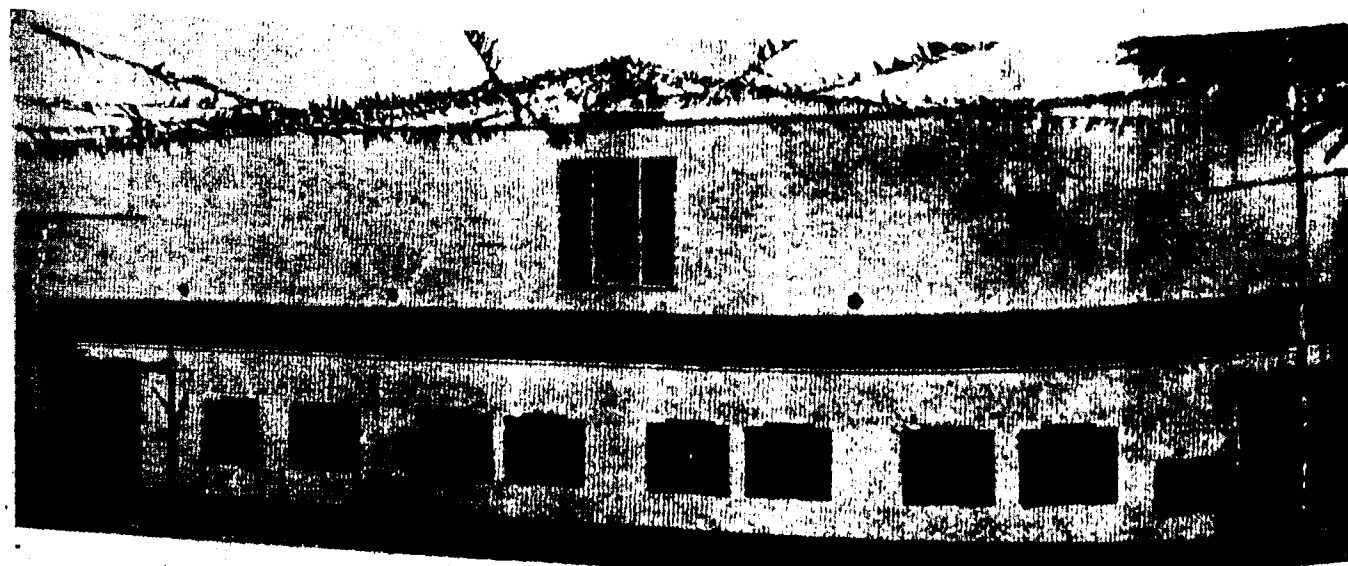
The present emergency has underlined the need for self-reliance in all vital sectors of our economy. Our defence expenditure, which even in normal circumstances, was running at about Rs. 2½ crores per day, will have to be stepped up further. As a self-respecting nation, we cannot grudge the additional burden and sacrifice involved in strengthening the defences of the country so as to be able to meet aggression from any quarter. We will not be worthy of the sacrifices which our brave jawans have made, unless we can draw the lessons from the present conflict and take steps to build up further the defence potential of our country.

While defence is the direct responsibility of the Centre, increased expenditure on defence affects the States indirectly as the resources available with the Centre for promoting developmental programmes get reduced to that extent. Apart from increased defence

expenditure, the present uncertainties in regard to foreign aid, including assistance under PL 480, point to a shrinkage in budgetary receipts of the Centre, corresponding to such flow of aid from abroad. These two factors together render a cut in Central assistance for the Plans of the States inevitable for some time to come and we have to get reconciled to it, though the process of adjustment is not going to be easy. Broadly speaking, on present indications, for next year we will get about Rs. 11 crores less than what we are getting as Central assistance for the Plan in the current year.

Additional responsibilities

The present acute phase of the national emergency has at the same time brought in its wake additional responsibilities which the States cannot grudge. We have had to take steps to strengthen the Home Guards organization as the base for any civil defence programme which may become suddenly necessary in an emergency. The introduction of statutory rationing in Madras City and the arrangements made in other vulnerable areas for orderly distribution of foodgrains have entailed additional expenditure. Programmes for training of medical personnel needed in large numbers for defence forces have to be enlarged and additional outlays on expansion of medical colleges are therefore inevitable.



New Factory of the Channimalai Industrial Co-operative Society.

The attainment of self-sufficiency in food production has always been an important objective of our Plans and it has never been more necessary than now, with the prospect of virtual cessation of assistance from friendly countries, that we should step up our production of foodgrains through all-out efforts at pushing through quick-yielding programmes. We have taken steps to accelerate considerably the programme for sinking of wells in the current year. Against the Plan provision of Rs. 100 lakhs for this programme for the current year, we have asked the Collectors to go up to Rs. 312 lakhs and we hope that with some additional assistance anticipated from the Central Government, the outlay on the programme may well be stepped up to Rs. 4 crores. With this provision, it will be possible to get 10,000 wells completed in the current year and initiate action on 20,000 new wells even now, so as to assure their completion by the middle of next year. The loan assistance to ryots for purchase of oil engines and electric motor pumpsets has also been correspondingly stepped up. Against the original provision of only Rs. 25 lakhs in the Plan for the current year for this purpose, we have permitted the Collectors to regulate the sanction of applications for loan assistance on the basis of an enhanced provision of Rs. 100 lakhs.

With further additional assistance anticipated from Central Government for an emergency food programme, we hope to be able to raise the provision to Rs. 181 lakhs in the current year for this programme. Government have also taken steps to intensify the programme of extension of power for lift-irrigation. Against the original Plan provision of only Rs. 4 crores

for rural electrification in the current year, we have already allocated an additional sum of Rs. 75 lakhs a significant portion of which is meant to be utilised in the provision of power for filter-point tube wells in Thanjavur district. As part of our efforts to stimulate food production in the short term, we want to step up the outlay on this programme in the current year by an additional sum of Rs. 2 crores.

Agricultural production

The augmentation of agricultural production will be the dominant objective of the Annual Plan for 1966-67. Though the Fourth Five-Year Plan of the State had visualized a substantial increase in outlays under all heads of development, in view of the new situation created by the Pakistani aggression and the decision to make the Plan defence-oriented, the Annual Plan of the State for 1966-67 will be somewhat smaller. It will seek to support the defence effort of the country through its emphasis on agricultural production and related programmes such as Minor Irrigation, Rural Electrification, Development of Dairying and Fisheries and the like. Emphasis will also be laid in all sectors on early completion of schemes under execution, so that the investments already made may start yielding results and thus strengthen the economy of the country. We cannot, even in the present emergency, however ignore the need to provide a reasonable measure of growth under social services such as Education, Medical Relief, Rural Water-supply and Slum Improvement, as these programmes benefit largely the poorer sections of the society.

The State Government have considered how, even with the inevitable reduction of Central assistance for the Plans of the States, this State can keep up a reasonable tempo of activity in regard to developmental programmes which have a vital bearing on the welfare of the people. Economy and austerity should be the key-note of all our policies now. We have imposed a ban on employment of additional staff for purposes not connected with the Plan or defence effort. Cuts have been imposed on expenditure on contingencies and travelling allowances. Buildings programmes have been deferred to the extent possible.

The Government have also set up a High Power Committee on economy and administrative re-organisation with a view to explore possibilities of effecting economies in administrative expenditure and study other related matters. It will obviously take some time for the Committee to complete its labours and for its recommendations to have a perceptible impact on the pattern of Government expenditure.

Finance Commission's recommendations

The current year's Budget had envisaged a revenue deficit of nearly Rs. 7 crores and subsequently we had to sanction a further increase in the rates of dearness allowance of public servants entailing an additional burden of Rs. 2 crores in the current year and Rs. 3.4 crores in a full year. The Finance Commission has made full allowance for this additional expenditure in its estimates in providing for devolution of resources to this State.

The Finance Commission's recommendations in other respects too, are generally fair. The share of the States in Income-tax revenue has been raised from 66-2/3 per cent to 75 per cent and in the allocation of this divisible pool among the States, the share of Madras has been raised from 8-13 per cent to 8-34 per cent. Likewise, in

terms of the Finance Commission's recommendations, the States will now become entitled to 20 per cent of the net proceeds of all Union Excise Duties, whereas the Third Finance Commission had confined the sharing scheme to 35 selected commodities. Our share in the distribution of the net proceeds of Union Excise Duties has also been raised from 6-08 per cent to 7-18 per cent. Likewise our share in the proceeds of additional duties of excise in lieu of sales tax, on sugar, tobacco and textiles in excess of the amounts guaranteed to the different States has been raised from 9 per cent to 11-13 per cent. The Fourth Finance Commission has also recommended payment of a grant-in-aid of the revenues of the State of Rs. 6-84 crores per annum as against only Rs. 3 crores at present, under Article 275 of the Constitution.

On the whole, as against about Rs. 151 crores anticipated over the Fourth Plan period on the existing pattern of sharing of Central taxes and Grants-in-aid, it is estimated that this State will receive, by way of statutory devolution, about Rs. 207-3 crores over the next five years in pursuance of the recommendations of the Fourth Finance Commission. Though the recommendations of the Finance Commission are thus by and large fair to the States, they will not however leave us with any significant surplus on revenue account after providing for the large maintenance expenditure on institutions and services created during the Third Plan period. In these circumstances, any reduction of Central assistance for the Plan will have to be made good by our own efforts at mobilization of additional resources through all possible means, if there is to be no set-back in our developmental programmes.

Economic strength

In taking a view on the size of our Plan and the order of efforts which the nation should put forth in fulfilling developmental programmes without generating

The New Madras District Central Library Building was declared open by His Highness Maharaja Sri Jaya Chamaraja Wadiyar Bahadur, Governor of Madras at Mount Road, Madras, on 10th November 1965. Picture shows the Governor inspecting the Library. Sri M. Bhaktavatsalam, who presided over the function is also seen in the picture. On the right is a view of the New Building.



inflationary forces, we should remember that we cannot afford to be overtaken by Pakistan in economic development. It is the relative economic strength of the two countries that will determine the outcome of the struggle that lies ahead. We should note that with the massive economic aid provided by western countries, which in per capita terms is thrice as large as that extended to India, Pakistan's gross investment has risen to 17 per cent of its national income. We should also therefore aim at a similar rate of investment so that our economy may be strengthened and diversified to meet all the demands likely to be made on it. This order of investment will be possible only if we take steps to mobilise the savings of the people through taxation and savings drives.

The Government have carefully reviewed their financial position in the light of the new situation created by the Indo-Pakistan conflict and the need to maintain the tempo of developmental programme and have concluded that some efforts at mobilization of additional resources to cope with the present emergency have become inevitable.

Electricity rates revised

The first proposal relates to adjustments in rates of tax on consumption of power. The development of power has absorbed the bulk of the capital investment

Prime Minister Shastri's Tribute to Madras

It has been a very warmhearted welcome which I received in the City. It has given me new confidence and in fact it is a matter of gratification that although Madras is far away from the frontiers, the urges and emotions of the people are the same as they exist in the northern part of India. The amount of gold I have received has overwhelmed me and it has been a moving scene to see how women took out their ornaments and handed them over to me. I have to convey my sincere thanks to all the donors and I am sure the people of Madras will continue to pursue and follow up this great work that they have taken on themselves. All my greetings and good wishes to the people of the South.

made in the three Plan periods. The investment in power projects will have increased from Rs. 23 crores at the commencement of the First Plan to over Rs. 250 crores at the end of 1965-66. The World Bank and other agencies which have extended financial assistance in the execution of power projects have been repeatedly stressing the need to secure a reasonable return on the large investments made in power projects. It has been urged that a minimum return of 11 per cent on such investments should be aimed at and that to this end there should be upward revision of electricity rates. Such adjustment of electricity rates is now being pursued in all States as an important element of national policy for the Fourth Plan period and the State Government have to fall in line with this policy in view of the large programme of capital outlay envisaged for the Fourth Plan period. Increased return from the investments made in electricity projects can be assured through either upward revision of electricity rates or adjustment in the rates of taxation on consumption of power and Government have preferred the latter alternative as the resources will then be directly available to Government for financing their programmes benefiting the poorer sections of the society. The rates of taxation on consumption of power levied under Madras Electricity (Tax on Consumption) Act, 1962, will be raised as follows:—

Category of consumers.	Existing rate of tax. PER CENT.	Proposed rate of tax. PER CENT.
High Tension Supply (General) ..	20	35
High Tension Supply for Textile Industry ..	30	40
High Tension Supply for Cement Industry ..	10	15
High Tension Supply for Energy-intensive Industry.	5	10
High Tension Supply, subject to levy of fuel surcharge.	5	10
Low Tension Supply, other than domestic consumers.	10	20
Among domestic consumers, those paying at bulk supply rates, will however have to pay at 20 per cent as against 10 per cent now.		

New Industries

The existing provision under which new industries licensed under the Industries Development and Regulation Act, 1951, are exempt from taxation on their consumption of power for a period of three years from commencement of production will continue

and there is therefore no reason to fear that the proposed enhancement will adversely affect the development of industries in the State. As cost of power is not a very significant proportion of the total cost of production of the end-product of most of the industries, the proposed enhancement will not have any significant impact on the cost of manufactured articles. The preferential treatment in respect of energy-intensive industries has been continued. Domestic consumers have by and large been excluded. The enhanced rates will take effect from 1st December 1965 and are expected to yield in a normal year an additional revenue of Rs. 2.5 crores.

The Government are aware that this enhancement is being brought into force at a time when there is power out but feel that in view of the present emergency there is no escape from demanding a measure of sacrifice from the different categories of consumers of power. More than the charges for supply of power, what is of greater significance to different categories of consumers is the availability of power and Government are doing their best for development of power from all sources—hydel, thermal and nuclear. Though the Annual Plan for 1966-67 will be somewhat smaller than originally anticipated, there will be no slackening of pace in the development of power and adequate provision is being made for schemes for generation and supply of power including rural electrification.

Sales tax

The Government have also decided on a measure of increase in the rates of sales tax levied under the Madras General Sales Tax Act, 1959. The single-point sales tax on items 1 to 14 in Schedule I of the Act—luxury goods as they called—will be raised from 10 per cent to 11 per cent. The rate of tax in respect of sale or purchase of other goods mentioned in Schedule I except item 61, viz., palmyra fibres and stalk and item 63, viz., potatoes which have been exempted from tax already by notification will also be increased by half per cent over the existing rates. The multi-point rate will also be increased by half per cent. The rate of tax under section 3 (3) of the Madras General Sales Tax Act in respect of component parts will also be raised by half per cent. The rate of tax on groundnut specified in Second Schedule will likewise be raised from 1 per cent to 1½ per cent.

The rate on other "Declared goods" will remain unaltered. The rate of tax applicable under the Act for certain items of goods has been reduced by notification issued under section 17 (1) of the Madras General Sales Tax Act, 1959. In consonance with the general revision

of the rates, it is proposed to raise the rates as so reduced by half per cent. It may also be mentioned that Government have decided not to increase the concessional rate of tax of one per cent in the case of foodgrains. The Government have also decided that the rates for composition laid down at different slab rates for dealers with a turnover of up to Rs. 50,000 should not be enhanced. The proposed enhancement in sales tax rates will not therefore affect the small dealers who will continue to pay at the existing rates of composition.

The Government are aware that the proposed enhancement of sales tax rates will have widely dispersed effect on different classes of consumers, but I have no doubt that the public will fully appreciate the abnormal circumstances in which upward adjustment in rates has been rendered necessary. The enhancement of rates will take effect from 1st December 1965 and is expected to bring in an additional revenue of Rs. 3.5 crores in a full year.

Other proposals

The third proposal of the Government for mobilization of additional resources relates to sales tax on petrol and diesel levied under the Madras Sales of Motor Spirit Taxation Act, 1939. The sales tax on petrol levied under section 3 of this Act will be increased from 9 Paise per litre to 10 Paise per litre and that on diesel from 8 Paise per litre to 10 Paise per litre. The rate in respect of motor spirit other than petrol and diesel will remain unaltered at 2 Paise per litre.



Sri T. A. Varghese, I.C.S. (left) who has recently retired from service as Chief Secretary to Government and the present Chief Secretary to Government Sri C. A. Ramakrishnan, I.C.S.

This measure is expected to bring in an additional revenue of Rs. 50 lakhs in a full year. This enhancement will also take effect from 1st December 1965.

The Government have also decided to levy an emergency surcharge on land revenue including water cess. The Government have always accorded the rural sector a preferential treatment in view of the importance of agriculture in our national economy. A significant portion of our Plan outlays is on programmes of direct benefit to the agriculturists and these outlays will be further increased in the next year's plan. Agriculturists who have been in the fore front of our struggle for freedom and have again given abundant evidence of their sense of patriotism and capacity for sacrifice in the cause of the nation, should also make some small contribution to the defence effort of the country at the present juncture. We therefore propose to levy a surcharge of 25 per cent on land revenue as fixed in Settlement notifications and water cess, wherever separately levied. In computing basic land revenue and water rate for purposes of levy of surcharge, the additional wet assessment and water rate levied under the Madras Additional Assessment and Additional Water Cess Act, 1963, will not be taken into account. The increase will, in other words, be calculated only on the basis of land revenue and water rates as they existed prior to the enhancement given effect to by this Act. The surcharge now proposed will also be taken into account for computing local cess and local cess surcharge levied by Panchayat Unions.

The surcharge will come into force from the current year, that is from 1st July 1965. This measure will, in a normal year, bring an additional revenue of Rs. 160 lakhs. The proceeds from this surcharge will be utilized for payment of grants to Panchayat Unions for schemes of local utility such as rural water supply, link roads and buildings for elementary schools and will thus flow back to rural areas benefiting in particular, the poorer sections of society in rural areas.

I am aware that these proposals do call for a measure of sacrifice from all sections of the society; but the burdens are not large in relation to the capacity to pay. The people of all ranks of our large secular democracy have, through voluntary donations in cash and kind and through offers of blood for the wounded jawans, demonstrated that they do not consider any price too great to pay for the defence of their motherland. The defence capability of any country can be built up only on the basis of strong and self-reliant economy and our Plan as re-oriented seeks to foster such an economy. A measure of restraint on consumption is also inevitable in any country which prepares to face the challenge of the aggressor. I have no doubt that the Honourable Members of the House and the people will view the proposals placed before them by Government in this perspective and do all that lies in their power to strengthen the defence potential of the country by assisting in the mobilization of resources for programmes oriented towards this objective.

COUNTRY'S CALL

"As a result of our freedom struggle we have succeeded in eliminating foreign domination; we had hoped to achieve peace by getting rid of foreign domination. Actuated by the same motive we accepted partition but subsequent events presented a different shape of things. . . ."

"You fought gallantly in the past and proved yourself first-class fighters; but then you fought for others; now you have to fight for your own country under your own Government. Your responsibility has thus greatly increased and will continue to increase; you should prepare yourself for that responsibility. . . ."

"Responsibility makes shoulders strong. And we have become strong. Now it is for us to consolidate this hard-won freedom."

—SARDAR PATEL.

GOVERNOR'S CALL TO THE PEOPLE OF TAMILNAD

In a broadcast talk on 31st October 1965 His Highness Maharaja Sri Jaya Chamaraja Wadiyar Bahadur, Governor of Madras, called on the people of Tamilnad to do everything possible to defend our motherland. He paid glowing tributes for the way in which the people of Tamilnad responded in the present emergency keeping in line with their glorious tradition of the past.

The National Emergency that started with the Sino-Indian border troubles in 1962 continues to this day with the added gravity that, as events have turned out, it is likely to continue for a considerable time. I need not recapitulate now all that has happened particularly since August this year when Pakistan started making deliberate attacks on our territory and our people through infiltrators and then with their regular army. It is now part of our history how valiantly our armed forces have fought for our defence and still continue their vigil for a free people. The heroic deeds of our men on the battle-field have rightly created a feeling of exhilaration and a sense of national pride in the minds of the people throughout the length and breadth of India.

Our objective

Our objectives have always been to defend our Freedom and our territorial integrity at any cost. In the words of our revered President Dr. Radhakrishnan, "we are fighting not for a piece of territory but for fundamental principles. Victory in our struggle for the maintenance of India's freedom and federal union which includes Jammu and Kashmir, is vital to the saving of free institutions."

A war, however limited may be its extent, has its own inevitable consequences. Our hearts go out to the families of the gallantmen who had to lay down their lives, and to the wounded and the incapacitated, and above all, to the innocent civilians who have been the targets of cruel attack by the enemy. It is encouraging and inspiring to find that the entire nation has risen as one man to help in fighting the aggressor. The people, as a whole, have displayed a remarkable sense of unity at this critical hour. It will hearten our armed forces to know that the will of their fellowmen is behind them.

People of Tamilnad

The people of Madras State, though far away from the actual scenes of conflict, have admirably demonstrated that the battle is as much theirs as it is of any section of the population anywhere in India. The tremendous enthusiasm they have displayed, the spontaneous support they have come forward to extend and the iron determination they have publicly expressed to face the situation, are most praiseworthy. The State Government and all our national leaders have been exhorting the people in all walks of life to do everything in their power to maintain our solidarity and to help the Government in its defence efforts.



The Collector of South Arcot district presenting pottas to ex-servicemen in respect of lands assigned to them and their dependents at a function held recently at Cuddalore.

It is necessary for the people, in general, to have a clear view of their duties and responsibilities so that all efforts may be purposefully directed towards one end. Food claims our first attention, and let us remember that self-sufficiency in food is our national objective. A great responsibility rests on the agriculturists to ensure increase in food production. Wastage of food has to be avoided and consumption needs to be regulated. Industrial establishments and public utility undertakings have to cater to the needs not only of the public but of the defence wings as well. The pattern of industrial production has to be defence-oriented. The families of our jawans have a right to look up to us for assistance. The donations pouring in from all parts of the State and from all classes of people are gratefully acknowledged. Everything possible is being done at Governmental level to help the families of jawans.

Effective co-operation

Effective co-operation of the public is required for putting down the nefarious activities of anti-social elements and maintaining internal law and order. Particular care must be taken to discourage rumours and false and harmful propaganda by interested parties. Blood donations from healthy and able-bodied persons will be very useful for our wounded jawans. The demand for doctors and nurses has to be particularly met, and the medical profession has a special responsibility in this

regard. Concessions have been announced in respect of those in Government service who join the defence forces.

Enduring all

The occasion calls for 'austerity in the daily life of the people. In short, we must believe in the slogan of a veteran war leader—'Giving all, daring all and enduring all'.

Addressing myself to influential social service organizations, non-official bodies and leaders in public life in towns and villages, I feel they can earnestly take upon themselves some well-defined public duties—such as, maintaining regular contacts with official agencies, educating the public in civil defence measures, collecting donations for Defence Fund, securing subscriptions for defence loans, persuading the traders and merchants not to resort to hoarding and profiteering and helping the general mass of the people to get their daily necessities of life without having to face undue hardships. What we want others to do, we must do ourselves with a high sense of duty. It must be realised that there is real work for everyone—man, woman and child—in the present context and there is a national value for that work. Let us remember that it is not words but deeds that count ultimately and what gives lasting satisfaction is not emotion but a work well done.

Glorious tradition

The martial spirit of the people of Tamil nad has a history of its own, and in an ancient Tamil work, 'a heroine speaks thus :

" My father lives in stone, a hero's effigy;
My husband fell in battle slain.
My brothers died, resisting the foe to the last
When all the host had perished.
My son, like a porcupine perished by innumerable darts,
Fell fighting against the foeman's king."

May I express the hope that the people of Tamil nad, with such glorious traditions, will continue to give of their best so that we may fight the evil forces that threaten our peace and security and guard our Freedom with vigilance and valour.



At the inter-school oratorical contest on National Savings held at Tiruchy Kumari S. M. Alamalu of Savitri Vidyasala Hindu Girls High School is receiving the rolling shield on behalf of her school which deputed the best team for the contest from Dr. S. Vijayalakshmi, Vice-Chairman, Advisory Board on National Savings.



Sri K. Ranganathan of St. Joseph's College is receiving the rolling cup on behalf of the College, which deputed the best team for inter collegiate Oratorical Contest on National Savings held October at Tiruchirappalli.



The Ethiraj College won the Rolling Cup this year for deputing the best team to the inter-collegiate Oratorical contest on National Small Savings held at Madras.



The Rolling Shield was won by the Hindu High School for deputing the best team for the inter school Oratorical Contest on National Small Savings held recently at Madras.



The All-India Co-operative week was inaugurated by Sri N.S.S. Manradar, Co-operation Minister, at the Tamilnad Co-operative Union Building, Madras.

THE CONFLICT WITH

PAKISTAN

The conflict with Pakistan turned out to be a major moral issue of our time, dictatorship or democracy, a controlled press or a free press, a non-communal State which respects all religions or a theocratic State, said Dr. S. Rudhkrishnan, President of India in the course of his broadcast to the nation in September 1965.

The present conflict, was calculated to involve the United Nations Organisation afresh in Jammu and Kashmir and compel it to issue a call to India to hold a plebiscite. The past seventeen years have created a situation where a plebiscite is neither practical or necessary.

I spoke to you on the 11th of September. Since then, we have seen grim tragedy. U Thant, the Secretary-General of the United Nations Organisation, came here to take the first steps for the restoration of peace. We responded positively to his suggestion of a cease-fire as we were anxious to put an end to this wasteful bloodshed when the dream of both our countries was being cut off. The cease-fire took effect from 3-30 a.m. on the 23rd instant.

We deplore the suffering and destruction, the disruption of family life; the wasting of human resources and the inevitable casualties of young men. War which sometimes becomes necessary for defensive purposes is still an evil and a danger to humanity. It does no good to any country since it leaves a trail of bitterness, fear and suspicion, thwarts all attempts at social and economic development.

General upsurge

The other day I went to two Military Hospitals here and saw among the wounded, young men of all communities Hindu, Muslim, Christian, Sikh and Parsi. There is a general upsurge in the country which has dissolved our minor differences and integrated our people to

a remarkable extent. There is oneness of feeling and purpose among our people, especially among the fifty million Muslims, who have given a striking testimony of their deep patriotism.

I should like to express our profound sorrow to those who have been bereaved by this war and our deep sympathy to the sick and wounded with prayerful wishes for their rapid recovery.

The country will remember their memorable services with immense gratitude. It is my earnest hope that the spirit which has become manifest in these hard days will continue with us in the years to come.

Excellent leadership

I should like to congratulate our Prime Minister and Government and our Chiefs of Staff, General Chaudhuri, Air-Marshall Arjan Singh and Vice-Admiral Soman, on the hard and excellent work which they and those working under their leadership have done in these difficult days. We have today retrieved our prestige and it is my hope that our Army, Air Force and Navy will continue to function with daring heroism and skill and be treated as a force to be reckoned with.

It is not our wish to destroy Pakistan or threaten its existence. Pakistan came into being as a result of the partition of India with good will and consent of our leaders. We want Pakistan to remain independent and sovereign. The people of Pakistan and India have ethnic, cultural and historical ties of long standing, and we should co-exist as brothers, co-operating in economic, cultural and other affairs.

Accession complete

This war was forced on us. Confident of victory against us, with mighty modern weapons, Pakistan tried to force the issue of Kashmir. Mao Tse-Tung stressed that guerillas must live off the land and can succeed only if they have the friendship and help of the local inhabitants. Pakistan sent across the Cease-fire Line armed infiltrators to incite a revolt in Kashmir but they failed to gain the support of the people of Jammu and Kashmir. They failed even as the raiders assisted by Pakistan troops had failed in 1947. On that occasion Indian troops were not there. The Maharaja of Kashmir, supported by Sheik Mohammed Abdullah, asked for India's intervention to repel the raiders. The Maharaja acceded to India and legally that accession was final and complete. Sheik Abdullah said in the Security Council:

"Thousands of tribal Pathans equipped with mechanised weapons of war, swooped down on us not merely as armed bandits, but as a centrally directed force with the avowed object of subjugating our land to the vassalage of Pakistan at the point of the gun."

In the Jammu and Kashmir Constituent Assembly, he repeated:

"Our accession to India is complete."

Sheik Abdullah on the 13th of April 1952 said: "The relationship existing between India and Kashmir which had been sanctified by the blood of countless martyrs was irrevocable and no power on earth could render us as under."*

Pakistan's miscalculation

The same temper and attitude were shown by the people of Jammu and Kashmir when the infiltrators came in August 1965. Maulana Massoodi, a close associate and friend of Sheik Abdullah, is reported to have told the Indian correspondent of the *Christian Science Monitor*, "We Moslems feel much closer to Kashmiri Hindus than to Panjabi (Pakistani) Mussalmans"†.

* The Kashmir Government Bureau of Information, New Delhi, issued this authorised version of the speech.

† 17th September 1965, p. 5.

Pakistan assumed that India was too weak or too afraid or too proud to fight. India, though naturally disinclined to take to arms, felt the necessity to defend herself when attacked. Pakistan also assumed that communal disturbances would occur in the country and in the resulting chaos she could have her way. Her miscalculations must have come to her as a rude shock.

India is a democracy. It is an essential condition of a democratic people that they are free from external aggression, from the imposition of an outside will by force, subversion or infiltration. The people are free to shape their destiny as they choose. India is what the world aspires to be, a multi-lingual, multi-racial, multi-religious society.

A democracy does not attempt to mould the whole world in a single pattern. Every individual has the opportunity for self-expression and self-development. India is a symbol of the good society. The conflict with Pakistan turned out to be a major moral issue of our time, dictatorship or democracy, a controlled press or a free press, a non-communal State which respects all religions or a theocratic State. Many religious fanatics try to reach heaven by creating a hell on earth.

U.N. and the issue

The present conflict was calculated to involve the United Nations Organisation afresh in Jammu and Kashmir and compel it to issue a call to India to hold a plebiscite. It is argued that the democratic way of life demands the application of the principle of self-determination to Kashmir and its future should be decided by a referendum. Self-determination does not apply to parts of countries. If it did, it would fragment and disintegrate groups and countries. Frequent reference is made to the Security Council resolution of August 1948. But there are three parts of the resolution which have to be read together. Part II provided for the complete withdrawal of Pakistan troops from Jammu and Kashmir. This requirement was not carried out by Pakistan. This part also provided that "Pakistan will use its best endeavour to secure withdrawal from the State of Jammu and Kashmir of tribesmen and Pakistan nationals not normally resident therein who had entered the State for the purpose of fighting!". The responsibility for the security of the whole state was assigned to India. By refusing to vacate the aggression, Pakistan sought to prevent the implementation of the resolution though they still talk about it. The U.N. resolution, Part III, which spoke

about consulting the wishes of the people of Jammu and Kashmir, could not be implemented if the truce agreement was not carried out by Pakistan. The past seventeen years have created a situation where a plebiscite is neither practical nor necessary. The conditions for it are incapable of implementation. If we think of it, we would worsen relations all round.

Every effort was made to ascertain the wishes of the people. A Constituent Assembly was set up and when the Kashmir Constitution was formulated a provision was made reserving twenty-five seats in the Kashmir Legislative Assembly for the elected representatives of Pakistan-occupied Kashmir to be filled some day by the elected representatives. These seats are still waiting to be filled by a democratic election based on adult franchise. In accordance with the Indian Constitution, elections to the State Assembly and the Central Parliament have been held regularly on the basis of adult suffrage. The people of Kashmir have the right to choose their own Government and way of life. Their language, their religion, and their culture and their economic needs are well met in a democratic framework. The people of Jammu and Kashmir are managing their affairs in full accordance with law and their own Constitution. Thus the accession of Jammu and Kashmir to India is legally, constitutionally, politically and ethically complete and just.

The Sino-Indian border troubles of 1962 have been used by Pakistan to secure the assistance of China. China combines commonsense and bravado in her foreign policy. China threatens trouble though she acts in accordance with her own interests. China knows that if she intervened on the side of Pakistan, she would

invite the opposition of many countries, great and small. Her intervention would lead to a general war with all its disastrous consequences. China is aware of this danger of the extension of the war resulting in great power involvement. She is, therefore, content to create a diversion of small-scale activity along with the Sino-Indian border to oblige Pakistan. But all the same we have to be alert and watchful.

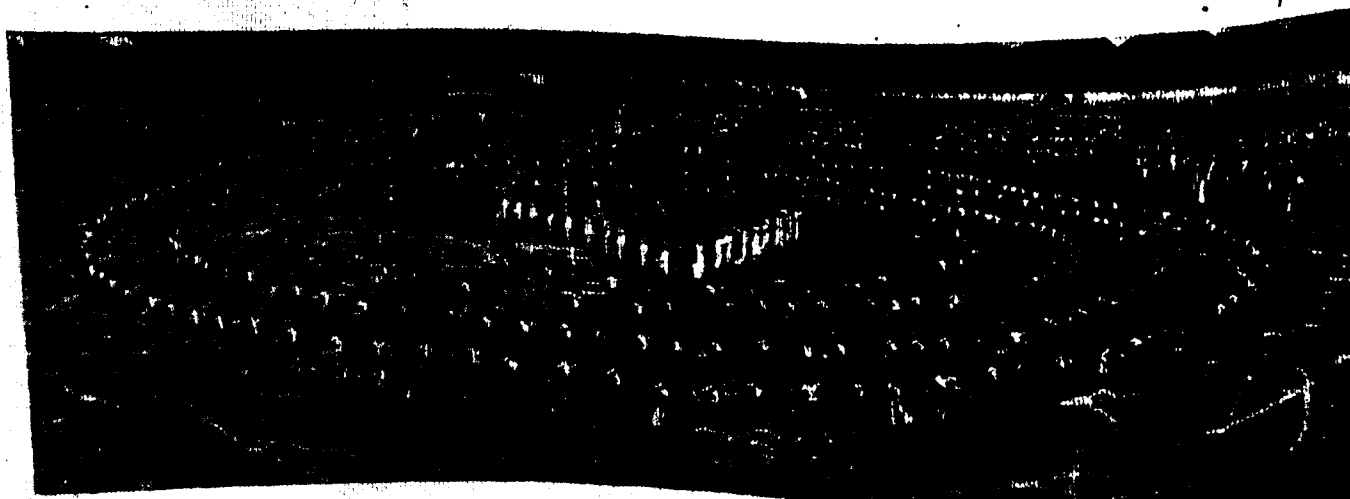
Plea for co-existence

Let us forget the bitterness of recent months and enter an era of peaceful co-existence. We must seek the unity of man with his neighbours, with the world that he has built with the knowledge that can save or destroy him, which can stimulate or stifle him, with the machines which can enrich or menace his spirit. As members of the international community, holding that humanity is above all nations, we should sincerely adhere to the peaceful settlement of all disputes. The only concern of a true man is to be as human as possible. The German Philosopher Schopenhauer complained that most men were like monkeys, it only made it worse, he lamented, that from a distance they often looked so deceptively human. Most wars are caused by misunderstandings, resentments, frustrations and nationalist emotions. These we have to subdue if we wish to behave like human beings.

China and Pakistan are our neighbours and they should be persuaded to become our good and friendly neighbours. This is not impossible, difficult though it may seem today, we should work for that goal.

dirgham pasyatma hrusam.

"Look far ahead; do not be shortsighted."



A view of the Children's rally held at Nehru Stadium, Madras, on 14th November 1965, in connection with the Children's Day celebrations.



The exhibition "Meet the Challenge" was declared open by the Chief Minister at Rajaji Hall, Madras. Sri C. R. Pattabiraman, Union Deputy Minister for Information and Broadcasting who presided over the function is seen explaining the exhibits to others.



People queue to see the exhibition "Meet the Challenge".



Sri V. Ramiah, Minister for Food who inaugurated the exhibition arranged on the occasion of the Regional Seminar of the College Planning Forums is looking at the exhibits.



Sri P. Ramachandran, Vice-Chairman of the State level Executive Committee of College Planning Forums is addressing the professors, staff and students of Tiruchi Colleges at the Town Hall, Tiruchirappalli.

A scene from a cultural performance staged by the college students of Madras City on the occasion of the regional seminar of College Planning Forums held recently at the Presidency College, Madras.



Another scene from the cultural performances staged by the students of Madras City in connection with the regional seminar of College Planning Forums.



TOWARDS INTERNATIONAL CO-OPERATION

DR. C. D. DESHMUKH,
Vice-Chancellor, Delhi University.

The world seems to be yet generations, if not centuries, away from an organisation that could justly claim to be world Government. The faint beginnings, however, of the yearning for one have begun to be felt and many have banded themselves together in some kind of organisations formed for the purposes of giving concrete shape to the idea.

The area where there is least hope of a truly co-operative action on a global scale is political organisation and politics. Since economics is often mixed up with politics, it follows that in the economic sphere also the possibilities of international co-operation are

limited. In area like science which least affected by national boundaries, the opportunities for international co-operation are many and frequent.

What Inhibits Co-operation?

The existing international agencies around which the present efforts at international co-operation can crystallise are small, haphazard and unco-ordinated. What inhibits success is not lack of machinery but preparedness of the Governments to use it in the appropriate way. For greater international understanding and co-operation, therefore, public opinion and its political expression will have to be more in the right



Hungarian Trade Delegation headed by Madame Jozsef Nagy, Minister for Light Industries, the Hungarian Peoples Republic, called on the Chief Minister and Industries Minister of Madras at the Secretariat.

direction. To achieve this public opinion has to be purposefully educated to throw into bold relief the instruments of economic policy that could lend themselves for international co-operation.

Endeavours to integrate on regional levels different countries have already been made as for instance in Europe. The desirability of reducing quantitative restrictions on trade has been confirmed and the need for a certain unification of indirect taxes has also been felt. At the international level, the importance of establishing the convertibility of currencies is well recognised. The desirability of an international policy of development is also beginning to be realised. Along with such international centralisation in broad areas, experience has confirmed the need for decentralisation for discharging local or national functions. All these aspects can be considered with advantage if there is greater reliance on reason and less dependence on emotions. The world has arrived at a stage when some general aims will probably be universally accepted: such as aiming at maximum production and avoiding disequilibrium and excessive inequalities. Even on the non-economic level, there is now some recognition of that attitude which arises out of a sense of human solidarity.

The World Wars

Before World War I, it looked as though we were advancing quite rapidly towards a single principle of economic organisation. It looked as though we were moving towards a single market economy through a monetary system based upon gold and free trade in goods with a greater international mobility for the factors of production.

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Even after the war at least lip-service was continued to be paid to the ideal of free trade and unregulated world economy with gold as, in effect, the worldwide monetary substance. The depression of the thirties changed all this. There was a virtual cessation of international lending which had played such a vital part in making possible the development of much of the world and which has not yet been resumed on anything like the old scale.

The second world war aggravated the confusion but out of this greater chaos emerged international organisations and agencies aimed at preventing the repetition of the great depression of the thirties, restoring a freer working of the monetary system and removing as far as possible the accumulated barriers to international trade and either restoring or finding a substitute for international lending as an aid to development.

World Agencies

Amongst these agencies might be mentioned the Economic and Social Councils of the United Nations, various International Unions connected with communications, the World Health Organization, World Meteorological Organisation, the Food and Agricultural Organisation, the International Labour Organisation, etc. The most important specialised agencies concerned with the general work of the world economy are the International Monetary Fund and the International Bank for Reconstruction and Development. International Trade Organisation is yet to be established. But significant steps have been taken towards it.



The Three-man Russian team on a visit to India to investigate the possibilities of developing Fisheries in this country met Sri G. Bhuvaneswari, Minister for Information and Publicity at Madras at his chambers.

An International Bank for private lending has also been established as also the United Nations Special Fund for pre-investment banking which provides through politically neutral agencies, a supply of grants and of long term loans bearing less than commercial rate of interests for providing basic services such as education, health services, housing, transport and power supply, without which development projects are not likely to look promising either to the private international lender or to the International Bank. The problem of deterioration of the terms of trade against the countries which produced primary commodities, however, still remains more or less unsolved.

I C Y—1965

The idea of observing 1965 as International Co-operation Year came from the late Prime Minister Nehru about three years ago. He drew pointed attention to the vast amount of co-operation continuing between countries about which very little was being said, while conflicts receive exaggerated attention. By designating a year for this purpose, it was hoped to direct some of the man's energy and some of his thinking to the large extent of existing international co-operation, thus creating an atmosphere for solving the world problems more easily and lessening the conflicts.

The general criteria approved for the I.C.Y. included emphasis on existing and continuing activities involving international co-operation; also a review of specific U.N. programmes and activities and assessment of their achievements. While peace and prosperity

Sri Nachimuthu, President, Tamilnad Handloom Weavers' Co-operative Society buying the first bundle of yarn spun in the Thanjavur Co-operative Spinning Mill from Sri R. Venkataraman, Industries Minister.



through co-operation is the broad theme of the I.C.Y., the proposal was to select for special emphasis specific areas for different periods of the year such as education, technical assistance, health, food, children's day, communication, etc.

Other activities suggested were: Assessment of the achievement of self-sustained growth of all nations of the world by the end of the development decade; special progress in regard to international trade, culture, education and agriculture, as well as science and technology, co-ordination of long term development programmes through regional economic commissions and launching of appeals for ratification of multilateral instruments; surveys of treaties for the peaceful settlement of disputes or international agreement and arrangements relating to development and technical co-operation.

Illustrative Functions

A number of functions have been held in the current year for illustrating international co-operation. These were the International Tele-Communications Union Centenary, second conference on World Population organised by U.N. in Yugoslavia; the International Rice Year of F.A.O., the projected establishment of the world weather watch by the World Meteorological Organisation; Organisation of the International Year of the Quiet Sun.

The 1961 edition of the Year Book of International Organisations published by the Union of the International Organisations illustrated 154 inter-governmental organisations and 1,255 non-governmental organisations. The non-governmental organisations enjoy relative freedom from power politics; have greater initiative power to criticise and apply pressure and have flexibility and speed of action.

It will be impossible in one article to give even a succinct summary of the achievements of these organisations but a great deal of information is available in regard to the scope and range of the activities of these organisations.

Achievements

For example at the Conference on Science and Technology for Development held last year under the auspices of the United Nations, scientists, technologists, planners and representatives of countries at various stages of development gathered together for enhancing, mutual understanding and discovering new possibilities. The

need for establishing some central research organisations was stressed during these discussions as well as the need for the planners to be in continuous rapport with such organisations.

In the field of industry the United Nations has its Centre for Industrial Development with a technological division, the purpose of which is to study and spread facts about modern technology.

Development brings in its train perplexing social problems of which the United Nations Bureau of Social Affairs gives continuing attention and on which it has assisted and advised Governments recently through a generous gift from the Netherlands Government which endowed the United Nations Institute of Social Development in Geneva, the United Nations will be able to direct social research towards development problems, particularly those of transfer and adoption. If awareness and acceptance of changes is to take place on grass-roots level, this has to be supplemented by the establishment of Institutes of Social Studies in developing



Sri M. Bhaktavatsalam, Chief Minister, presided over the public meeting organised on 24th October 1965 at the Srinivas Sastri Hall, Madras, to celebrate the U.N. Day as International Co-operation Year. The Chief Minister is addressing the gathering.

It may be worthwhile knowing here that the preparations for setting up one in India are already in progress at the India International Centre which has recently set up a council for social development.

DONATE GOLD—STRENGTHEN THE NATION

We have got to harness a substantial part of the gold reserves in this country and put them to the service of the Nation if we are to be strong and self-reliant. We have given considerable thought to the new defence loans and the National Defence Gold Bond Scheme, which are now in operation and we have tried to take a practical view and give whatever inducements are possible. In themselves, these schemes are a useful investment, but what is more important, they represent a vital contribution to the nation's defence effort. Our countrymen to-day are imbued with a fierce determination to offer any sacrifice to make the country strong. I have every hope, therefore, that people will respond suitably to these schemes and especially that of the Gold Bond in order to attain this objective.

SRI LAL BAHADUR SHASTRI,
Prime Minister.



MADRAS WELCOMES THE PRIME MINISTER

1. Sri Lal Bahadur Shastri, accompanied by his wife, arrived in Madras on 20th November. In the picture the Prime Minister is talking with Sri M. Bhaktavatsalam, Chief Minister immediately after arrival at Airport. 2 & 3. Sri Lal Bahadur Shastri is seen inspecting a guard of Honour by Home Guards at the Airport. 4. Gold and Gold Bonds were presented to the Prime Minister, at a women's meeting held at the Centenary Auditorium, University Buildings, Madras. 5. The A.I.C.C. President, the Prime Minister and the Chief Minister in conversation at one of the meetings held in the City. 6. Prime Minister was presented with garlands of gold rings and donations for National Defence Fund by students at the Students Rally held in Nehru Stadium on 21st November. Picture show the Prime Minister receiving the donations. 7. The Prime Minister and the Chief Minister are inspecting a gold chain presented at the Women's Rally. The Chief Minister is presenting Rs. 1,11,11,111 to the Prime Minister at the public meeting held at Marina on 20th November. 9. Prime Minister receiving Gold from temple authorities at Sri Kapaleeswarar temple, Mylaore. 10. The Prime Minister with the Governor of Madras at Rajbhavan, Guindy. 11. The Prime Minister, taking the salute of the N.C.C. Parade at Nehru Stadium. 12. The Mayor of Madras is presenting a Civic Address to the Prime Minister at the Function held in the Nehru Stadium. 13. Sri Shastri is proceeding to Nehru Stadium after his visit to Sri Kapaleeswarar Temple.



OUR AIR FORCE IN THE WAR

The sunset was only about an hour and a quarter away on September 1 this year when a forward airfield in the Punjab suddenly came to life with the noise of jet engines starting up. In sections of four, with a few minutes interval between each section, 28 fighter bombers of the Indian Air Force got airborne with a full complement of armament load for the Chhamb sector in the Jammu and Kashmir area, to help stem the unexpected thrust of the Pakistani armour, which had crossed the international border into Jammu.

This was the start of the air action by the Indian Air Force which, when it stopped on September 23, had cost the Pakistan Air Force 73 aircraft destroyed in air action and by ground fire. This figure does not include the aircraft destroyed or damaged during the numerous night attacks carried out by Indian bombers on Pakistani air bases. The Indian losses during these 23 days of action were only 35 aircraft.

The need for the Indian Air Force to go into action had been made imperative by the Pakistani action in spear heading its attack across the international border and the cease-fire line with almost two regiments of tanks in the Chhamb sector. In this first strike by the Indian Air Force, 14 tanks were destroyed or damaged. Eleven were actually seen burning. In addition 30 to 40 heavy vehicles were also destroyed. After this engagement, however, two Indian Vampires were missing and two more had been damaged.

Two days later, that is on September 3, came the breakthrough, which marked the start of the superiority which the Indian Air Force unmistakably established

and maintained throughout the ensuing 20 days. At 7 a.m. on that fateful day September 3—a formation of Pakistani fighters was reported to be circling over our army positions in the Chhamb sector. A section of Gnats was scrambled to intercept the enemy. Squadron Leader Trevor Keeler, who was the section leader, sighted the enemy and identified them as F-86 Sabres. He immediately engaged them. While Keeler was jockeying for position, the F-86s were joined in by a section of F-104s. But in spite of being face to face with reputedly superior aircraft, he refused to break off and finally lining up a Sabre in his sights, shot it down. The next day another two Sabres were shot down over the same area. Superior men had begun to take a heavy toll of superior machines.

Costly Venture

On September 6, when the Indian Army marched into the Lahore sector to forestall an attack in the Punjab, the I.A.F. was called upon to extend ground support and try and disrupt the logistics of the Pakistani Army. Our aircraft, till then had not attacked any P.A.F. air bases. However, on September 6, Pakistani aircraft attacked two Indian air bases in the evening. One of the attacks was on Halwara and was carried out by four F-86 Sabres. It was to prove an extremely costly venture for the Pakistanis, for none of the four Sabres went back. Three F-86s were shot down by our Hunters and one fell victim to our anti-aircraft fire. Again, Pakistanis carried out their raid in the Eastern sector, on Kalaikunda, with a section of four F-86s. The story of Halwara was repeated all over again. All the four were shot down, two by Hunters and two by anti-aircraft fire.



The Defence Minister, Sri Y. B. Chavan, accompanied by Lt. General K. Bahadur Singh, G.O.C.-in-C., Central Command, recently visited the forward areas of the central sector in Uttar Pradesh. The Defence Minister is seen addressing the troops somewhere in a forward area of central sector.

This costly lesson was not lost upon Pakistan, because after this they never ventured to attack our air bases in daylight. But this attack on I.A.F. bases opened the way for our pilots to attack Pakistani airfields in retaliation. The first to be attacked by the Indian bombers were Sargodha and Chaklala on the night of 6th and 7th September. From then on nearly 200 sorties were flown by our bombers against the Pakistan air bases till the cease-fire on the 23rd. Only one I.A.F. Canberra was lost during this entire period.

While the Pakistan Air Force was paying a heavy toll in the air battles, the Indian Army gunners were doing wonders with their anti-aircraft guns. Taking only one example of a single battery at Amritsar, the first attack by P.A.F. against this installation came on the evening of September 5, which was driven away.

In the next attack, which was put in by the P.A.F. on September 8, one of the attacking aircraft was shot down. Then began a long tale of victory for this "charmed" ack-ack battery, which by the time the hostilities ceased had confirmed a bag of 10 Pakistani aircraft including B-57 bombers.

Fighter sweeps

While Pakistanis had been effectively deterred from carrying out daylight attacks on our airfields and installations and targets inland, the Indian Air Force fighter-bombers ranged far and wide attacking military targets and airbases. A number of attacks were carried out on Sargodha airfield in broad daylight by both Mysteres and Hunters. Considerable damage to the installations was done and besides other aircraft, at

least two F-104s (Supersonic Starfighters) were destroyed or damaged. In offensive fighter-sweeps which, our aircraft carried out, tanks, heavy guns, armoured vehicles, anti-aircraft guns, heavy motorised transport and formation headquarters fell victim to Indian rockets, bombs and front guns. The toll of Pakistani tanks alone, which the Indian Air Force destroyed during the 23 days of operations, adds up to an impressive figure of over 120. In one very effective strike, on September 8, four Hunters destroyed a goods train which eventually resulted in the blunting of the Pakistani armour attack in the Khem Karan sector and, in addition, destroyed four tanks and over 60 vehicles.

While the I.A.F. fighter-bombers continued giving ground support to our troops and exacting heavy toll of the enemy armour, guns and other positions, the Indian fighters were busy clearing the skies of the Pakistani Sabres. Every time the F-86s were engaged by Gnats or Hunters, the Sabres were never able to get away without any losses. The reputedly deadly sidewinder air-to-air missiles, on which the P.A.F. depended so heavily for air combat, proved ineffective because of the low altitudes at which most of the air battles were fought. More often than not, the enemy fighters had to jettison these missiles when engaged by the Gnats. In fact the greatest single deterring factor in air battles proved to be this light weight, high performance India-made fighter which has been under manufacture in the country since 1956. It was soon nick-named 'Sabre Slayer', and not without reason. Its performance in the air battles was so impressive that even the supersonic F-104s refused to engage it in battle, and almost invariably decided to break off by cutting in their after burners, when chased by a Gnat.

Fantastic claims

Learning that daylight operations against Indian airfields were costly, the enemy started visiting these places at night with their B-57s. But here again the accurate anti-aircraft fire, almost invariably made the Pakistani pilots drop their bombs in a hurry and scuttle away. While the fact was that the B-57 night raids failed to hit any worthwhile installation, their propaganda machine continued to churn out fantastic claims of aircraft destroyed and airfields put out of action. For example, after a night raid on Ambala the enemy claimed 27 aircraft destroyed on the ground, whereas, in reality, except for a section of old flying control tower, none of the airfield installations, let alone a single aircraft, had even been damaged. All the enemy bombs had fallen on non-military targets, which included a hospital, a residential area and the century old St. Paul Cathedral. Then again, the airfields at Pathankot,

Adampur and Halwara were claimed to have been put out of action. The Air attaches of foreign countries, who were taken round all the airfields in the Punjab after the cease-fire, and who should have a discerning enough eye for everything air force, were highly amused by Pakistan's somewhat juvenile claims, after seeing first hand that none of these airfields had been put out of commission or rendered non-operative for even a single day. The foreign air experts certainly did notice with professional interest the destruction, by Pak. air action, of civilian property and life, which abundantly spoke of the type of marksmanship which might be expected from semi-skilled, panic-stricken pilots.

The destruction of MIGs was another fantastic fib, which was floated by the Pakistani propagandists. It claimed that the Pakistan Air Force had destroyed nine MIG-21s. In fact the I.A.F. started the operations with only nine MIG-21s, and was prepared to show eight of these aircrafts at the end of the operations.

Nocturnal sorties

Such tall Pakistani claims of destruction of Indian aircraft and airfield installations were decidedly to cover up the loss of 73 of their own aircraft in air battles and by ground fire, and more on the ground. This figure has been conclusively corroborated by cine gun film records, supported by eye-witness accounts of pilots, and recovery of wreckage on the ground. The morale also flagging which was evidenced by their erratic marksmanship, both during the day and at night, and their inability to put up effective air strength to stop daylight attacks. The last raid put in by I.A.F., for example, with a section of Canberras on the vital radar installation at Badin in Sind, did not meet any aerial resistance at all. The Canberras only met ack-ack fire, which did not stop them from destroying this installation with a rocket attack.

Throughout these operations, strict care was taken by the Indian Air Force and, indeed, unequivocal orders had been given that no civilian areas were to be harmed, nor any non-military targets, or targets which did not have a direct bearing on immediately supplying or reinforcing the Pakistani war machine were to be attacked. That these orders were honourably and strictly obeyed is proved by the fact that not a single industrial target or even legitimate military targets such as bulk petroleum installations situated in non-military areas, were attacked. This was despite the fact that Indian bombers were able to operate with impunity in much larger numbers than the nocturnal sorties of the Pakistani B-57s. As opposed to this,

thwarted in their attempts to inflict any damage on military installations or on army targets, the Pakistanis resorted to hit and run raids on civilian residential places of worship and similar other non-military areas. The disastrous B-57 attack on Chherta, near Amritsar, on September 23—the pre-

scheduled and known day for cease-fire—is a case in point. The diversion of air potential against such militarily unproductive targets would not have been resorted to by the enemy had not the Pakistani Air Force received a severe mauling at the hands of our pilots and gunners, which it did.

IT IS THEY WHO DIRECTED OUR GUNS

Chhamb.—The enemy's guns were sending a barrage of fire across the border into our territory. This was the evening of September 1. There was a thick haze in the sky and visibility was poor. But the enemy had to be silenced.

His guns were hidden and they had to be located. It was then that an officer of Air O.P. went up in a small mono-plane. He had to fly low, often just 50 feet above the ground. His mission had just begun when a medium machine gun opened up at him. His aircraft was hit in the wings. Then a splinter hit the starboard side of the engine and ripped its covering open.

Just then, the officer began noticing things on the ground and he stayed on to make detailed observations. He pin-pointed the enemy's guns and transmitted the information back to our artillery units. The enemy found that he was being answered, and to the point. A little later the enemy found that his tanks behind his guns had been located too, and the troops behind the tanks as well.

This officer is, however, only one of the Indian Artillery's hand-picked band who fly through ravines and nullahs, come down to tree-top level, weave in and out of the enemy's lines, stay in the air for two hours at a time, again and again.

The plane is light, it is slow-moving, much of its hull is made of fabric, it is unarmed. The enemy goes for it with everything he has, both from the ground as well as in the air. Yet these mono-planes of the Indian Artillery flew behind the enemy's lines over every battle front. It is they who directed our guns.

PROPER USE OF *fertilisers*

One of the basic deciding factors in influencing the yield per acre is the proper utilisation of fertilisers. The following paper on proper use of fertilisers was read at the Agricultural Seminar held at Thanjavur recently.

In order to improve the productivity of the soils proper use of fertilisers is essential. Fertilisers alone may not give the expected results unless the various limiting factors of crop production like incidence of soil erosion, salinity, alkalinity and adverse soil reaction, are properly controlled. If the soil is too dry or if it is too wet (water logged) no significant benefit may be expected from fertilisers application. Along with irrigation facilities and improved varieties there will be ample scope for increased use of fertilisers. In fact the high yielding variety (ADT. 27 for example) must be heavily fertilised to get full benefit of its production potential. The farmers have to use right kinds of fertilisers in right proportions in right quantity in right time and in right manner in order to derive maximum benefit from the use of fertilisers.

Balanced fertilisation

The knowledge of nutrient demand by various crops and of the amounts of available nutrient in the soil (as indicated by soil tests) helps the proper use of fertilisers.

The farmers should take advantage of the soil testing laboratory at Aduthurai which will test the soils of the farmers and furnish suitable fertiliser recommendations free of cost.

The State general fertiliser recommendation for rice is 30 pounds N and 30 pounds P_2O_5 per acre over a basal dressing of 5,000 pounds of green leaf or 5 tons of FYM per acre. Where it is not possible to apply the basal dressing at this rate the deficit of nitrogen should be made up by supplying one pound N corresponding to every thousand pounds of FYM or compost and

4 pounds N corresponding to every thousand pounds of leguminous green manures. The Thanjavur district has a village-wise average fertility index available with the extension workers as well as village fertiliser recommendations for paddy. This fertility index had been worked out as a result of analysis in a number of samples collected from the different parts of the villages in the soil testing laboratory, where it is not possible to get the soil samples from a farmer analysed in the laboratory these generalized village-wise fertiliser recommendations may be used for calculating the fertiliser requirements. At present only a single recommendation has been worked out for all the three crops of paddy. The extension staff will help in working out suitable recommendation for other crops from the soil fertility index values available with them.

Right kind

While non-leguminous crops (cereals) may have the heavy demand for nitrogen, leguminous crops (like cowpea, gram, groundnut, sunnhemp, etc.) may synthesise their requirements from atmospheric nitrogen under favourable conditions.

In the selection of fertilisers, we have also to consider the soil reaction and the nature of the crop. Fertilisers like ammonium sulphate and ammonium chloride are acidic in reaction and should not be used for acidic soils unless accompanied by liming to correct the soil acidity. These fertilisers are more suitable for soils which are alkaline in reaction. While fertilisers like Rock phosphate, basic slag, fused magnesium phosphate and calcium phosphate may be responsive in an acidic soil, they are quite ineffective in alkaline soils. Nitrate

fertilisers like ammonium nitrate and ammonium sulphate should not be used for basal application for wet land paddy.

Time and method

The demand for the various kinds of Plant Food Elements vary considerably depending on the crop. Nitrogen is usually required during the early stages of development and pre-flowering stage for increasing the crop yields. Application at a later stage may not increase the yield appreciably although it may improve the quality (protein content) of the crop. Benefit from phosphatic fertilisers is mostly towards grain formation.

The fertilisers should be available within the easy reach of the plant roots so that they may be absorbed by the plant. Broadcasting and thorough incorporation of fertilisers in soil especially in powder form may lead to the fixation of phosphatic fertilisers in certain soils and also often of potash.

Placement of fertilisers

Localised placement of fertilisers is desirable because of restricted contact and less chances of their fixation.

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Placement should be properly controlled to minimise the possibility of injurious effect on the plant roots.

While localised application to far from seeds may result in the retarded growth root injury may take place if the application is too close.

Phosphatic fertilisers undergo progressive fixation or reversion in the soil depending on its reaction, namely, fixation as insoluble iron and aluminium phosphate under acidic conditions and reversion to insoluble tricalcium phosphate under alkaline conditions (Latritic soils, Regur or black cotton soils).

While nitrogenous fertilisers are highly soluble and mobile (nitrates) phosphatic fertilisers do not move very far from the point of application.

Fertilisers should ordinarily be placed (in band) about 2 inches away and 2 inches below the seed. All the phosphatic fertilisers should invariably be applied as basal dressing.



The State Panchayat Development Consultative Committee met at the Old Legislators' Hostel to discuss problems relating to increase in production, etc. Sri M. Bhaktavatsalam presided. Collectors and Panchayat Union Chairmen participated in the discussion.

Crops grown under rainfed condition may benefit from a deeper replacement of fertilisers because of better moisture regime.

Top and side dressing

Top dressing and side dressing with nitrogen and some times with potash are useful in providing nutrients at the critical stage of crop development and in replacing the plant food by leaching or other causes.

For transplanted paddy, for example, half the recommended dose may be applied at transplanting time and the rest about a month before flowering.

Certain fertilizers may be dissolved in water and applied as spray to plant foliage and at least part of this will be absorbed. This becomes specially necessary for micro-nutrient elements like iron, copper, zinc, molybdenum and manganese which may undergo fixation in the upper soil layers and rendered unavailable.

Nitrogen application as top dressing may often be a problem subsequent to the failure of rains. Foliar application of urea in such circumstances may be beneficial.

SAVE SO THAT THE COUNTRY MAY LIVE

Savings are vital for the growth of the economy at all times. The need for savings and investing it with the Government is all the greater at a time like the present when our requirements for defence have increased. If, we have to be self-reliant, as we must, we have to practise thrift and save so that the country may live. Among the means of savings, small savings must, in particular, take the pride of place as they represent the contribution of the common man and give him a sense of participation in the Defence effort. Our people have demonstrated their unity and willingness to suffer hardships and I am confident that the Central and State Advisory Boards will succeed in devising ways for harnessing the enthusiasm of the people for raising resources through small savings.

SRI LAL BAHADUR SHASTRI,
Prime Minister.



V. KARTHIKEYAN, I.A.S.,
Director, Tamil Development.

With the dawn of independence in the country, the development of regional languages received an impetus at the hands of the National Government. The Government of Madras enacted the Official Language Act in 1956 and thus paved the way for conducting official business in Tamil. The passing of this legislation was unique in the history of the State and it received the unanimous approval of all sections of the people of this State. The State Government were of the view that for the successful implementation of the Official Language Act, a strong base should be provided by making Tamil the medium of instruction in colleges. Besides this, several important schemes have been implemented by the State in its efforts to develop Tamil, a review of which is given in the following paragraphs.

THE OFFICIAL LANGUAGE COMMITTEE

Consequent on the enactment of the Official Language Act in 1956, the Government appointed the Official Language Act Implementation Committee in January 1957 to advise them on the steps to be taken to implement the Act. The difficulties in the way of implementing the Act simultaneously at all levels of the State administration were realised. It was therefore decided, to introduce Tamil for official correspondence initially in small offices where the typewriters were not in use. The typewriter being one of the modern equipments essential to carry on the administration effectively, the scheme of Tamil correspondence in Government offices, depended on the introduction of Tamil typewriters. One of the first tasks of the Official Language Committee was to standardise the key board of the Tamil typewriter. After the introduction of the standardised typewriter, the Government started an institute to train typists on the standardised machine. About 1,000 typists were imparted training in this institute. On the abolition of this institute, the typists in Government offices are trained at the private commercial institutes under a subsidy scheme.

Another important step taken preliminary to the introduction of Tamil as the Official Language of the State is the compilation of the Glossary of Administrative Terms. The first glossary was published by the Government in 1957 and subsequently it was revised and a second edition was brought out in 1962. An addenda and corrigenda to it was issued in 1964. A supplementary glossary of special terms relating to each department was compiled and so far, 43 supplementary glossaries have been issued. The Official Language Committee also arranges to translate the State Acts, Rules, Codes, Manuals and Forms into Tamil. All the four volumes of the Board's Standing Orders have been rendered into Tamil and are under print. Besides these, model drafts and notes have been obtained from various departments, translated into Tamil and arrangements have been made to print them. A Special Officer has been appointed to scrutinise all these translations in Tamil.

It has been decided to introduce the Tamil Scheme in the offices of the Heads of Departments in four stages. The first stage was introduced in 1963 and the second stage during the current year, viz., 1965-66. According to the first stage, the replies to communications in Tamil received from the public will be issued in Tamil itself. In the second stage, the offices of the Heads of Departments will correspond with their subordinate offices and District Offices in Tamil. Even here, for the present, correspondence on simple subjects specified by the Heads of Departments alone will be carried on in Tamil. With the experience gained, other subjects also will be included under the scheme according to a phased programme.

In the Secretariat

Orders have been issued that the first stage of the Tamil Scheme will be introduced in the Secretariat with effect from 1st May 1966. As a prelude to this scheme, the Typists in the Secretariat are given compulsory training in Tamil typewriting and those who do not possess adequate knowledge of Tamil are also given training to learn Tamil. The scheme for the in-service training in Tamil is already in force.

and published in the Fort St. George Gazette and the District Gazettes, as the case may be. Central Acts and Bills are also rendered into Tamil whenever required.

A translation Cell for minority languages, viz., Telugu, Malayalam, Kannada and Urdu has been constituted to cater to the needs of the minorities. Rules and notifications of interest to the minority communities are rendered into the respective languages and published in the Gazette. Representations received from them are translated into English for appropriate action by the concerned departments.

Translation of Legislature Questions for preparing Question lists in English and Tamil is another important item of work of this Wing. Answers to be given by the Ministers on the floor of the Assembly and Council are also rendered into Tamil. The Agenda, Resolutions, Adjournment motions, etc., are also rendered into Tamil for the benefit of the Members. Besides this, all the required Legislature publications are brought out in Tamil and supplied to the Members along with the publications in English.

One of the main functions of this Wing is to render in Tamil the Budget Speech of the Finance Minister, the several Budget publications and the Supplementary Budgets. The Wing also caters to the needs of

the Central Government and Quasi Government bodies in translating their Rules and By-laws of interest to the staff and the public.

LEGAL GLOSSARY COMMITTEE

The proceedings of Law Courts should be in a language which could be understood by the members of the public. It will be possible for one and all to understand and appreciate the Books of Law and Judgment of Law Courts only if they are made and delivered in the mother-tongue. The suggestion was also made that the medium of instruction in Law Colleges should be Tamil. The need has therefore arisen for the translation of Acts and Rules into Tamil. The Government have considered it necessary to take suitable steps in this regard.

In 1957, the Government appointed the Legal Glossary Committee with a view to translating the legal terminology into Tamil. This Committee has already translated a considerable number of legal terms into Tamil. The appropriate Tamil word for each legal term has been coined and this collection has been completed from "A" to "D". The Committee also considered that it would be better to explain also the meaning of each legal term so that each term can be understood in a fuller measure. In this manner, the words from "A" to "N" have already been



**WE ARE ALL INDIANS...
LET NONE DIVIDE US**

DA 5173

The Police in the present EMERGENCY



SRI F. V. ARUL,
Inspector-General of Police, Madras.

At the Special Police Ceremonial Parade held at the Rajaratnam Stadium, Madras, on 20th October 1965 to celebrate the National Solidarity Day, the Inspector-General of Police has stressed the important role the Police Force and the Home Guards have to play in the present emergency in maintaining internal security.

We are very grateful to the Chief Minister and to the Home Minister for their presence at this parade which has been arranged in connection with the National Solidarity Day. Hitherto it has been the practice to take the pledge in the morning at our respective offices. But this year, the Union Government have asked all State Governments to direct the Police and the Home Guards to hold parade in the evening in addition to taking pledge in the morning. This has obviously been done to highlight the need for unity and discipline in the country during the present crisis.

The Police Force in India number 500 thousand. There are 700 thousand Home Guards in addition, and so, the Police and the Home Guards total 1.2 million. This large force is governed by the basic principle of discipline, though its members may be drawn from different castes and communities and though they may profess different creeds. The Police Force is united in its loyalty to the country. The great responsibility of setting an example in discipline and loyalty for others to follow rests with police force. On the occasion of the National Solidarity Day, we renew our pledge to work for the unity and solidarity of the nation.

If we have been able to assemble in an atmosphere of peace and quiet, that is in no small measure due to the military skill and valour of our defence forces. I sometimes think that some of us have not fully recognised the magnitude of the threat that was posed on our Northern Frontiers last month. The Pakistanis, equipped with the latest planes and tanks and guns, dreamt that they would reach Delhi within a few days.

But, what actually happened? It was Indian Army which moved forward and infested both Lahore and Sialkot. How had that happened? It was because of the supreme courage, leadership and sacrifice of our fighting forces. Our officers and men stood together shoulder to shoulder in the front line and they stopped the armoured columns of Pakistan. So, we owe a great debt of gratitude to our defence forces. The least that we, the Police and the Home Guards can do is to work with even greater zeal and enthusiasm to ensure



At the Special Police Ceremonial Parade held at Rajaratnam Stadium, Madras on the National Solidarity Day, the Chief Minister, Sri M. Bhaktavatsalam took the Salute and addressed the Police Force.

He is seen handing over to Smt. S. Kupppammal, wife of P. C. 411 Subramaniam a cheque for Rs. 1,000.



Sri P. Kakkan, Home Minister, presented 'ponnadai' to Sri A. N. Lakshmana Rao, Headmaster, Board High School, Arni, for meritorious service in the field of education.

from June 1963 in all Government Offices. The scheme provides for two training classes per week for a period of eleven months. A Special Officer has been appointed to inspect all the offices to see that the Tamil Scheme is implemented satisfactorily.

Shorthand Manual

The publication of a Manual of Tamil Shorthand is one of the important achievements of the Official Language Committee. The printing of the Manual posed a serious problem as there were no adequate facilities either at the Government Press or the private presses in the State to print the shorthand symbols clearly. Prolonged correspondence was carried on with Messrs. Pitman and Company London, to entrust them with the printing part of the work. But, as there were certain difficulties in the way, it was decided to go ahead with the work at the Central Survey Office adopting the Photo Lithographic method. There is no doubt that the Shorthand Manual will serve as a great boon to the students of Tamil Shorthand. The publication of the Manual has paved the way for the fuller implementation of the Official Language Act.

THE BUREAU OF TAMIL PUBLICATIONS

In April 1959, the Government appointed a Committee known as the College Tamil Committee to consider and

advise Government on the mode of selection of students and the staff for the Tamil medium degree courses and on the preparation of text books, notes and glossaries of technical terms for the use of the newly introduced Tamil medium courses.

The College Tamil Committee functioned from 14th April 1959 to 31st March 1962 and sponsored the publication of 35 books in Tamil on various subjects of Science and Humanities.

The Government constituted the Bureau of Tamil Publications so that this new body might take up the activities of the defunct College Tamil Committee. The main object of the Bureau of Tamil Publications is to bring out more and more books in Tamil covering a wider range of subjects including Medicine, Law, Engineering and Technology. The Bureau has undertaken to prepare both original books and translations of standard English books on various subjects catering to the needs of the University students and to the members of the general public. The Bureau has undertaken not only to prepare the manuscripts but also to publish them, engaging private printers for printing the books. One benefit of this arrangement is that the books are sold at rates far less than the cost price since the Bureau of Tamil Publications is maintained from the Government funds.

In order to expedite the completion of the writing up of the books assigned to several authors, a Cell of Authors was constituted in the Government Arts College, Madras, from 5th April 1962 to 20th June 1962. Only twelve authors were able to attend the Cell for the full period.

Seminar on Translation

Another Cell of Authors was constituted during the summer of 1963 at the Government Arts College, Madras, in which 47 authors participated. At the inaugural function of the Cell held on 10th April 1963, 14 publications of the Bureau were released. English books on various subjects have been translated and an original book on "Zoology" has been written.

The Bureau co-sponsored with the Southern Languages Book Trust, a seminar on "Translation", conducted in the middle of August 1963. Delegates representing the four Southern languages participated in group discussions on the technique of translation. A souvenir containing valuable articles on the art of translation was published. The Bureau shared equally, with the Southern Languages Book Trust, the expenditure incurred on the conduct of the seminar.

The Chief Minister of Madras presided over a function at which a few sets of books were presented to certain Universities in O.K., U.S.A., U.S.S.R., West Germany, France, Ceylon and Malaysia where Tamil is taught. The Consular Heads of the respective countries received the books on behalf of the Universities on the 13th April, 1964.

The Bureau has so far published 72 books on subjects like Economics, History, Psychology, Politics, Philosophy, Statistics, Sociology, Physiology, Zoology and also on other general topics. These books are the treasure house of knowledge and it is hoped that the students and the public will greatly benefit by them.

THE TAMIL DEVELOPMENT AND RESEARCH COUNCIL

With a view to do constructive work for the development of Tamil in all possible directions, the Tamil Development and Research Council was constituted in 1959 with the then Education Minister as its Chairman. To attend to the diversified tasks, several Sub-Committees were formed. Recently in January 1965, the Council as well as the following Sub-Committees were reconstituted:—

- (1) Sub-Committee on the Evolution of Technical Terms.
 - (2) Sub-Committee on Archaeological and Epigraphical Research.
 - (3) Sub-Committee on the Research of Children's Literature.
 - (4) Sub-Committee on the promotion of the folk songs and Folk Dances.
- The Chief Minister of Madras is the Chairman of the Tamil Development and Research Council.

To promote the publication of good literary books in Tamil, the Government introduced in 1947 a prize award scheme. The scheme was being implemented by the Tamil Development Council (Tamil Valarchi Kazhagam). In 1960, the Council requested the Government to take over the scheme themselves. The Government have approved the scheme submitted by the Tamil Valarchi Kazhagam. This scheme provides an opportunity to all new books in Tamil for competing for the award of prizes.

The compilation of a Bibliography in Tamil is one of the very useful tasks undertaken by the Tamil Development and Research Council. The aim is to compile



Sri M. Bhaktavatsalam, Chief Minister, presenting ponnadai to Sri Kivalur Meenakshi Sundaram Pillai, author of the book "Thyagaraya Keerthanai porul vilakkam" at a function held at Rajeswari Kalyanamandapam, Madras, on 9th November, 1965. The Governor of Madras released the 1st volume of the book on the occasion.

the Bibliography from 1867 to 1957. The first part of the Bibliography for the period from 1867 to 1910 has already been published. The Bibliography contains information regarding the title of the book, the name of the author, the name of the publisher and a brief summary of its contents. It will be of great value to all those interested in the development of the Tamil language and to the Research students in particular.

THE TRANSLATION WING

The avowed object of the Government is to introduce Tamil as the Official Language at all levels of the State Administration. Till then, it is of paramount importance that Tamil translations of all Government publications in English should be made available to the public. The translation Wing with a Joint Director of Translations under the over-all control of the Director of Tamil Development is discharging this important function.

Legislative Bills, Enactments, Ordinances, Rules, Codes and Notifications are being translated into Tamil and in the minority languages, wherever necessary.



Sri Govindan

slipped and fell into the well. Women standing nearby on noticing this, raised a hue and cry, and bawled for help. Sri Govindan, Police constable No. 596 one of the tenant of the premises was just going out to Central Railway Police Station in uniform. On hearing the noise while passing the main entrance he returned to the house and without removing the uniform, for any delay in rescuing the boy would mean fatal, dived into the well and saved the drowning boy who had by that time taken in mouthful of water. The Railway Police constable has not been deterred attending his duty either by this unexpected incident. He then immediately left for the police station to resume his duty in the train leaving Madras Central Railway Station at 6.15 p.m.

A large crowd was witnessing the swirling water rushing under the bridge across the river Cauvery on 22nd July 1964, near Srirangam. An aged woman of about 60 years age named Pavayasee Ammal who came to the Srirangam temple from Coimbatore with her relatives was also there. She suddenly slipped and fell into the river and was being carried away by the swift current. The entire crowd was simply looking at the drowning woman but none had come forward to rescue her. Police constable No. 1446, Khader Khan returning to headquarters from duty at Uthamarkoil without loss of time dived into the river, swam for about 100 yards lifted the struggling woman and brought her swiftly to the foot of the bridge. The police party over the bridge helped the police constable with rope and rescued the victim. After giving first-aid she was handed over to her relatives.

On the 10th February 1965, about 500 persons took out a procession at Komarapalayam in defiance of an order prohibiting them from doing so. The procession was joined by a large crowd and proceeded towards



Sri Khader Khan

the Cauvery bridge damaging the local Post office on the way. A small Police party which included Head constable George, followed the procession. At the Cauvery bridge there was already a huge crowd which a lathi charge had been made in an attempt to disperse it. The small police party was mobbed in sides and scattered. A group of agitators dragged a constable to a nearby firewood depot, with a view of burning him alive. Head constable George rushed to the depot and, at great personal risk, rescued the constable. In the afternoon a section of the police twice attacked the Police station and attempted to set fire to it. They smashed cycles and threw fire-balls and sticks of dynamite. Head constable George rallied the depleted Police force and held the station until reinforcements arrived. Sri Munuswamy Pillai George showed leadership, courage and devotion to duty in an extremely dangerous situation. The President of India is pleased to award the Police Medal to Sri Munuswami Pillai George for gallantry under rule 4 (i) of the rules governing the award of the Police Medal and consequently carries with it the special allowance admissible under rule 5, with effect from the 10th February 1965.

The brave acts of these policemen go to prove that they are always at the service of the public. They have enhanced the status and prestige of the Police Department in the eyes of the people by proving that the police is there not only to maintain law and order alone. It is also there ready to serve the people in whatever capacity possible for it. It need not be said that but for the timely and heroic acts of these policemen, even at the cost of their own lives, many lives would have found a watery grave. It is therefore to be wondered that these men have been honoured by the British Humanitarian League of Bombay for the award of the Medal of Humanity Medal.

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His Holiness, Sri Sankaracharya of
Sringeri Sarada Peetham, presented to
the Chief Minister 49 gold coins and
Rs. 5,000 at Madras.

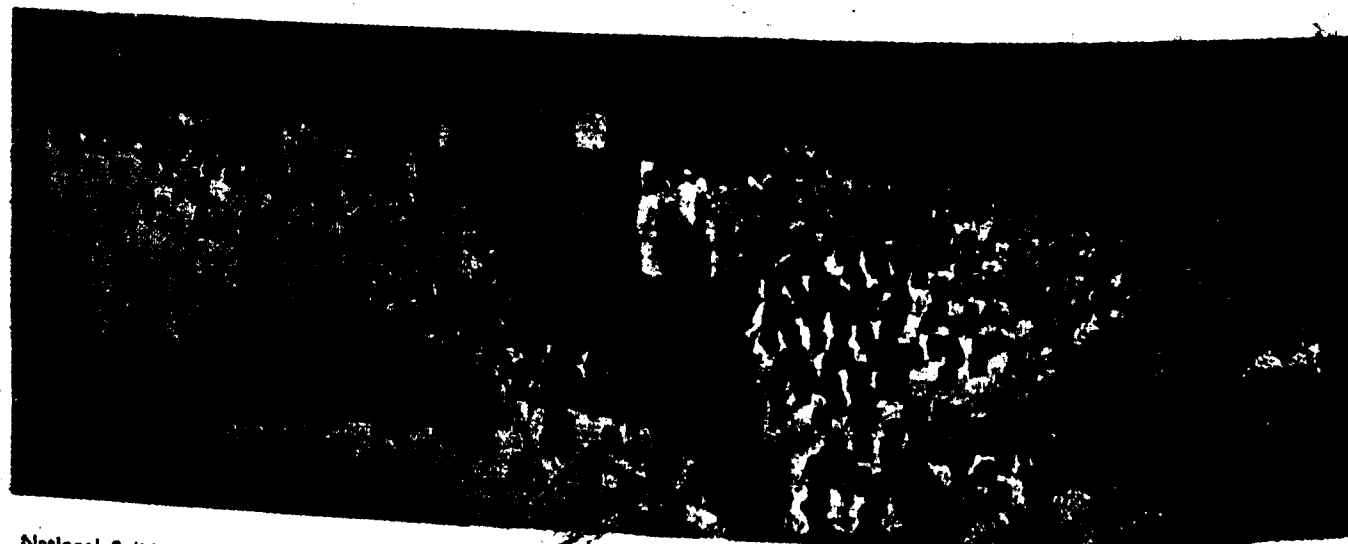
Rajasthan Jain Mandal, Madras,
presented a cheque for Rs. 50,676
towards the National Defence Fund to
the Chief Minister.

SHASTRI'S PRAISE FOR MADRAS

Mr. Shastri in his speech in the Rajya Sabha paid tribute to Madras for its response to the Gold Bond Scheme:

"When I was in Madras, I was struck by the response, especially from the women. They had collected in thousands—10,000 to 15,000 people or perhaps even more in a place and the way they came forward taking out their gold ornaments and gave it to me was a moving sight. I got about 97,000 grams of gold in Madras. So this shows that it is not as though people are not prepared to come forward to make sacrifices but it is the approach that is important. It is for political organizations, official organizations, non-political organizations to go to them and try to collect as much as they could."

192360
Sri R. Venkataraman, Industries
Minister, who inaugurated the Savings
Fortnight Campaign at the Tondiarpet
Bus Depot, is distributing Defence
Savings Certificate to one of the
employees of the State Transport
Department.



National Solidarity Day was observed by the Secretariat Staff at the parade grounds on 20th October 1965. The Chief Minister read the pledge.

that the entire security of the State is maintained, for, it is only when internal security is safeguarded that the Defence Forces can really do their job of defending the country. One other way by which we can help is by collecting money to the National Defence Fund. That is what we have done. The Madras State Police have collected a sum of 1,25,000 rupees towards the National Defence Fund. I have great pleasure in presenting the cheque for 1,25,000 rupees on behalf of the Madras State Police to our Chief Minister.

One of our Armed Police Battalion, namely, the First Battalion of the Special Armed Police, Avadi, was deputed to Jullunder in the first week of last month at the height of the recent conflict. One platoon of this Battalion was detained for guarding the Air Force Signal Station at Ferozpur. Constable 411 of the First Battalion was one of the members of this guard. While he was defending this Air

Force Signal Station, he was subjected to shelling by the Pakistani forces. But, he stood to his post and in the course of duty was hit by a bullet and he died on the spot. So he has given his life in defence of his motherland and rejoined the list of heroes who have given their lives for the safety of the country. We have decided, as a token of appreciation—a very small token of course—to give a sum of money to the widow of constable 411, Subramaniam.

We have given a sum of Rs. 1,000 from the Madras Police Benevolent Fund. Another 500 rupees has been raised by the men of his own Battalion on a voluntary basis and the members of the Chingleput district. Police have raised another sum of Rs. 100 to be given to his widow. So, a total of Rs. 1,600 will be given to this widow and I request the Chief Minister to kindly hand-over these cheque to his widow.

PERCENTAGE OF VILLAGES ELECTRIFIED IN EACH STATE

Name of the State	Percentage of towns, villages and hamlets electrified	Name of the State	Percentage of towns, villages and hamlets electrified
	PER CENT.		PER CENT.
1 Andhra	16.20	10 Mysore	13.20
2 Assam	0.88	11 Orissa	0.66
3 Bihar	8.25	12 Rajasthan	1.34
4 Maharashtra	9.10	13 Punjab	35.40
5 Gujarat	8.55	14 Uttar Pradesh	8.45
6 Jammu and Kashmir	7.60	15 West Bengal	1.19
7 Kerala	47.20	16 Union Territories	13.50
8 Madhya Pradesh	1.59		
9 MADRAS	63.70		
		INDIA	9.50

The total number of towns, villages and hamlets electrified in Madras State as on 1st August 1965 was 19,886 and the total number of pump-sets given power connection was 233,713.

Madras Police Wins Kendall Humanity MEDAL

It happened on the evening of 20th July 1963 when Police constable No. 2406, Kumaraswamy was on bandobust duty in the Sorimuthayan temple near Lower Dam in Vikramasingapuram. To reach this temple devotees had to cross the Tambaraparani river. As it was a festival occasion four devotees were watching the festival sitting on a rock in the middle of the river. Suddenly the water level of the river rose and the four pilgrims were caught in the rising flood. In spite of the announcement about the rising flood over the mike by the temple authorities the four persons were unable to reach shore in time.

Sri Kumaraswamy who was on duty there on hearing the news rushed to the spot, tied a rope round his waist leaving the other end of the rope with the people on the shore, jumped into river and saved all the four persons one by one working till 9 p.m.

On the morning of 9th September 1965, Police constable No. 1394, Vellayaraj attached to the Swamimalai outpost while on patrol duty on the river bridge leading to the Swamimalai temple heard cries from the bathing ghat of the river Cauvery and rushed to the spot. He saw two ladies being carried away by the current. While one of the two ladies—older than the other—managed to come near the shore. The other lady was fast drifting away towards the midstream and deep waters. People standing on the bank saved the lady who managed to come near the bank but none of them dared to save the

other woman. Sri Vellayaraj unhesitatingly removed his head gear and plunged into the river and with great deal of struggle against the strong current brought her to the shore. Immediately first-aid was rendered and the lady regained her consciousness. The constable was lustily cheered by the public and his bravery was reported by woman's husband to the department.

Police constable No. 786 Ratnaswamy was sent to Nanguneri with a party of men in connection with a rioting case. On the evening of 11th November 1963, while he was returning to his camp after answering calls of nature noticed a man drowning in the deep waters of Marugalkurichi tank. He saw the drowning man waving his hands for help. Instantly Ratnaswamy jumped into the tank and rescued the drowning man by dragging him to bank while he himself was swimming.

The rescued person was subsequently identified as one Sri Shanmugasundaram, Construction Foreman in Government Electricity Department of Nanguneri Division.

Sri Chandrasekaran, a boy, aged about 10 years, living in No 16, Saravanaperumal Mudali street, Purasawakam, Madras, was drawing water from the well on the evening of 10th January 1964. The rope got stuck up in the pulley. In an attempt to re-place the rope on the pulley the boy got up on the parapet wall around the well but



Sri Kumaraswamy



Sri Vellayaraj



Sri Ratnaswamy

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