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CONTENTS

EDITORIAL—SOME HIGHLIGHTS

I General Economic Scene

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ther and Prices :

.ie weather and climate in November s from the short run point of view ous in the State and the South rally. There were continuous and vy rains all through the month as a sult of which all reservoirs, tanks, wells d ponds were overfull and surplussing. all of them water had to be let out to eep the reservoirs and tanks from being reached and destroying the neighbouring ands and villages. Mettur by November 9 recorded 36.52 metres against its apacity of 36.62 metres, Vaigai 20.43 metres against its capacity of 21.65 metres, Krishnagiri 15.78 metres against its capacity of 15.86 metres, Sathanur 35.66 metres against its capacity of 36.27 metres. Chembarambakkam lake near Madras was surplussing. On top of this non-stop and heavy North East monsoon, the State was hit by a cyclone on November 12, passing through and destroying Nagapattinam and causing havoc in Thanjavur district and surrounding districts, disrupting railway and telephone and telegraph communications. At the end of the month the damage was still only tentatively computed as 3.5 lakh houses destroyed or damaged, 5 lakh acres of kharif crop lost, 481 persons killed and 30,000 cattle wiped out. Coaxial cables between Tiruchi–Madurai and Tiruchi–Madras were washed away and those on the Tiruchi–Karur and Tiruchi – Dindigul sections damaged. Flood waters as a result of breaches in Uyyakondan, Korayar, Kodamurutti and in the Kodaganar dam led to flash floods in the Cauvery and Coleroon and flooded Tiruchi town with 10 to 12 feet of water on November 12, 13 and 14. The colleges suffered irreparable damage to their libraries, laboratories and structures. The Chief Minister computes, again tentatively, that the amount needed to rehabiliate the uprooted families and repairs to damaged roads at between Rs. 150 crores to Rs. 200 crores. The State government has allocated Rs. 15 crores for relief and the Union government Rs. 5 crores pending an assessment of the losses suffered by the State. The Chief Minister has also ordered an enquiry into the design and execution of the Kodaganar dam and the breaches and damage to Tiruchy and the other villages caused by it. Similarly the breaches in the tank bunds and the river banks of the Coleroon are being attended to on a war footing. On November 19 and 20 an even more severe cyclone lashed Andhra Pradesh and caused even greater destruction and havoc in the districts of Prakasam, Guntur, Krishna, West Godavari and East Godavari, wiping out certain areas like Divi and Repalle and again on a tentative estimate involving the loss of lives of over 10,000 persons and serious damage to the standing crops, cattle and houses. Kerala and the Mangalore coast also suffered at the same time from a cyclone which blew in from the Arabian sea and caused great damage to fishermen, their houses and boats. Thus for all 4 Southern States November was a disastrous month—the worst hit being Andhra Pradesh and Tamil Nadu. To support the relief work which is under way the people in Tamil Nadu and the other Southern States are contributing to the Chief Minister's Relief fund, the other States in India are also making contributions and the United Nations, U.S., and other countries have come forward to help. A package of wide ranging reliefs and concessions at a cost of Rs. 100 crores was announced by the State government to people affected by the cyclone and floods. Where crops have been damaged, short term co-operative loans are converted into medium term loans and on medium loans, RBI has been requested for relief. For *thaladi*, seeds are being supplied free, fertilisers at 25 per cent subsidy, 25 per cent subsidy for urea application for salvaging submerged samba crops, government reclaiming sand cast land or a 50 per cent subsidy to farmers to do it, supply of free coconut seedlings, subsidy of Rs. 100 per acre for retrieving affected sugarcane and banana crops, exemption from land revenue, other land taxes, water cess, cash crop levy, local cesses and postponement of recovery of Takkavi loans, co-operative credit for those who have lost their cattle to buy animals, half loan and half grant to fisherman to buy catamarans, increase of ex gra[illegible] ayment from Rs. 100 to Rs. 200 and [illegible]uest to Union government to grant an [illegible]ditional loan of Rs. 300 to those who [illegible] their houses and bringing bricks, [illegible]tches, bamboo and casuarina poles u[illegible]r the Essential Commodities Act to k[illegible] their prices down and a request to th[illegible] Union government to increase the cemen[illegible]uota. On the prices front, in early No[illegible]ber the price of rice and paddy d[illegible]ned, selling at between Rs. 1.70-Rs. 1.[illegible] per kg. and newly harvested LR-2[illegible] was being quoted in Thanjavur at R45-Rs 51 per bag. On November [illegible] the State government issued orders und[illegible] the Pulses and Edible Oils (Storage [illegible] Control) Order 1977, directing [illegible] producers of pulses and edible oi[illegible] submit a fortnightly return of their st[illegible] in excess of 500 quintals of pulses a[illegible] 200 quintals of edible oils. As a res[illegible] of the cyclone and disruption of co[illegible]munication, prices of rice and vegeta[illegible] began rising, the former selling at betwee[illegible] Rs. 4.-Rs. 5 per kg. Hence the Stat[illegible] government obtained from the Centra[illegible] Pool 50,000 tonnes of rice for distribution in the cyclone affected areas. In this connection FCI authorised a team of senior officials to assess the damage to the foodgrains stored in the State. After visiting Tiruchi, Thanjavur, Mannargudi, Nagapattinam and Sembanarkoil, the team's finding was that above 3,000 tonnes of wheat had been badly affected. It reports that in the 4 Southern States, FCI had 1.5 million tonnes of wheat, 1.2 million tonnes of rice, 1 lakh tonnes of paddy and 3.5 lakh tonnes of fertilisers and the damage to these stocks, it reports was minimal. CSO's monthly statistics reports that consumer prices in the State for June remained stable at 300 with a 2 point fall in food prices and a 12 point rise in clothing. Rural prices shows 1 point fall for June but a rise by 1 point to

303 in July. The inter-city prices remained the same, with Madras at 304, followed hy Tiruchi at 299 and Madurai at 286.

Power :

In November the power supply in State was affected by the continuous rains, floods and cyclone referred to earlier. The 11 KV distribution networks in Thanjavur, Tiruchi and South Arcot districts were seriously affected and the 66 KV transmission tower on the Thiruvarur route collapsed, interrupting power supply to the grid substations in these districts. Men and material had to be rushed from Ramanathapuram, Madurai, Karur and Mettur power systems to the affected areas in Thanjavur, Nagapattinam, Pudukottai, Orathanad, Tiruvarur, Thiruthuraipundi, Tiruchi, Srirangam, Karur, Manapparai, Vedasandur, Kodaikanal, Chidambaram, Cuddalore and Sethiathope. The overall power supply position in the State was however satisfactory. Dueto extensive rain, there was a fall in demand on the State grid. The energy storage in all hydel reservoirs was 1,400 MU plus 240 MW being generated at Mettur. Following the flooding of the lignite mines at Neyveli, the thermal station generated only 100 MW during the earlier part of November which was stepped up later to 200 MW. Kerala maintained its daily supply of 4 million units and Tamil Nadu had increased its quantum of power to Karnataka. Ennore and Basin Bridge were generating fully, with one unit at Ennore being taken down for overhaul and modification. Kerala expects to have a surplus of 1,000 MU by the end of June and this will be made available to Tamil Nadu and Karnataka. So far Kerala had supplied the 2 States 400 million units and by July 1978 will provide 1,400 MU, which is more than double last year's supply of 600 million units. The reservoirs in Kerala – in Idikki and Sabarigiri—are full as are all this State's hydel reservoirs. This year's power prospects are thus good and there should be no cut during the year. The State Electricity Board is being reorganized so that it would cease to be a sick unit and would meet consumers' needs effectively.

For the country as a whole, power supply and generation improved in November. The third unit of the Lower Sileru Project in Andhra Pradesh was commissioned during the month and the fourth unit is expected to be commissioned in March 1978. Also the first units of Kothagudam and of Nagarjunasagar are expected to be commissioned shortly along with the first unit of Vijayawada's thermal plant. By the end of 1978 Andhra Pradesh will have 1, 700 MW and by 1979 3,000 MW of power. Punjab is raising its power generation at Bhatinda thermal plant to full capacity of 440 MW by 1978, doubling its generation, to be followed by the Thien dam project and Rupnagar power plant so that there will be no power cut in the Punjab from 1978. Haryana also has established a 7 year plan for establishing a network of 8 more thermal units at Yamunagar and Faridabad so that over 2,000 MW will be generated and the State will be self-sufficient in power supply. On the other hand, due to the power cut by the Damodar Valley Corporation, the Durgapur steel plant reported that in October it lost about 3,000 tonnes of saleable steel and 7,000 tonnes of zinter production. Also, due to the 50 per cent power cut in Karnataka, textile mills in September reduced their production by 7 per cent. Against this background, the third conference of ministers of irrigation, meeting in

November has urged to harness the nation's hydel resources without allowing inter-State disputes over the sharing of river waters to come in the way. Given the fact that hydro-electric schemes have a *long gestation period*, it was agreed that advance action in the preconstruction stage is necessary. Its payoff is high because hydro-eletricity is the cheapest form of energy. It was also announced that following CWPL's survey of the hydel potential of the country in the fifties, CEA was currently organising a reassessment of the hydel potential, involving the collection of detailed information on hydrology and plans for irrigation and flood control development of river basins.

Cauvery Dispute :

In response to the Prime Minister's appeal to the Chief Minister of Karnataka to postpone the Varuna canal construc-*tion, the latter has reiterated the State's* right to proceed with the project. The Rs.18 crore project is aimed at irrigating 80,000 acres in the drought affected taluks of Mysore district. The Karnataka Chief Minister holds that the Varuna canal will use the additional waters from the Cauvery to which the State is entitled. This, as has been pointed out in Vol VII p 685 will mean considerable reduction in the water available to the Thanjavur farmers.

Urban Development :

The Madras Corporation is constructing an additional headworks in Robinson Park to improve water supply in North Madras and expand the distribution system in Kodambakkam and West Mambalam at a total cost of Rs.110 lakhs in 1977-78. The Master Plan for the city's water supply aimed at receiving additional water supply from Krishna and Veeranam so that the water supply can be increased from the 15 gallons to 30 gallons per head is nearing completion. The improvement works completed include the Rs. 20 lakhs underground tank at Kilpauk water works, the Rs. 80 lakhs trunk main along Kodambakkam road, Triplicane, Perambur, Arumbakkam and Saidapet and the Rs. 50 lakhs on renewal of old and choked up mains. From the 1.1 lakh water connections, the free allocation has been restored to 30,000 litres (from the reduced 15,000 litres in 1974-75) as well as the giving of 3,000 new water supply connections annually in George Town, Chintadripet, Triplicane, Washermanpet and Park Town. The repair to the city roads as a result of the rains will cost Rs. 6.70 crores of which Rs.75 lakhs is being immediately spent to meet urgent needs. The State govern-ment has decided to set up a modern abattoir at Koduvelli at a cost of Rs. 3 crores, towards which the Union government will contribute Rs.50 lakhs and the State government and the Madras Corporation Rs. 25 lakhs each. and the balance being from the financial institutions. It will enable recovery and use of blood, bones, skin and other products and will provide employment for 1,500 people. The Madras telephone system which covers 1,02,871 subscribers is being restructured to meet the causes for dissatisfaction and the causes for this investigated. A random survey of 1,880 subscribers has been completed and on the basis of their views the improvements are,being effected.

Transport :

From November 4 the Madras Port Trust has increased the wharfage and other charges by 10 to 30 per cent to cover the increased cost of the services it provides—cranes and fork lift trucks, night and holiday service, warehousing etc. A seminar on 'Road Accidents' in Madras at the end of November identified the increase in population and in the number of fast moving vehicles as the cause for the increased number of accidents. Cautious driving, remodelling the Motor Vehicles Act to tighten the requirements for obtaining a license, and the need to establish an expert committee to make an indepth study of the causes of road accidents along with (also establishing) an accidents bureau emerged from it.

Housing :

The problem faced by the building industry because it is not recognised by the government as an industry and so is not able to get bank credit, having to borrow from private moneylenders at high interest rates, the inflation crisis and the constriction imposd by the Urban Land Ceiling Act are being debated at the Eigth All India Builders' Convention to be held in Madras for 3 days from December 16. The need for governmental assistance to the frozen building industry is sure to be highlighted. The Urban Land Ceiling Act should be suspended. The exhibition at the convention should also highlight cheap and durable model rural houses.

Welfare :

This State's loss of excise revenue as a result of prohibition is around Rs.50-60 crores per annum. The Union ministry of social welfare computes that total loss of revenue in the Sixth Plan when all States adopt prohibition would be Rs. 3,700 crores. State governments have been requested to draw up a 4 year programme for the introduction of prohibition.

National :

Sixth Plan :

In November, the ruling party at the Union level issued its economic policy statement concretising its objectives of giving primacy to agriculture, a shift away from large scale industries for consumer items, stress on production of goods for mass use and job-orientation to planning and development. Based on Gandhian Socialism involving economic and political decentralisation, the economy is to be developed on a 7 per cent annual growth rate, the share of public sector resources in agriculture is to be increased from 30 to 40 per cent, ensuring higher production per unit of land, maximum employment per unit of land or industrial capital, and ensuring equitable distribution of the national product, and private property being used on the concept of trusteeship. In planning there is to be close relation of targets to performance, fair price to farm products will be ensured, land ceiling laws will be strictly enforced. What can be produced by the cottage industry will not be produced by the small and large scale industries and what can be produced by the small scale industry will not be produced by the large scale industry. This separation will be statutorily defined. Till the goal of full employment is reached, no new capital intensive enterprise will be authorised, as for instance in textiles where the weaving capacity of the mills will not be expanded and similarly in the case of footwear and soap. The public sector will continue its dominant position but it will serve not the private sector but agriculture and cottage and small industries. In view of the pressing needs of investible resources for agricultural and rural development, both the public sector and the organised private sector units must generate their own resources for growth and expansion. A selective and flexible approach to foreign collaboration is to be followed, the provisions of FERA vigorously enforced and the outright purchase of technical knowhow, skills and machinery are to be permitted. Housing construction is to be reviewed and in international trade the principle of comparative advantage is to be followed. With regard to price policy a firm control over money supply, incentive price for increasing basic goods production, import of commodities in short supply, an efficient public distribution system and on tax policy, a heavy burden to meet the increased investment expenditures, the promotion of redistributive justice, the principle of simplicity in cost and administration and an inbuilt growth potential are to be followed. The policy statement is still at a general statement level and the extent to which it becomes government policy and the policy instruments to make it effective need to be watched. For the Sixth Plan, a massive small industry programme giving preferences to "tiny units" was being developed in November in the Ministry of Industry with a gross output target of Rs. 27,000 crores in the last year of the Sixth Plan, which would generate 3 million jobs during the Plan period, involving a fixed investment of Rs. 2,200 crores and a working capital of Rs. 5,300 crores in the last year. A new administrative structure with a competent chairman to administer the small and village industries development programme is to be set up alongside of simplifying the licensing and regulatory measures. The banks are to provide the entire institutional finance and the present 15 per cent without subsidy is to be modified as an investment cum employment subsidy for the "tiny units" in towns and villages with a population below 5,000. The National Small Industries Corporation is to help in marketing the products of the "tiny sector" and a possible 5 year tax holiday for them is under consideration. The government issued at the end of October guidelines for tax relief to companies and co-operatives undertaking approved rural development programmes. These include rural industries for self-employment by the units running dispensaries, maternity and child welfare centres, educational and vocational training centres, constructing and maintenance of rural roads, drinking water projects, housing, rural electrification, minor irrigation schemes, improved varieties of seeds, supply of fertilisers and insecticides, plant protection equipment, animal husbandry, assistance to SFDAs, MFALs and workshops and farm machinery repair services. With regard to the rolling plan concept, the Chairman and Deputy Chairman of the Planning Commission have emphasised that it would make planning more realistic and flexible as projections would be made from a base level which would be adjusted annually to allow for continuous correction of errors and providing a constant time horizon for investment decisions. The State governments are being consulted on the concept. An up to date information system and a quick and forward looking evaluation organisation is being built into the rolling plan. Monitoring and evaluation have a key role and for this an expert organisation has to be set up at the State and Union levels. Also the Deputy Chairman points out that in the rolling plan, targets in the crucial sectors of the economy will be readily available and will stimulate investment by the private sector. In the Sixth Plan, a new element is the decentralised micro level block planning involving voluntary agencies and providing a means of organising the 80 per cent unorganised farm and rural labour sector. The Civil Supplies and Co-operation Ministry in its first Sixth Plan draft has doubled the turnover of urban and rural consumer co-operatives from Rs. 650 crores to Rs. 1,250 crores involving the setting up of 2,000 additional large and small branches and 200 small stores to fill the distribution gap in town and villages. Meanwhile the Planning Commission has set up in the ministries 83 groups which are working on their share and sector of the Sixth Plan. Their reports will be ready by December.

Prices and Anti-Inflation :

The index number of wholesale prices continued to decline in October, standing at 184.1 per cent, which was a fall of 2 per cent over the month. Primary articles declined by 2.8 per cent, all items showing a decline, oil seeds by 11.4 per cent, fibres by 4.7 per cent, pulses by 3.9 per cent and cereals by 1.3 per cent during the month. Manufactures which registered a month's decline of 1.4 per cent, showed the largest fall in edible oils (7.6 per cent), followed by sugar (3.8 per cent) and tobacco manufactures (0.2 per cent). It is too early to say whether this represents a secular price decline and whether it is due to control over money and credit, or demand recession or increased farm production or a mixture of all 3 factors. The Economic Times' retail index for Greater Bombay supports this declining price trend. For October the fall in retail prices was 1.8 per cent. Food item prices declined by 3.6 per cent, with oils falling by 13 per cent, vegetables by 12.4 per cent, condiments and spices by 8 per cent and cereals by 1.6 per cent. Pulses, however, rose by 1 per cent, meat, fish and eggs by 3.9 per cent and clothing by 2.3 per cent. The month saw a continuation of anti-inflation credit measures. RBI in mid November notified banks that it will scrutinise the sources and uses of borrowal accounts of Rs. 10 lakhs and over, in order to ensure that the borrowers are adhering to their production targets and are within the inventory limits and receivable norms. To this should be added the steps taken by RBI to contain credit expansion to the commercial sector during the year. During October–December 1976 credit expansion was Rs. 1,129 crores (more than double of Rs. 535 crores in October–December 1975), as a result of which the cash reserves ratio was raised to 6 per cent and food refinance formula tightened from Rs. 800 crores to Rs. 1,000 crores above which refinance was reduced from two thirds to 50 per cent. There was also the impounding of 10 per cent of the incremental demand and time liabilities from January 14 to April 1977 and the stopping up of margins and scrutiny of all borrowed accounts above Rs. 2 crores. The Finance ministry in early November set a ceiling of 10 per cent on the expansion of money supply for the current year (in the first seven months of the year the expansion was 5.8 per cent but from October it is picking up). As just noted, at the end of October, the banks were notified that any credit granted that would take a borrower credit from the banking system to beyond Rs. 2 crores would require the prior authorisation of the RBI. The government has also under study a proposal to import gold as an anti-inflationary and anti-smuggling measure. In fact conversations are under way between smugglers who made disclosures under VDS (see Vol V p 654 and Vol VI p 6), and the government to extend in a modified from the scheme so as to bring out the wealth and black money of smugglers. Further towards the end of November, the government brought oil seeds and millers within the purview of the Pulses and Edible Oils (storage Control) Order. It has raised the ceiling limit on the quantity of pulses retailers can stock and this will dehoard quantities held by dealers to bring down prices. It also brings the miller under discipline, limiting his stock of oil seeds and oil. On the other hand, the government also took a few decisions which will have an inflationary effect. On November 16, it announced as from 1 September an additional dearness allowance, which will cost the government Rs. 50 crores in a full year and Rs. 25 crores this year. There is also some work being done towards some reduction in the bank lending rate which is correction of the current penal rates and should not have an inflationary impact. The States' financial provision shows that their additional resource mobilisation will fall by Rs. 152 crores against the target of Rs. 278.96 crores established when their 1977–78 plans were finalised. This will have an inflationary impact. Also it is estimated that Union subsidies will amount to Rs. 1,300 crores which is Rs. 225 crores above the budget provision. It also represents a threefold increase in subsidies over the past 3 years. Also in November, the government announced a new higher price for domestic viscose filament yarn for its supply from spinners to actual users, which will raise the price of cloth. The prices of car tyres have been raised by the producers by 6–16 per piece which is both an inflationary and possibly a demand recessionary development. RBI has relaxed its stringent credit policy in the case of the Eastern States—Assam, West Bengal, Bihar, Orissa, Tripura and Manipur where both through the regional credit offices in Calcutta, Bhubaneswar and Gauhati and Co-operatives, it is increasing agricultural credit in these areas. The government reports that the Neelakantha Rath Committee on consumer prices (see Vol VII p 438) has recommended the setting up of Central and State advisory committees to periodically review the compilation of consumer price indices to rectify anomalies. It is expected that its final report will be submitted to the government in December.

Economy and Public Sector :

The macro-indicators of the health of the economy impressed the IMF team which visited the country in November. Their summary conclusion was with comfortable foreign exchange reserves, foodgrains buffer stocks and stable domestic prices, the economy can make a major breakthrough in growth and development. The government forecasts that this year's industrial growth rate would be 7 per cent over last year's 10 per cent. The problem areas are power shortage and inadequate infrastructural facilities which are holding back further industrial growth and the revival of the investment climate. The government constituted in late October a study group headed by the Additional Secretary in the Department of Industrial Development in the Union Industry Ministry to identify the bottlenecks and simplify the regulations and procedures relating to the development of industries. The group will report in February on its findings. On the public sector front, the capacity of MAMC is being underutilised and will remain so until its production programme is diversified. Being the country's biggest manufacturer of port equipment which it has executed for Murmagao, Goa, Madras and Haldia, the shortage of orders it is facing is leading to the closing of a number of small units which rely on its orders. This is an instance of the linkage between heavy industry and small industry and employment. Already 1,000 workers have been retrenched by small industries in Durgapur as a result of MAMC's order book being empty. HEC, Ranchi, on the other hand, is diversifying its production profile. As a producer of steel plant equipment and as steel capacity is not being increased fast, it is diversifying to include a sponge iron plant, a pelletisation plant, a heavy duty cement plant producing 2,000 or more tonnes per day and a low temperature carbonisation plant. BHEL reports a 40 per cent increase in its October production at Rs. 40.24 crores, with the Tiruchi unit producing 46 per cent more than in October 1976, and Hyderabad 84 per cent more. The Bhopal and Hardwar units maintained their production above Rs. 8 crores each for the month.

National Production Front:

Steel:

There has been some deterioration in the performance of the integrated steel plants this year. During the 6 months, April to September, the total production of saleable steel of all six plants was only a little higher than that for the same period last year (3,367,000 tonnes compared to last year's 3,31,900 tonnes). Saleable steel production dropped from last year's 982,000 tonnes to 953,000 tonnes at Bhilai, from 557,900 tonnes to 550,000 tonnes in Rourkela and from 254,900 tonnes to 237,000 tonnes in IISCO. At Durgapur it went up from 442,800 tonnes to 629,000 tonnes, TISCO from 729,900 to 769,000 tonnes and Bokaro from 343,000 tonnes to 439,000 tonnes. Capacity use declined for Bhilai which was 102.2 per cent last year and is now 96.9 per cent. At Durgapur it has fallen from 71 per cent to 67.6 per cent, Rourkela from 91 per cent to 89.9 per cent and IISCO from 64 per cent to 59.5 per cent. Even TISCO's 102.5 per cent in April-September 1977 is lower than 103.3 per cent last year. This slowdown is due to a variety of causes, shortage of coking coal, interruptions in power supply, industrial unrest, but above all the uncertainty introduced about the restructuring of the public sector set up in the steel industry. As a result, the executive have lost their initiative and interest. On 18th of November, the government announced that all public sector steel plants will be brought under a single holding Company. In this new set up, Hindustan Steel, Bokaro Steel, Salem steel, SAIL International, Bhilai, Rourkela and Durgapur which were wholly owned subsidiaries of SAIL are now merged with SAIL and function as its divisions. This is the fifth time that the steel plants under the public sector have been subjected to restructuring, and this is not healthy for the industry and the economy. Rourkela announced in November that it is setting up a Rs. 100 crore plant to manufacture cold rolled grain oriented electrical sheets with technical collaboration from Aramco of the US. Rourkela has called for modernising its steel making—the blending of raw materials, sinter production, desulphurisation of hot metals and the oxygen lancing in all 4 OH furnaces—so that it can produce 2.5 million tonnes of ingot steel and convert it to saleable steel. MECON is to design and supply complete cold rolling mills to Bokaro. The three mills to be designed will be of the latest design incoporating hydraulic automatic gauge control systems and other such features. MECON is also modernising the hot strip mill of Rourkela. To return to the poor performance of the plants, the loss in Durgapur for this year will increase to Rs. 10 crores from last year's Rs. 7.74

crores mainly due to the erratic power supply from DVC, as noted earlier. There is need now to consolidate the production gains of the plants, provide them with needed infrastructure of power and coke, and stop restructuring them constantly.

Crude :

During the current year, the total output of crude will be 10.8 million tonnes and it will probably increase to 19.6 million tonnes by 1981–82, with the offshore oilfields in the Western coast yielding 10 million tonnes. As against this Year's output of 10.8 million tonnes from both offshore and onshore installations, next year's output is expected to increase to 13 million tonnes. Bombay High will double its output from 2 million tonnes to 4 million tonnes. Hence next year crude imports are to be reduced by 1 million tonnes to 13.5 million tonnes saving Rs. 80 crores in foreign exchange. 5.5 million tonnes delivery agreements have been signed up with Iraq, Abu Dhabi and the Soviet Union. Iran will supply 2.5 million tonnes to the Madras Refineries, and further contracts will have to negotiated with Saudi Arabia and Iran to make up the balance of 5.5 million tonnes. ONGC is intensifying its geological surveys to locate prospective oil bearing structures. Drilling and testing operations are being conducted at 24 onshore locations in Arunachal Pradesh, Assam, Gujarat, Himachal Pradesh, Tripura and West Bengal. Drilling is to be started at Narsapur in Andhra Pradesh, Bilvjit in Uttar Pradesh and in Goyalia in Tripura. A number of field parties are carrying out geological, seismic, gravity and magnetic surveys in the above areas plus Andaman and Nicobar islands, Maharashtra, Pondicherry, Rajasthan and Tamil Nadu. Exploration work at onshore sites is being done by geoscientists, drillers, engineers and other technicians of ONGC. For offshore structures, ONGC's seismic survey ship' Anweshak, is in use, along with the 4 submersible platforms—Sagar Samrat, Haakon Magnus shenandoah and Gettysburg—for offshore drilling and testing operations. The two foreign firms which explored the Bay of Bengal and the Gulf of Cambay have withdrawn and their data is being processed by ONGC. The Asamera group and ONGC are at work in the Cauvery basin and the Gulf of Mannar. Union carbide has submitted a proposal to the government for using Bombay High gas for the manufacture of 20,000 tonnes of high density polythelene in addition to switching over to gas its current production of 20,000 tonnes of low density polythelene. OPEC has offered a loan of $ 14 million for the development of Bombay High, which is in addition to the $ 50 million Euro-dollar loan. Within the next 3 months, the Union government must make major investment decisions on Bombay High gas. There will be a million cubic metres per day of gas and it should be used as fertiliser feed stock. The first, second and fifth units of the fertiliser corporation at Trombay will use gas as feed stock. The rest of the gas will have to be used in a petro-chemical complex but the new government's low priority to large industry make this a doubtful starter. Some gas will still be left for use in such uneconomic areas as power generation and production of LPG. This brings in the controvesy between Maharashtra and Gujarat which should be settled quickly so that major investment decisions are not held up. The Haldia refinery reports that Union government's pricing policy and delay in settling its claims led to a national loss of Rs. 5.6 crores last year and again

Rs. 4 crores this year, when for each year the refinery has in effect made a profit of Rs. 10 crores. The fuel section of the refinery will in 1978-79 produce 2.30 lakh tonnes of petrol, 1.20 lakh tonnes of naphtha, 3.5 lakh tonnes of HSD, 35,000 tonnes of mineral turpentine oil, 30,000 Cubic metres of LPG, 5.76 lakh tonnes of furnace oil, 1 lakh tonnes of bitumen and 90,000 tonnes of jute batching oil. Then its capacity of 2.5 million tonnes will be in full use.

Coal :

Coal production in November resumed its schedule. The fact that Coal India ends the year with a loss of Rs.80 crores is due to the price policy. The cost of producing a tonne has increased by 122 per cent since October 1971, but the sale price has incrased only by 77 per cent in that period. Coal India's cumulative investment has increased from Rs. 240 crores in 1972-73 to Rs. 875 crores today and there is a case for an immediate increase in the price. The long term plan for the re-organisation and re-construction of the industry, using the labour abundant (intermediate) technology available to the country should become the country's perspective coal plan. Coal India is making a concerted drive to increase production, improve its welfare facilities for its labour force and establish a centralised marketing system. Production in the first seven months April-October has bettered last year's performance and its new Central marketing structure will meet the needs of its 1,000 customers, some of them 2,000-3,000 miles away. One immediate demonstration was the movement of 12,000 tonnes of direct feed coal in rakes to Durgapur steel in last November. This will place Durgapur in a comfortable position, providing it with the needed reserves.

Cement, Textiles and Cotton :

The total output of cement this year is estimated at 19.5 million tonnes. Cement exports have been halted and as a result an additional 7 lakh tonnes are available in the domestic market. Cement technology is being improved and the use of slag and fly ash will increase production by 6 million tonnes. Mini cement plants are being set up in areas where small quantities of limestone are available and the capacity of such plants will be 30 to 100 tonnes. The textiles licensing policy as part of the overall textile policy is under review with a view to correcting the areas where mistakes have been made and expanding the employment generating area of the industry—which is the decentralised sector. The textiles machinery industry reports a capacity utilisation of less than 25 per cent and its fuller use will be a function of increased exports and providing machines to the decentralised sector. On the cotton front, a bumper cotton crop of 75 lakh tonnes for the year 1977-78 is expected surpassing the previous year's record of 74.62 lakh tonnes, in 1971-72. However, the country has the highest acreage under cotton and the lowest yield per acre which is 142 lbs compared to the world average of 368 lbs, USSR 793 lbs, China 454 lbs, Egypt 631 lbs, Sudan 345 lbs. Pakistan 281 lbs and Israel 1,160 lbs. Against the rise in cotton prices earlier in 1977 (see Vol VII p 289), cotton prices in November have fallen by Rs. 500-Rs. 1,000 a candy from the June level, and with the bumper crop in the offing, substantial imports, acute financial stringency and below normal sale in textiles, prices may fall even further. There is need to plan now for support prices and remove the restrictions on holding cotton stocks introduced in August 1976 (see Vol VI p 446) at a time of extreme short supply. With the suspension of

Maharashtra cotton monopoly procurement scheme, there is need for CCI to undertake large scale purchase at least for NTC mills to prevent prices crashing.

Sugar and Paper :

The major event in the sugar industry in November was the decision announced on November 16 by the government to cut by 17.5 per cent the basic excise on free sale sugar and by 2.5 per cent the basic excise in levy sugar. This enables the retail price of sugar to be maintained at Rs. 2.15 per kg. in the public distribution system and at the same time ensures a fair price to producers. The decision accelerates the declining price trend which set in as a result of increased releases for Diwali. The total production of sugar during 1976–77 was 48.4 lakh tonnes, compared to the previous year's 42.64 lakh tonnes. The September offtake from factories was 3.43 lakh tonnes and the total despatches during the 1976–77 season were 37.46 lakh tonnes for internal consumption and 3.47 lakh tonnes for exports. The closing stock in September was 15.79 lakh tonnes. The reduction in the excise duty may lead the sugar mills to sell off their stocks to improve their liquidity position and this in turn may affect the khandasari units in Uttar Pradesh, Bihar and other States and contract employment. It is therefore urged by ISMA that India should ratify the Geneva Sugar Agreement quickly, under which India's sugar export quota has been fixed at 8.25 lakh tonnes annually. This would not only prevent sugar prices falling further but if the export quotas are fully fulfilled, India's claim for a higher quota two years hence, when the pact is reviewed, would receive favourable consideration. The Union government also announced that in the sugar year October–1978–September 1979, 18 new sugar factories will be set up in the Country (8 in Uttar Pradesh, 5 in Maharashtra, 2 in Karnataka and one each in Gujarat, Andhra Pradesh and Tamil Nadu). On the paper front, it is estimated that about 1.23 lakh tonnes of fresh annual capacity will be created in the paper industry this year, including 12 new units in different states with a total capacity of 89,400 tonnes plus substantial expansion in 6 existing units. This means that the total installed capacity by the year end will be 12.6 lakh tonnes per annum. Production last year was 8.8 lakh tonnes against a capacity of 11.37 lakh tonnes. If there had been no power cut, production would have been 45,000 tonnes more worth Rs. 17 crores. During the last 5 years the industry has expanded by a mere 1.2 lakh tonnes which is a 3.2 per cent growth rate. This is attributed to its capital intensive nature, long gestation period and other bottlenecks. The project cost of a 100 tonne a day plant is Rs. 40 crores, the investment turnover working out to 38:1. The new units are in Assam (27,000 tonnes), and Uttar Pradesh at Chandrauli and Agawanpur—each with an annual capacity of 10,000 tonnes, with Gujarat and Maharashtra expanding by about 30,000 tonnes per annum.

Agricultural Production :

The 1976–77 foodgrain output is estimated by the Union agriculture ministry at 111.5 million tonnes compared to the previous year's 121 million tonnes, the main decline being in kharif rice which declined by 7 million tonnes (12 per cent compared to 1975–76 production). The decline in rice output in Andhra Pradesh, Orissa, Madhya Pradesh, West Bengal and Karnataka was due to the contraction of the area of cultivation due to unfavourable weather. The Union minister stated that as a result of the lifting of the ban on inter-State movement of rice and despite the lack of any procurement target, kharif cereals procurement was 25 per cent higher than last year's. By November 17 the States and Union agencies had procured 8.058 lakh tonnes compared to the 1966 November 17 figure of 6.177 lakh tonnes. Possibly the ceiling on rice stocks which each wholesaler or trader could hold prescribed by the States led to this improved procurement. Once more Punjab topped the list with 6.36 lakh tonnes (the previous year 4.59 lakh tonnes), Haryana 1.27 lakh tonnes (the previous year 84,234 lakh tonnes). To all this should be added the paddy stocks with millers which in Uttar Pradesh were 1.86 lakh tonnes, total purchases by millers being 20 lakhs and in Haryana 7.166 lakhs. This does signify a better kharif crop this year. What the procurement record will be can be judged only much later because FCI, unlike the Union ministry, is of the view that procurement except in Punjab and Haryana will be less than last year, as Andhra Pradesh rice will find its way to deficit Kerala. But all this was before the two cyclones which destroyed lakhs of acres of kharif paddy in Andhra Pradesh and Tamil Nadu. Besides paddy, the ministry estimates good kharif groundnut and sugarcane crops following timely rains as well as cotton. The jute crop will not be large as it has been affected in parts of West Bengal and Assam. HSD shortage in mid November due to poor planning and distribution arrangements by the oil industry might affect the rabi crop and its sowing. There is no excuse for the number of outlets which have gone dry in November which is known to be month of sowing and high HSD demand. Another dark spot is the loss suffered from plant diseases which amounts to Rs. 500 crores every year. By controlling the disease caused by fungi alone, there could well be an increase of foodgrains production by 5 million tonnes. The new wheat arrivals which will gather full force by the end of December will increase the storage problem of FCI. With the poor offtake by the public distribution system, the burden of carrying the growing stock is becoming heavy. In early November the first shipment of 14,000 tonnes of wheat out of a total of 3.3 lakh tonnes to be shipped from Madras has commenced. As noted earlier, kharif groundnut this year will be better than last year's 47.77 lakh tonnes. The outlook for rabi groundnut in Tamil Nadu and the other Southern States is good due to improved extension programmes and favourable rainfall. Special efforts are under way for extending the area under non-traditional oil seeds—sunflower and soyabean—, the latter particularly in Madhya Pradesh and Uttar Pradesh. The conference of State ministers of irrigation meeting in Delhi in early November adopted an integrated plan and decided to add 1.3 million hectares to the irrigated area this year. It endorsed the Sixth Plan target of an additional irrigation potential of 17 million hectares, of which 8 million hectares would be achieved through major and medium schemes and 9 million hectares through minor schemes. Every State has to develop a shelf of well investigated projects and should provide adequate outlay for the ongoing schemes to ensure their completion according to time bound programmes. Modernisation of all pre-plan and earlier plan projects should be completed within a decade, the detailed works to be finalised at the latest by June 1978. At least Rs. 50 per hectare of gross irrigated area should be provided annually for proper and efficient investigation of flow irrigation systems. The conference also agreed that in view of the need for undertaking socio-economic surveys of irrigation and multi-purpose river valley projects to evaluate actual benefits and adverse effects, such surveys should be taken up by competent agencies for selected projects at an early date. To improve and render precise irrigation planning and execution, statistical cells in the Irrigation Department should be strengthened.

Exports :

During the first 5 months, April—August, exports continued the upward trend rise by 12.7 per cent at Rs. 2,117.72 crores compared to the 1966's 5 month total of Rs. 1,879.87 crores. Following the liberalisation of imports, imports have increased to Rs. 1,950.44 crores compared to the previous year's Rs. 1,943.27 crores. Hence the trade surplus which stood at Rs.222.68 crores in July was reduced to 167.28 crores at the end of August. In terms of growth and the use of our growing foreign exchange reserves, which on November 11 stood at Rs. 3,856.1 crores and which would be Rs. 5,000 crores by the end of the financial year, what is needed is a sizable import deficit, which will then turn our foreign exchange resource into an investment. Further an official committee headed by the Union commerce secretary has been constituted by the Union government to recommend liberalisation provisions in the import—export policies and procedures as noted in Vol VII p 697 The Prime Minister has constituted a Cabinet committee on exports with the minister of Commerce as Chairman and the ministers of Finance, Agriculture, Industry and Steel and Mines as members to keep under review all aspects of export promotion and decide on all matters concerning export production and promotion and joint ventures in other countries. The addition to the reserves have been Rs. 393.88 crores in April, Rs. 268.58 crores in May, Rs. 104.79 crores in June, Rs. 131.77 crores in July, Rs. 98.35 crores in August and Rs. 118.76 crores in September. The Finance ministry estimates that the foreign exchange reserves by the end of the Sixth Plan will amount Rs. 5,000 crores at the rate of Rs. 1,000 crores a year during the Plan period from export surplus, remittances and foreign aid. More liberal imports of machinery for priority sectors like power and industrial production needing imported spares etc. are thus being planned. Among good export performances, carpets stand high earning an estimated Rs. 80 crores this year, compared to last year's Rs. 60 crores. This also makes India the top exporter of woollen handknitted carpets, replacing Iran in this regard. Japan has placed a trial order for 2 shipments of 1 lakh tonnes each of iron-ore fines from Bailadila mines, Madhya Pradesh and Ponamalai, Karnataka. The two orders are valued at $ 3 million and will lead to long term orders for the export of these fines. In late November EEC announced that jute products will enter the 9 nation EEC duty free from January 1978, which is six months in advance of the time to be adopted 3 years ago. This was the result of the successful negotiations of the Indo-EEC joint commission over the past 6 months. Similarly a new Indo-US agreement on textiles exports in 1978 is under negotiation in Washington. As noted earlier, MMTC has scaled down the iron ore exports target for the second time at 13.5 million tonnes from the original 17.7 million tonnes and later 15.4 million tonnes, due to world recession and the cutback in Japanese steel production. It is estimated that iron ore exports this year may not exceed last year's 22 million tonnes, of which MMTC's share would be 11.7 million tonnes. Another decline in exports was the refusal of Iran to purchase 1.20 lakh tonnes of sugar that it had contracted to buy from India because it was not satisfied with the colour of the sugar exported. Also EEC has notified India that it will not lift its quota of 25,000 tonnes of sugar this year but will do so in the next financial year. The need to meet international specifications in our exports is urgent and should be met by the industries involved. India and Iraq signed an agreement in October to double imports to Iraq from India from Rs. 50 crores to Rs. 100 crores per annum. Similarly India and Hungary signed an agreement in November under which Indian handicrafts, leather goods, textiles, sports goods, woolen goods, ready made garments and agricultural tools will be exported on an expanded basis to that country.

Aid :

IDA has agreed in November to provide a credit of Rs. 96 crores ($ 107 million) for the second foodgrain storage project being implemented at an estimated cost of Rs. 190 crores. ECM has put forward plans for a 7 year food aid project to help supplement India's domestic milk output involving the supply of 186,000 tonnes of milk powder and 76,200 tonnes of butter oil between 1978 and 1983. While ECM is not likely to liberalise its GSP for the coming year, India is negotiating with the US for liberalisation of its GSP in order to increase its trade with that country, whose total imports are $ 129 billion of which India's share is a mere $ 708 million.

International :

Bangla Desh :

The Farakka agreement between India and Bangla Desh which was initiated on September 30 (see Vol VII p 636) was signed in November in Dacca by the India minister of Agriculture and the Deputy Chief Martial Law Administrator in Bangla Desh. It will be recalled that the agreement provides for the short term division of the available waters, while setting in motion efforts for finding a long term solution will be subject to review at the end of 3 years and every 6 months thereafter in light of the proposal submitted by the reactivated joint Rivers Commission of India and Bangla Desh, within the time frame, for augmenting the flow of the Ganga during the dry season. On the economic front, Bangla Desh is launching a massive plan to achieve self-sufficiency in foodgrains by 1985, involving a 50 per cent increase over the current level of 13 million tonnes. The plan provides credit facilities to small farmers and share croppers to buy seeds, fertilisers and insecticides along side of land reforms, expansion of extension services and development of inland fisheries. It avoids the floods and cyclone prone areas and concentrates the use of HYV seeds and fertilisers in risk free areas. The programme will be formulated and supervised by a Committee in which various existing Commissions will be merged. In tenancy reform a graduated multiple fixed tenure will be introduced to increase the share of the tenant farmer in production.

Pakistan :

As forecast in Vol VII p 510, Pakistan purchased in November 110 tractors at a cost of Rs. 60 lakhs from India, which has helped the tractor industry which, with a capacity of 1.5 lakh units, has faced a stagnant domestic demand of 40,000 units, due to its high price and faulty demand projections by the Agriculture ministry that by 1973-74 the demand will rise to 90,000 units. Now the domestic demand will have to be stimulated by cutting back on excise duty by Rs. 2,000 and reducing the price per unit by Rs. 5,000. India's exports to Pakistan are expected to double this year to Rs. 50 crores, over last year's Rs. 23 crores, with enlarged exports of scooters, scooter rickshaws, cables, electrical machinery parts and tractor parts.

China :

India and China have announced trade deals valued at Rs. 1.70 crores, involving Indian export of 20,000 tonnes of pig-iron and 800 tonnes of shellac and in return India will import Rs. 10 lakhs of antimony from China. In return for the Indian trade delegation's visit to China for the Canton fair in September 1977, a Chinese trade team will be visiting the engineering trade fair in February to examine India's products and machinery in sugar, textiles and steel.

World Monetary Reform :

IMF announced in November that it will be distributing 6.25 million ounces of gold worth $ 1 billion of its gold holdings to its members who contributed it originally. In November Sri Lanka devalued its Rupee by 85 per cent in domestic terms and 46.2 per cent in terms of the US Dollar. The two tier system has been replaced by one rate of exchange which will float according to the developments in the market and the country's balance of payments. Exchange controls and quotas and import restrictions except for luxury goods have been removed and only those earning *less than* Rs. 300 per month will receive subsidised rice from January, thus reducing the national food subsidy from Rs. 7 billion to Rs. 3.2 billion. Also a salary limit of Rs. 3,500 per month and an unemployment pay of Rs. 50 per month for the country's 1.2 million unemployed have been introduced. In the same month, the Australian dollar was devalued by 0.22 per cent. The British government freed the Pound Sterling from its ties to the US Dollar. after massive foreign currency inflows in the earlier part of October 1977. The first effects were that in the open market the pound moved up from $ 1.77 to $ 1.85. Also during November the Yen continued to move up against the dollar ending the month at a post war record of 240 Yen to the US Dollar. The Bank of Japan intervened massively, buying $ 622 million to keep the Yen from going up further. Back of this are the overly large trade surplus that Japan is building up which are also causing concern to the US and ECM. On November 11, Gold prices rose to $ 168.375 an ounce, which was the highest since May 1975—due mainly to the weakness of the dollar.

UNCTAD Commodity Fund :

Of the major issues in the New Economic Order debated at Nairobi, Manila, New York and other international forums—access to Western markets for the manufactures of the developing countries, debt relief, increase in aid flows, indexation, transfer of technology, a common fund to stabilise commodity prices, only the commodity fund has survived and on it in November a 106 nation Commodity Conference convened under UNCTAD auspices in Geneva. Here again a sharp difference between the industrialised countries and the developing countries developed. The latter want the Fund not only for financing price regulatory buffer stocks, but also for use as credit for other measures to develop trade and production of raw materials and generally to act as an instrument of the New International Economic Order. The industrialised countries do not accept any link of the Fund with the New Order and want the Fund to provide funds exclusively for financing buffer stocks. The other purposes proposed could be handled, they say, by the existing financial institutions. Further, the industrialised countries want that the Fund should provide finance only for commodities to be set up under individual commodity agreements and there are such agreements only for cocoa, tin and sugar. The fluctuations of commodity prices can be seen in the following brief summary for the financial year 1977-78. For coffee the price in May 1977 was £ 3,700 per tonne and fell to £ 1,500 in November, for sugar it was £ 140 per tonnes in May and fell to £ 92 per tonne in November, for tin it was £ 5,700 per tonne in May and rose with intervening fluctuations to £ 7,000 per tonne in November, for cocoa it was £ 2,100 per tonne in May, rose to £ 3,100 in July and fell to £ 2,000 per tonne in November, for rubber it was 50 pence per kilo in May, fell to 47 pence per kilo in June, rose to 57 pence per kilo in September and fell to 52 pence per kilo in November, and for copper it was £ 825 per tonne in May and fell to £ 650 per tonne in November.

World Food :

FAO estimates that world cereal stocks at the end of 1977-78 will be 177 million tonnes, a reduction of 7 million tonnes from its previous forecast, but which is still 20 million tonnes above 1976-77 levels. The stocks in USSR and China are not included in the estimate. The lower estimate is due to fall in wheat stocks from 85 million tonnes to 78 million tonnes. The stocks cover 14 per cent of annual consumption. Coarse grains will be 81 million tonnes up from the previous level by 24 million tonnes. Aggregate wheat stocks in the main exporting countries will be at last year's level, while importers' stocks will be below 1976-77 levels.

World Sugar :

The US Department of Agriculture estimates that against a lower 15 to 18 per cent domestic production of sugar for 1977-78, world production in 1980 would be 87.5 million tonnes if the world sugar price was 7 US cents per lb, 96.4 million tonnes, if it was 15 cents per lb and 105.3 million tonnes at 23 cents. World consumption at these three alternative prices in 1980 would be 95.2 million tonnes, 93.6 million tonnes and 92.1 million tonnes respectively. The stocks at the end of 1980 will be 20.8 million tonnes, 19.2 million tonnes and 17.6 million tonnes.

Rural Asia :

An ILO study of India, Bangladesh, Pakistan. Indonesia, Malaysia and the Philippines shows that rural poverty in Asia has grown worse, even though food production has kept pace with population growth. While average income increased in all the countries except Bangla Desh, the incomes of the poor declined everywhere. Between 1963 to 1973 the percentage of the rural poor increased in Pakistan from 72 to 74, between 1957 to 1970 in Malaysia from 30 to 36.5, and from 49 to 63.6 in Uttar Pradesh in India between 1960 to 1970. This is due to the bad distribution of revenue and tillable soil and concentration of investment on industries with low employment potential. In the six countries, the wealthiest 20 per cent families have 50 per cent of the national income, while the *poorest 40 per cent share 12 to 18 per-cent* of the national income. Even after land reforms, 20 per cent of the poor farmers own 3 per cent of the land, while the richest 10 per cent own 35 per cent. The report concludes that the only way to improve the lot of the rural poor is to redistribute productive wealth and *increase the participation of the poor in* decision making. A parallel study by the Asian Development Bank supports these conclusions and refers to the Asian labour force increasing from 380 million in 1975 *to 480 million in 1980—a rate of increase* of 10 million workers who need 10 million new jobs a year in the 10 year period. The Bank survey suggests that the new jobs can be created through (a) labour intensive rural works programmes and (b) establishing rural based industries. These remedies face four problems: giving flexibility and authority to local officials, organising labour, knowing the possibilities and limitations of labour and machines and fitting in with seasonal fluctuations. There is no problem of men *being able to match machines in terms* of cost, on which the study refers to the World Bank survey which shows that at base wages $ 1.00 to $ 1.80 per day plus incentives, labour could compete with *machines and in most countries wages* are well below this limit. In practice these programmes fail because of lack of co-ordination or poor management which leads to failure of labour intensive projects. The problems of pushing rural based industry are access to credit, communications, power supplies, nearness to *market, and efficiency of labour* force and management. At a time when this country is planning a massive rural programme in these directions, *the studies* provide adequate material for building the necessary infrastructure for their success.

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II Agricultural Development

Paddy Production :

The State as noted earlier has suffered in two ways in its production of paddy. Widespread rains throughout October *and early November hampered kuruvai* harvesting and led many farmers to harvest their crops in the rains, so that the resulting paddy has a high moisture content and commanded low prices in the market. By the first week of November, of 4 lakh *acres of kuruvai* paddy, 1.30 lakh acres had been harvested. And then came the November 12 cyclone and floods and the tentative *estimate at* the end of the month is that of the 4 lakh *acres under kuruvai* in Thanjavur district, 2.15 lakh acres were affected by the cyclone, crops in 20,000 acres totally lost and a 25 to 75 per cent loss expected in the remaining 2 lakh acres. In Tiruchirapalli district, crops were completely destroyed in 6,000 acres and submerged in 45,000 acres. Against this serious background of loss of foodgrains and even more serious loss of income and livelihood to lakhs of farm families, the government is taking steps to help those farmers to raise an additional crop of paddy or millets wherever the crop has been lost or damaged. The Mettur storage which is full can by a turn system provide water to these farmers for 60 days and with adequate seeds, fertilisers and pesticides made available to them, the farmers can raise a crop over 3 lakh acres. In Tiruchirapalli also, the farmers are preparing themselves to raise a second crop and want the government to set right irrigation systems and channels for this purpose. The second crop would be the short duration—ADT-31, which the farmers are familiar with and want to grow. Meanwhile to procure paddy and rice, the State government imposed on November 15 a traders' levy on stocks of paddy and rice purchased and moved by wholesalers from the surplus districts of Thanjavur, North Arcot, South Arcot and Chingleput. The quantum of levy will be 20 per cent on paddy and 10 per cent on rice. Millers in the State are subject to a levy (see Vol VII p 701). The levy will not obtain on sale within the surplus districts or on grain moved from other States into this State. This system does not violate the Union government's instruction for treating the country as a single zone and not cordoning off surplus districts. In order to make possible the second crop and widen and strengthen the samba crop, the government has restored power supply to pumpsets which were disconnected for non-payment of charges and has also given concessional rates to farmers. Now the department and its extension officers face an urgent and demanding task to help the farmers who have lost heavily to grow a short duration samba and navarai crop and to use the new seeds and fertilisers for this purpose.

Commercial and Other Crops :

The State government has launched a special programme to increase the production of commercial crops this year. Oilseeds production will increase from 13.43 lakh tonnes producted last year to 14.9 lakh tonnes this year, cotton output from 3 6 lakh bales to 4 lakh bales. The groundnut is to be grown intensively both by way of area extension in irrigated areas and using improved agronomic practices in rainfed areas. The area under groundnut will be increased by 15,000 hectares to reach 11 lakh tonnes. An additional 25,000 hectares is being brought under sunflower to reach a total coverage of 1.75 lakh hectares. For cotton, the area would be increased by 2.07 lakh hectares and Varalakshmi grown over 12,000 hectares. Five cocoanut development schemes are being executed, costing Rs. 1.12 crores covering 3,400 acres in Tirunelveli, Tiruchi, Salem, Ramanathapuram and Chingleput districts and a further 7,900 acres in Coimbatore district. A special package of Soyabean cultivation is being tried out at the agricultural research station at Kudumiamalai and a variety, Kalitur, suited to this State has been chosen. This could be raised in all districts with clay loam soils and good drainage capacity. Special marketing arrangements for the crop are being made and the State Agro-Industries Corporation is starting soyabean based industries to ensure the demand for this important crop. The government has also mounted a special programme of plant protection to help farmers to get better yields from the redgram crop now in the field. The widespread rain has led to profuse flowering and pod production and to fight pests like pod borer, a spraying campaign is being taken up in 2,000 hectares at a concessional rate of Rs. 2.50 per hectare. Protection at this critical stage will increase the yield many times. On horticulture, the government has increased the outlay from last year's Rs. 94.3 lakhs to Rs. 1.17 crores, with emphasis on the cultivation of mandarin oranges, banana gardens and grape vine development. Robusta banana—the export variety—will be grown on 4,000 hectares and multiplication centres in farms of 100 acres each would be located at Tiruchi and North Arcot. Mandarin oranges are being developed in the lower Kodaikanal range and grape vine in the Coimbatore district.

Research Results :

The International Crops Research Institute for semi-arid Tropics is running a research project where pest management is being undertaken without the use of pesticide chemicals. A part of the Institute's land is being kept as a non-sprayed area with no specified allocation, and where techniques, cultural practices and promising varieties in a realistic pest situation are being tried out. This will be of interest to our Southern arid areas in this State. Such reduced and controlled use of pesticides alongside of a number of cultural, biological and agronomical measures by the farmer has been tried out effectively in other countries and could be used by farmers in this State. The agronomic activities include the farmers' action to do away with larvae and embryos of rice borers while preparing the field; the biological measures include releasing Trichogamma and other parasitic fungi which kill the borers; the cultural activities refer to vigilance and choice of pest resistant varieties. Similarly research results are reported with regard to controlled and limited effective use of fertilisers. This involves a simple fertiliser mix and use of a fungi which economises on the fertilisers used and makes for better nutrient assimilation in the plant. The Tamil Nadu Agricultural University is introducing a new variety of gingelly, SI-3240, developed at its Tindivanam station. It is suited for cultivation in the irrigated season (March–June) and matures in 85 days, yielding 23 per cent more than the traditional TMU-3. Research also suggests that in the State, the traditional farming practice of growing redgram and groundnut as a mixed crop can be further improved by interposing safflower between rows of redgram in a normal rainfed area.

TNDDC :

With the end of the World Food Programme's assistance in the Operation Flood I, the Tamil Nadu Dairy Development Corporation has lost its subsidised supply of imported skimmed milk and butter oil from that source. It has now to obtain supplies from the open market at about double the cost. TNDDC is therefore increasing the price of milk in the State to cover the additional cost that it now faces.

Tea :

In 1977–78 total tea production is estimated at a minimum of 570 million kg., compared to 512 million kg. in 1976-77. While last year's exports were 252 million kg., the government has fixed this year's export at 225 million kg., so that 345 million kg. would be available for internal consumption. Exports are doing well. For the period April-July the exports earned Rs. 152.53 crores compared to the 4 month earning in 1976 of Rs. 58.7 crores. There is a case for increasing the export quota for this year because the internal consumption on the basis of a 15 per cent increase in tea consumption will not exceed 310 million kg. This means 35 million kg. can be released for export. There is an increasing export demand for packet tea. In 1977-78, 12-15 per cent of India's tea export will be of the packet tea category. Meanwhile the high price of tea till the start of November, has begun falling rather rapidly, demand has been declining and there have been withdrawals in various auction centres. There is a case for the increased excise duty on tea being now rescinded (Rs. 5 per kg.) and for increasing the export quota by at least 30 mililon kg. The problem faced by the Siliguri and other auction centres regarding canalisation of 80 per cent of tea production through the auction centres, the ensuring of a uniform sales tax pattern in the country, and the creation and availability of a tea development fund should be attended to by the Union ministry of commerce quickly. Studies with regard to the tea industry in 2000 AD indicate that by then tea production in India will be 1,200 million kg-750 million kg. for internal consumption and 450 million kg. for exports—largely packet tea. Tea producers will also be more directly involved in marketing their produce to ensure lower prices. At the international level, with Sri Lanka and Uganda ratifying the International Tea Promotion Association negotiated by the Inter-governmental group on tea at FAO on October 10-15, 1977, the Association will come into being with 8 members—Indonesia, Kenya, Mauritius, Tanzania, Sri Lanka, Uganda and India. It will be launched before April 16 under the auspices of the International Tea Centre of UNCTAD-GATT.

Coffee :

Coffee production in 1977-78 is estimated at 1,10,000 tonnes. The year's export earnings are a record of Rs. 151.32 crores. The Coffee Board has extended its direct sale operation. Here again on the basis of a perspective 2000 AD study when an additional area of 1.3 lakh hectares will be added to coffee growing to meet the then coffee demand of 2 lakh tonnes, the Coffee Board Chairman has asked the governments of Andhra Pradesh, Assam and Orissa to formulate expansion plans and state the extent of area available for coffee growing in the State, so that the Board can take follow up action. At present, coffee is grown in 1.32 lakh hectares in Karnataka, Kerala and Tamil Nadu and in a few thousand acre in Andhra Pradesh, Assam, and Orissa. It has been recommended by NCAER, which made this study, that the 3 traditional States extend their coffee area by 58,000 hectares and the non-traditional areas of Andhra Pradesh, Assam, Orissa, West Bengal, Madhya Pradesh, Sikkim, Andamans and the North Eastern States set apart 72,000 hectares for coffee cultivation. The average coffee production in the country over the last 6 years was around 90,000 tonnes and with the domestic demand stagnant at 37,000 tonnes, exports have increased sharply. For this current year, exports are estimated at 60,000 tonnes and the Coffee Board plans an annual growth of production of 2 per cent till 2000, 5.5 per cent growth in exports and 3 per cent in domestic consumption. For next year, the export target according to this plan will be 61,000 tonnes, 28,000 tonnes to quota countries and 32,000 tonnes to non-quota countries. On the international front, twenty coffee exporting countries have called for an increase in coffee prices under the International Coffee Agreement. The agreement speaks of a price of 77–78 cents per pound whereas the latest price is 185 cents per pound. There is a case for a rise in prices envisaged in the Agreement.

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III Industrial Development

Salem Steel :

The Union steel minister stated in November that the first phase of the Salem steel plant which at a cost of Rs. 127 crores would produce 30,000 tonnes of cold rolled stainless steel and double that with an additional investment of Rs. 24 crores would be completed by 1981. To begin with, manufactured hot bands will be supplied to Salem for conversion and when functioning fully, the annual production would be Rs. 150 crores. The problem for the future is how to increase consumption consistent with increased production.

Kalpakkam :

The third indigenously manufactured Calandria, nuclear reactor vessel was formally handed over on November 3 to the Department of Atomic Energy. Thus the Kalpakkam Atomic Power Project has received 2 locally made Calandrias and the present one is to be used for unit 2 of the project.

BHEL :

BHEL, Tiruchi with its wide ranging boilers and boiler parts manufactures supports 250 ancillaries. Two ancillary industrial estates with a total of 22 units and one each at Pudukottai, Thanjavur, Kumbakkonam are working for BHEL on specific assignments. The State government has allotted 470 acres as developed plots adjacent to BHEL and in the first phase 97 plots were developed and allotted and 48 are working as sub-contractors of BHEL. Besides these, there are 120 small and medium units in Madras, Coimbatore and other locations in Tamil Nadu and 36 units in other States which are doing subcontracting work for BHEL. In 1976–77 the total sub-contracted outturn was 27,500 tonnes valued at Rs 174 lakhs. Of this over 18,000 tonnes were produced by ancillaries in Tiruchi and the neighbouring areas. Employment for over 4,000 persons has been generated this year. BHEL has a Committee to continuously identify parts, valves and fitting which can be manufactured by ancillaries and as of today 35 of the parts are offloaded in this manner. BHEL is urging its ancillaries and new small units that wish to establish themselves to take up the manufacture of work machining and other sophisticated items. The problem here is that this new demand cannot be met by existing ancillaries because they need medium and heavy machines with heat treatment facility, and these machines can be installed only with a long term assurance from BHEL of purchasing the product. But with changing technology, such long term assurance is difficult to provide.

HPF and Film Industry :

The Hindustan Photo Film's Ambattur conversion project costing Rs. 2 crores has been cleared by the Union government and the first converted products, comprising industrial X-ray film and graphic art material will be on the market by June/July 1978. Orders for the requisite machinery have been placed abroad and in eight months the machines will be installed. Meanwhile developing and fixing chemicals specially made by HPF at Ambattur to suit the emulsion employed by it were in the market in November. The RTD structure is being expanded. HPF is establishing new facilities in Tambaram at a cost of Rs. 30 crores for emulsion preparation and coating of new projects. HPF made polyster base X-ray films have been released for the first time, and will soon be available as a package with intensifying screens and developing chemicals. The film industry has raised questions about the high prices of films produced by HPF and the high reflection rate of its products—problems which need examinations by the unit. The Film Federation of India has set up a Film Development and Management Council to make in co-operation with IIM, Bangalore, a scientific assessment of the problems facing the film industry which can also look into the 2 problems of HPF referred to earlier and present the results to the Union government. The Council has established 3 sub-committees which are (a) examining questions of a national film policy, relations with government and a system of equitable regulations and taxes, (b) setting forth system and structures for different segments of the film industry and (c) studying the social impact of films.

Southern Structurals :

Southern structurals, which had been taken over by the State government (see Vol VI p 24,) has now diversified its production from manufacturing railway wagons to a heavy engineering unit. It now manufactures electric overhead travelling cranes, gantry cranes and wharf cranes for steel plants and structural fabrications for the Tuticorin thermal plant. It is also fabricating mining machinery like bucket wheel excavators for Neyveli lignite. A capital investment programme of Rs. 50 lakhs has just been completed and as a result the company losses have been reduced from Rs. 20.64 lakhs in 1975-76 to Rs. 9.34 lakh in 1976-77. The current year's production will be Rs. 4.5 crore and its sales turnover Rs. 224.55 lakhs.

Madras Refineries :

On the basis of a feasibility study to manufacture 30,000 tonnes per annum of linear alkaline benzene, which is a base for synthetic detergents and a market survey, Madras Refineries has applied to the Union government for clearance of a project to set up a Rs. 5 crores paraffin wax plant with an annual capacity of 20,000 tonnes In 1976-77, the unit processed 2.35 million tonnes of crude which was lower than the previous year's 2.67 million tonnes because of the March shutdown after

30 months of continuous operation and reduced offtake of lube base stocks due to a change in the demand pattern. Aviation turbo fuel production increased by 22.7 per cent to 1.02 lakh tonnes and middle distillates improved from 12.1 per cent the previous year to 43.7 per cent in 1976-77. The Unit will use Bombay High crude after some adjustments. Its turnover declined from Rs. 254.8 crores in 1975-76 to Rs. 237 crores in 1976-77 and pre-tax profits of Rs. 4.9 crores (Rs. 5.7 crores in the previous year).

TIIC :

The Tamil Nadu Industrial Investment Corporation plans to widen further its capital base of Rs. 6.5 crores to take advantage of IDBI's refinance facility to promote development of small scale industries. The Corporation reports an improved recovery programme of Rs. 3.14 crores in April-September 1977 compared to Rs. 2.16 crores in the same period in 1976. It has reduced interest rates to technocrats in backward areas, from 11.5 per cent to 9.5 per cent and to those in non-backward areas from 13 to 11 per cent. Its total sanctions during the period were Rs. 7.16 crores to 216 units, disbursements Rs. 4.32 crores and term loans Rs. 4.76 crores to 122 units. It has extended foreign exchange loans aggregating Rs. 1.53 crores to 11 units under the World Bank second line of credit for import of plant machinery and technology.

Engineering Exports :

Engineering goods exports from the Coimbatore district which was Rs. 6.54 crores will be Rs. 4 crores this year, due to power cuts last summer and labour unrest. The coming year's prospects are better as major contracts with Italy and other countries are increasing and the raw materials position has now improved. The main export items are textile mill machinery, pumps, lathes castings, automotive chains, bicycles, diesel engines, agricultural machinery and spares etc. and the countries cover Europe, South Asia and the Gulf area.

Mill Yarn :

During September the total production of yarn in the 177 southern mills was 1.17 lakh bales of 180 kg. each, comprising 91,222 bales of cotton yarn, 11,574 bales of cotton/viscose and other blended yarn and 14,464 bales of viscose staple fibre yarn As noted earlier, because of the 50 per cent power cut, the Karnataka mills production declined by 7 per cent. Allowing for consumption of yarn for cloth production by mills, this meant that 95,000 bales were available to the decentralised handloom sector in September.

Handloom :

To give further relief to the handloom sector, as from November 25, excise duties on processed power looms and handloom fabrics have been reduced by 4 per cent. The excise concession will be available to independent processors of handloom fabrics when approved by the Union government on the recommendation of the Handloom Development Commissioner. Cotton handloom fabrics exports are increasing. For the five months April-August 1977, exports increased to 35.12 million metres valued at Rs. 26.34 crores compared to 20.15 million metres and Rs. 14.67 crores during the corresponding period the previous year. While cotton handloom made up exports declined, a sharp rise in the exports of Madras handkerchiefs from Rs. 4.74 crores to Rs. 16.08 crores during this period saved the situation. Exports of lungies and sarees doubled to Rs. 4.12 crores as did towels and napkins at Rs. 2.21 crores.

Leather :

Leather exports have declined by 17 per cent during the 6 month period April–September 1977, compared to the corresponding period in 1976. Lack of confidence in international markets, instability of prices heavy inventories on hand, inflationary trends, high prices of raw materials and change in fashion are responsible for the decline. Exports of tanned hides and skins declined by 28 per cent, its value falling from the 1976 period of Rs. 53.35 crores to Rs. 37.92 crores. Leather foot-wear declined by 30 per cent. In this connection the shoe industry has asked for decentralisation of shoes exports which have to go through STC because of the high service margin it charges, making shoes non–competitive in prices internationally. The Industry and Commerce ministers are meeting to decide this matter. Also the new categorisation of leathers into finished and non–finished ones which comes into force on October 1, has not helped to clear fully the uncertainties and confusion of the industry. In the latest fashions, European handbags, garments and footwear do not have a protective or the glazed plated look and according to our new norms in this country such leathers are not classed as finished leather.

Private Sector Reports :

The annual report of the South India Shipping Corporation for 1976–77 shows a 32 per cent increase in profit but reports on dull trading prospects. It refers to vessels not being able to get full cargoes or being involved in much longer passages in ballast. It also reports on negotiations for purchase from Japanese shipyards for contracts for ships' purchases without government loans. The Annual Report of Textool Company for the year ending April 30, 1977 refers to the increased sales turnover at Rs. 571 lakhs (against Rs. 506 lakhs of the previous year) despite the 9 month power cut, resulting in the steel section operating at a lower level. The textile machinery produced by the company has faced a dull market, leading to accumulation of stocks with the unit. Exports have been good at over Rs. 1 crore and the diversification programme is now spread to include the production of machine tools, alloy steel, and high spare milling machines. A soft loan from IDBI has been obtained of Rs. 1 crore for modernisation, with which future expansion can be confidently planned.

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IV Educational, Science and Health

Educational Reform :

Reports of educational unrest in November decreased, with a clash between ITI students and busmen in Ambattur and some students of the law college gheraoing the Principal and being arrested for it. On the following day 4 colleges went on strike in sympathy. The colleges in Madurai University reopened in mid November after a month's closure due to disturbances. The Tiruchi colleges were closed in early November because of strikes. This was in a sense fortunate because when floods inundated the colleges, there were few students who suffered. A review of education and employment policy by the *Economic Times* in November shows during the first four plans (1949-50 to 1969-70) the growth rates of enrolment at the primary level was 6.5 per cent (schools expanded by 3.9 per cent), secondary level by 8.5 per cent (secondary schools expanded by 10 9 per cent) and higher education by 10.1 per cent (colleges and universities expanded by 6.3 per cent). This shows the lopsided development of the educational programmes. Direct educational expenditure rose by 12.5 per cent and indirect expenditure rose by 11.3 per cent and the ratio to GNP rose from 1.1 per cent to 3.2 per cent. To increase national income from 100 in 1955-66 (Rs. 21,000 crores) to 320 (Rs. 67,300 crores) in 1985-86, (per capita income going up from Rs. 425 to Rs. 900), educational expenditures will have to go up from 100 (Rs. 600 crores) to 673 (Rs. 4,036 crores) and per capita educational expenditure from Rs. 12 to Rs. 40. There is here, an implicit direct relation assumed between economic development and educational expenditures which is still under debate. The study also shows that the educational expenditure and its results are skewed: except for ITIs in professional education, 60-80 per cent of students are urban, (except in agricultural colleges), and 60-95 per cent of students are from industrial, business and professional houses, and except for ITIs, agricultural college and polytechnics, the majority are from families earning more than Rs. 150 per month. The open door policy to middle class enrolment is accompanied by mass unemployment which in 1975 involved 2,632,560 matriculates, 156,700 arts graduates and post-graduates, 62,680 science graduates and post-graduates, 44,750 commercial graduates and post-graduates, 313,400 engineers and 5,220 medical personnel. The report also quotes the rather optimistic estimates of educated employment of the Education Commission rising from 3.2 million in 1960-61 to 6 5 million in 1985-86, and the stocks needed—all of which events have proved to be of little use The study concludes with some computations of relating *enrolments at various levels* to the demands for educated persons in various sectors, with a plea for *restricting* enrolments in general education, as is being done in professional education. At the all India level, the Union ministry of Education announced in November that on the basis of the recommendations of the Ishwarbhai Patel Committee (see Vol VII p 451) *the number of subjects* prescribed for the secondary stage classes 9 and 10—will be reduced. As part of the effort to improve learning, the Institute of Human Resources Development has devised illustrated workbooks for secondary school students, comprising a 12 title set, comprising mathematics, natural and social sciences with over 1,000 pages of text, 500 illustrations, graphs and tables and 5,000 comprehension exercises. At the State level, the Tamil Nadu Board of Higher Secondary Education decided that at the plus 2 stage, Tamil and other minority languages should be the medium of instruction, that 35 per cent marks in SSLC should constitute the entry requirements to the + 2 stage and that the University should be requested to conduct special diploma courses either in the evening colleges or through correspondence courses to equip teachers for the + 2 stage. It was also decided that students taking the Tamil medium at plus 2 stage will have free education, while those using the English medium should pay the tuition fees. A 12 day orientation course for the Economics and Geography teachers of Central schools from the 4 southern states was held in Madras in November. The State government is examining a proposal to introduce topics on archaeology in the school curriculum. Also a dental health programme in the schools is under consideration by the government. At the University level, the Undergraduate Review Commission and the Syndicate recommended and the Academic Council and Senate approved a restructured undergraduate course, to go into effect in the Madras University from 1980–81, when the new + 2 completers will be entering the University. Under this restructured 3 year degree programme, each student will have 4 or 5 foundation courses comprising the Vernacular, English and 2 or 3 general study courses, 4 specialised core courses and CSS and supporting courses. On the basis of this approved structure, the Boards of Studies will go to work elaborating the syllabi and the University will undertake the task of preparing the new textbooks.

Colleges Damage from Floods :

As a result of the cyclone and floods on November 12 referred to above, 5 Tiruchi colleges and 5 colleges in Thanjavur district and Pudukottai suffered damage and loss to their libraries and laboratories to the extent of Rs. 1.09 crores. The most serious damage was caused to five Tiruchy colleges which had water from 10–12 feet standing in their libraries and laboratories, class-rooms and hostels for 36 hours. A University Commission which visited the colleges estimated the damage and loss suffered as follows: Seethalakshmi Ramaswamy College Rs. 43 lakhs, St. Joseph's College Rs. 31.03 lakhs, Holy Cross College Rs. 23.9 lakhs, Bishop Heber College Rs. 6.55 lakhs, National College Rs. 2.73 lakhs (all in Tiruchy) and other colleges in Thanjavur, and Pudukottai districts Rs. 1.80 lakhs. The University advanced a small sum of Rs. 2.75 lakhs to the first five colleges and has appealed to the State and Union governments and UGC to make grants to the colleges to enable them to rehabilitate their destroyed academic life.

Adult Education :

On November 2, the National Board of Adult Education was inaugurated by the Prime Minister. The Board's task is to implement the National Programme of Adult Education. The programme is to educate and make self-reliant 10 crores of adult illiterates in the age-group 15-35 in the five year period 1978-79 to 1983–84. The Prime Minister stated that this programme has the highest priority to the government and the Deputy Chairman of the Planning Commission stated that the government will have all the funds it needs. This is a new dimension for Adult Education in India. First, it is the first time that the government and people have committed themselves to Adult Education, giving it in the words of the Prime Minister "the highest priority". Second, this is not a literacy programme but an adult education programme, aimed at improving skills, providing employment, ensuring political participation and liberation into which literacy will be woven. The Board and its working group are now finalising the work plans and preparing themselves and the voluntary agencies and government departments this year to launch this massive national effort from next year. As part of its effort to popularise science, NCERT has developed a mobile science van equipped with exhibits and a projector which has also helped to increase the number of state science exhibits and expositions. At the State level, the Board of Continuing Education ran a 3 day conference/seminar to prepare the government departments and voluntary agencies to launch the adult education proprามme in the State for educating 65 lakh illiterate adults within the next 5 years. It has been suggested that out of the 2.5 lakh school teachers in 35,000 schools, over half be involved to educate 50 lakh adults. The other 15 lakhs will be the responsibility of voluntary agencies.

Science:

The CSIR Society meeting in November under the chairmanship of the Prime Minister decided that 17 CSIR laboratories will be delinked from CSIR and registered as separate societies with the minister of the related ministry as Chairman. These are laboratories which are largely related to a single ministry. They are: the Central Fuel Research Institute, Dhanbad and the Indian Institute of Petroleum, Dehra Dun, the former attached to the Energy ministry and the latter to the ministry of Petroleum, the Central Building Research Institute, Rourkela to the ministry of Works and Housing; the Birla Industrial and Technological Museum, Calcutta and Visveswaraya Industrial and Technological Museum, Bangalore and the Nehru Science Centre, Bombay to the ministry of Education; the Road Research Institute, New Delhi to the ministry of Shipping and Transport. Ahmedabad Textile Industry Research Association, Bombay Textile Research Association, Silk and Arts Silk Research Association, South India Textile Research Association, Wool Research Association, Indian Jute Research Association, Automotive Research Association, Indian Plywood Research Institute, Cement Research Institute and Indian Rubber Manufacturing Research Association to the ministry of Industry. The other 30 laboratories will continue with CSIR as they are multidisciplinary research institutes and each caters to a multiplicity of users. The executive councils of those laboratories will be expanded to include representatives of users, industries, ministries, scientists and technologists. To make their research result oriented, their future research programme will be all India co-ordinated projects involving several laboratories and scientific agencies. The 17 agencies detached from CSIR will send periodic reports to CSIR. This decision to restructure CSIR has a certain amount of logic and is not as originally feared, based on a straight break up of this multidisciplinary institution. However the extent to which the 17 separated laboratories will function as effective R and D institutions will depend on their maintaining an autonomous scientific character, and their work being co-ordinated with the whole government sponsored industrial R and D network in the country. CSIR reports that its laboratories have developed technologies to produce a wide range of industrial rubbers and some of them are ready for commercial use. NCL, Poona has developed polysulfide rubbers for use by the aircrafts, marine and automobile industries, it has also developed sulfo chlorinated polythene which with its resistance to weather and abrasion can be used for high temperature gaskets, hoses and shoe soles: it has developed the technology for the manufacture of cellulose butyrate used in the manufacture of fountain pens, a part which till now has had to be imported: it has also produced rigid urethrae for use in refrigeration, transportation and as wood substitute in furniture. IIP, Dehra Dun has produced micro crystalline wax for use in electrical insulation and for paper and leather treatment.

Health :

The Health ministry is launching a malaria control programme which will meet the many types of epidemological problems, each needing a different approach based on adequate knowledge of malaria vectors. Also environmental sanitation measures such as avoidance of manmade collection of waters where mosquitoes breed, emptying ornamental water containers, cisterns and household drains, introducing fish in paddy fields which consume mosquito larvae etc. are to be used by the public with the help of the community health worker under the Rural Health Scheme (see Vol VII p 603). On November 1, a National Trust was established in New Delhi with contributions from the public for the treatment of cancer, heart ailments and kidney diseases. On the family planning programme, the Union government has advised States to follow the cafeteria approach, leaving to the citizen to choose his family planning method. It has also suggested to States certain levels of performance, and for Tamil Nadu for this year, 3.5 lakhs sterilisations, 71,000 IUD and 2.21 lakh contraceptives have been suggested. The State government has revised the scale of cash incentives for sterilisation, Rs. 75 for vasectomy and Rs. 85 for tubectomy instead of the previous graded scale of Rs. 60–Rs. 100 according to the number of children one had. During the current year upto October 30, 40,646 sterilisations have been performed, of whom 36,745 were women.

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V Employment

From the labour force level of 230.5 million in 1971, the total labour force is estimated to be increasing at 5 per cent per annum. The present extent of unemployment and underemployment is computed by the Planning Commission to be equal to 21 million person years. Taking into account the existing backlog employment has to be found for 70 million persons in the next 10 years. The actual rate of growth of the economy was 3.8 per cent in the First Plan, 3.7

per cent in the Second Plan, 3.2 per cent in the Third Plan, 3.5 per cent in the Fourth Plan and 3.3 per cent in the current Fifth Plan. Agriculture grew at 2 per cent per annum between 1961-62 and 2.5 per cent since. Industrial growth which was 7 per cent in the Third Plan declined to 4 per cent in the Fourth Plan and was 6.5 per cent in the first 2 years of the current Fifth Plan. The dimensions of poverty are larger than unemployment—at 40 to 60 per cent—as a number of the employed do not earn enough to live even at the subsistence level. CSO's annual survey shows that by December 1975 there were 71,705 factories with a total fixed investment of Rs. 1,409 crores employing 6.4 million workers. The number of factories and fixed capital increased by 11.7 and 17.7 per cent respectively compared to the previous year. Corresponding increases were employment at 5.41 per cent, output 14.4 per cent and value added 5 per cent. 5 industries—chemicals, basic matals and alloys, cotton textiles, electricity and food production contribute more than 50 per cent of the total value added. Even in the medium scale sectors, there is heavy capital concentration, and in spite of the higher ICOR, the large and medium scale industries generated more than 50 per cent of total employment. Factories employing 500 or more persons accounted for more than 30 per cent total employment, while factories employing more than 1,000 persons accounted only for 1.5 per cent of the total number of units. The public sector is dominant having 60 per cent of total fixed capital, porducing only 25 per cent of the total output and with ICOR of 1.3 which is six times that of the private sector. The survey shows that 75 per cent of the 71,705 factories surveyed are in the small sector with just 6.5 per cent of the total fixed capital, one fourth of total output and one third of total employment. With only 2 per cent of total fixed capital, the tiny sector accounts for 15 per cent of total employment, thus confirming that it is the highest employment generator per unit of capital. 47 per cent of the factories belonged to the tiny sector—that is units with an investment in plant and machinery not exceeding Rs. 1 lakh, contributing 8 per cent of total output and 5 percent of value added. The Khadi and Village Industries Commission plans this year to produce Rs. 270 crores of goods and provide 4 lakh additional jobs. Last year production was Rs. 225 crores and total employment was 21 lakhs. The Commission is setting up raw material banks and mini industrial estates to provide common work places with improved tools for the artisan. By 1979 it will produce Rs. 75.50 crores of khadi and Rs. 251 crores of village industrial products and provide employment to 28.41 lakh persons by the end of the Sixth Plan to 35 lakh persons. This is in line with the Planning Commission's exercises as noted earlier. On the industrial relations front, an improvement can be effected in the country by paying attention to (a) machinery for settling individual and collective grievances and disputes, (b) establishing agreed criteria for identifying the bargaining agent, (c) dampening of inter-Union rivalries and arresting the erosion of the legitimacy of the demands and the paying capacity of the undertaking and (d) a more effective conciliation machinery and in defined cases through adjudication. In early November 35,000 textile workers in 36 mills in Coimbatore district went on strike on the bonus issue, which was settled after a week.

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VI Other Items

National Board of Adult Education:

As noted earlier, the National Board of Adult Education was inaugurated on November 2 in New Delhi by the Prime Minister. It had before it the policy statement on the National programme of Adult Education that had been adopted by the Conference of ministers of education (see Vol VII p 600) and further elaborated by its working group. The Board decided to use the present year as a preparatory period and launch the massive national programme of providing Adult Education to 10 crore illiterate adult from 1978-79 within a period of 5 years. A second meeting of the National Board's working group was held on November 8 and continued the preparatory work for the programme, refining the concept, agreeing upon the modalities of work of the Voluntary agencies and the total budget for the 5 year period which includes the important and costly programme of follow up literacy, reading and self-development.

+ 2 Committee :

The Union government has constituted a 30 member committee with the Director, Madras Institute of Development Studies, as Chairman to review the curriculum, syllabus and vocationalisation of the + 2 stage. The Committee had its first meeting on November 8 at which there was a general exchange of views about the NCERT document—the Vocationalisation of Higher Secondary Education, and an agreement that there was need to phase the proposals over an adequate period of time and that what was needed was sufficient time by teachers and schools to prepare themselves. The Committee divided itself into 4 groups—on the document, on the academic stream, on the technical/industrial stream and the rural/agricultural stream. The first group on the NCERT document met in Madras on November 14 and agreed to adopt a broad definition of vocationalisation as referring to employability skills and decided to recommend concentrating on the rural-agricultural options.

AIR / TV / Committee :

The Committee set up by the Union government to frame a structure, constitution and working rules for AIR and TV to become autonomous, (see Vol VII p 601) met in Madras in mid November and examined the AIR and TV establishments in the city, interviewed several public and specialist personalities in the south and received representations from the various technical, professional and administrative associations of the two establishments. It agreed that the main thrust of its investigation was pointing to one or two para governmental organisations in which the possibility of residual governmental interventions on major issues should be provided for. The Committee planned to visit Calcutta in November and finalise its report in January.

Institute of Public Enterprises and CLRI :

The ICSSR Committee to inspect the plans of the Institute of Public Enterprises, Hyderabad visited the Institute in November, assessed its past efforts which were good and commended its proposals and programmes for the future, with the new Director now in charge of the Institute. It made recommendations on the quantum *of assistance from ICSSR. A meeting of* MIDS-CLRI specialists group met also in mid November and examined alternative models of small scale shoe manufacture and their cost—benefit implications. In light of the review, it was decided to revise the preferred model and submit it to examination by economists and sociologists.

SICCI and TNBCE :

The South Indian Chamber of Commerce and Industry, in co-operation with FICCI organised a seminar of the southern states at the end of November on the subject 'The Role of the Business Community in Rural Development'. FICCI has developed a detailed plan for Industrial units to undertake rural development activities. One point made was that it was for the community to identify the resources which give each village its comparative advantage and concentrate employment generation activities around it. The Tamil Nadu Board of Continuing Education organised as noted earlier the annual conference for the State of Adult Education on the subject —Tamil Nadu's participation and involvement in the National programme of Adult Education. It was decided that the 65 lakh illiterates in the age-group 15-35 should be educated and made self-reliant in five years by combined action of the government and voluntary agencies. The 35,000 schools with their 2.5 lakh teachers could to the extent of 50 or 60 per cent take on the task of educating 50 lakhs persons, while the 120 voluntary agencies can take responsibility for the other 15 lakh persons in the five year period. The Governing Body of the Resource Centre and the Executive Committee of the Board met after the conference and decided on the supporting action by the Resource Centre for the State *programmes of Adult Education, and* 30-50 centres to be run by the Board under this National and State programme.

Tiruchy, Erode and Komarapalayam:

As noted earlier, the five Tiruchi colleges—Seethalakshmi Ramaswamy, St. Joseph's, Holy Cross, Bishop Heber and National—were visited on November 24 and the extensive damage to the libraries, laboratories and hostels assessed. Even more, it was the morale of the college Principals and authorities which had to be strengthened. The destruction was both material and spiritual, and quick and early action was called for. All colleges are busy with raising funds for the Chief Minister's Flood Relief *Fund, and the CSS and NSS* services are at work helping the victims of the cyclone and flood with food, medical aid and clearing of debris. Vasavi College, Erode had a formal function at which Rs. 9,000 raised by the management, staff and students for the Relief Fund was presented to the Vice-Chancellor. Similarly the Alamelu Angappan College for Women, Komarapalayam in celebrating its annual day and the opening of its new building on October 24 made a similar presentation to the Chief Minister's Relief Fund.

National Library Week and IITS:

The Tenth National Library Week was celebrated in the University on November 28, with an inaugural ceremony when the new importance of the library in the semester system and in the National Programme of Adult Education was emphasised. The book *exhibition* in which 21 book sellers participated was impressive. The seminar on library development brought together many library specialists. The Governing Body *of the International* Institute of Tamil

Studies met at the end of the month and approved a programme of research as recommended by its governing council. It also recommended that the council be affiliated to the International Association of Tamil Research.

Continuing Education for Nurses and Role of Advertising in India

The University in co-operation with WHO organised a National workshop on Continuing Education for Nurses. The workshop was attended by nursing educators and Superintendents from 9 States and laid emphasis on updating the skills of hospital and public health nurses both in relation to the changing needs of the individual and community and the acceleration in progress of medical science and technology. The University Department of Management organised in early November a seminar in Hotel Connemara on the role of advertising in India. It was agreed that advertising plays an increasing role in a progressive, dynamic and changing economy and that further studies were needed as to the cost benefit implications of this form of marketing.

1978 Monthly Seminar :

The Institute's monthly seminar establised in November the following membership list and programme for the 1978 monthly seminar.

Members

Name	Subject	Residence
1. C. M. Abraham	Sociology	Coimbatore
2. M. S. Adiseshiah	Economics	Madras
3. M. S. Appa Rao	Management	Madras
4. B. Ardhanareeswaran	Social Science	Madras
5. M. V. Arunachalam	Business Management	Madras
6. Rev. A. Devasia	Economics	Madras
7. A. Joshua	Education	Madras
8. K. Jhaveri	Human Science	Pondicherry
9. V. C. Kulandaiswamy	Technology	Madras
10. C. T. Kurien	Economics	Madras
11. T. C. Mohan	Economics	Madras
12. J. P. Naik	Education	New Delhi
13. M. Srinivasan	Economics	Madras

Name	Subject	Residence
14. T. V. Natarajan	Political Science	Madras
15. R. Nityananda	Management	Madras
16. S. Nityananda	History	Madras
17. K. K. Pillay	Social Science	Madras
18. S. Patankar	Education	Madras
19. A. Ramakrishnan	Science	Madras
20. S. Ramanathan	Sociology	Madras
21. R. Ramanujam	Economics	Madras
22. Basu John	Technology	Madras
23. M. N. Rao	Business Management	Madras
24. M. R. Santhanam	Economics	Madras
25. V. Shanmugasundaram	Economics	Madras
26. R. Sundaresan	Education	Madras
27. R. Venkataraman	Planning	Madras
28. T. S. Venkataswamy	Economics	Madras
29. T. S. Devadoss	Philosophy	Madras
30. B. Krishna Rao	Economics	Madras
31. M. S. Jothi	Education	Madras
32. Sethunarayanan	Technology	Madras
33. G. M. Andavan	Planning	Madras
34. J. Ramachandran	Political Science	Madras
35. R. T. Narendra	Electronics	Madras
36. Y. Shanmugasundaram	Economics	Madras
37. V. Chandrasekhara Naidu	Economics	Madras
38. K. A. Zachariah	Economics	Madras
39. S. K. Ekambaram	Statistics	Madras

Theme: PRIORITIES IN THE SIXTH PLAN

Subject	Author	Chairman	Date
Tamil Nadu Economy 1977	C. T. Kurien	T. S. Venkataswamy	Friday 27, Jan.
Industrial Development	K. A. Zachariah	T. V. Natarajan	Thursday 23, Feb.
Reduction of Unemployment	Fr. A. Devasia	R. Ramanujam	Thursday 30, Mar.
Elimination of Illiteracy	M. S. Jothi	S. Nityananda	Thursday 27, Apr.

NO SEMINAR IN MAY

Extension ol Irrigation in the Country and the State	B. Krishna Rao	M. N. Rao	Thursday 29, Jun.
Small & Cottage Industries	T. V. Natarajan	S. Ramanathan	Thursday 27, July.
Expansion of Power Generation in the Country and the State	V. C. Kulandaiswamy	R. Nityananda	Thursday 31, Aug.
The Population Problem	K. K. Pillay	M. Srinivasan	Thursday 28, Sep.
Use of Foodgrains Reserves	R. Ramanujam	A. Joshua	Thursday 26, Oct.
Eradication of Poverty	T. S. Venkataswamy	V. Shanmuga-sundaram	Thursday 30, Nov.
The Plan Frame	V. Shanmuga-sundaram	B. Krishna Rao	Thursday 21, Dec.
Tamil Nadu Economy 1978	Y. Shanmuga-sundaram	M. Srinivasan	Thursday 25th, January 1979.

Meeting of Heads of Social Science Departments :

The Seventh Meeting of the Heads of Departments of Social Sciences of the Southern Universities was held in the Institute on 10th and 11th December 1977. Members present were :

1. Dr. Malcolm S. Adiseshiah,
   Vice-Chancellor,
   University of Madras. Chairman

2. Dr. M. V. Pylee
   Vice-Chancellor,
   Cochin University,
   Cochin.

3. Dr. C. T. Kurien,
   Prof. & Head of the Dept. of
   Economics,
   Madras Christian College,
   Tambaram, Madras.

4. Dr. K. Mathew Kurian,
   Senior Prof. and Director,
   Indian Institute of Regional
   Development Studies,
   Kottyam, Kerala.

5. Dr. C. Lakshmanna,
   Prof. and Head of the Dept. of
   Sociology,
   Osmania University,
   Hyderabad.

6. Dr. P. D. Mahadev,
   Head of the Dept. of Geography,
   Mysore University,
   Mysore.

7. Dr. E. T. Mathew,
   Prof. of Economics,
   University of Kerala,
   Trivandrum.

8. Dr. A. M. Nalla Gounden,
   Prof. and Head of the Dept. of
   Economics,
   Madras University,
   Madras.

9. Prof. G. Parthasarathy,
   Head of the Dept. of
   Co-operation
   and Applied Economics,
   Andhra University,
   Waltair.

10. Dr. V. Rajagopalan,
    Prof. and Head of the Dept. of
    Agricultural Economics,
    Tamil Nadu Agricultural University,
    Coimbatore.

11. Dr. P. V. Rajkumar,
    Prof. of Economics,
    Madras University PG. Centre,
    Coimbatore,

12. Dr. B. Sarveswara Rao,
    Emeritus Prof. of Economics,
    Andhra University,
    Waltair.

13. Dr. Gopala Sarana,
    Prof. and Head of the Dept. of
    Anthropology,
    Karnataka University,
    Dharwar.

14. Dr. P. Satyanarayana,
    Deputy Director,
    ICSSR Regional Centre,
    Hyderabad.

15. Dr. N. Subbu Reddy,
    Prof. and Head of the Dept. of
    Anthropology,
    Madras University,
    Madras.

16. Dr. John D. K. Sundarsingh,
    Head and Co-ordinator,
    School of Social Sciences,
    Madurai University,
    Madurai.

2. Introduction :

The Chairman welcomed the Social Scientists to the Seventh Meeting and referred to the usefulness of the repetitive discussion on reviews of teaching, research problems and potential in the Social Sciences.

The meeting conveyed its good wishes to two members of the past meetings, who have assumed responsibilities as Vice-Chancellors: Dr. G. Ram Reddy, Osmania University and Dr. M. V. Pylee, Cochin University.

3. Item I :

The Agenda was adopted as follows:

(1)	Approval of the Agenda	— Doc VII SS/1
(2)	Discussions of the reports on Social Sciences—Teaching and Research	— Doc VII SS/2- (I-X)
(3)	Review of the report on the Methodology Workshop held in Hyderabad in May 1977	— Doc VII SS/3
(4)	Methodology workshop to be held at Kottyam in May 1978	— Doc VII SS/4
(5)	Progress on Post M.A. courses in research methodology	— Doc VII SS/5- (I-V)
(6)	Work on production of textbooks	— Doc VII SS/6- (I-II)
(7)	Future of Annual Meeting of Heads of Departments of Social Sciences of the Southern Universities	— Doc VII SS/7
(8)	Approval of records of discussions	— Doc VII SS/8

4. Ietm 2 :

Discussion of Reports on Social Sciences — Teaching and Research :

Dr. JOHN D. K. SUNDARSINGH: (Head and Co-ordinator, School of Social Sciences, Madurai University) introducing Doc. VII SS/2-I, referred to the introduction of subjects with practical and possible employment potential in the M. Sc. Mathematical Economics and M.A. Economics courses. The possibility of making the courses on practical banking and managerial economics optional in the M. Sc. Mathematical Economics course and reviewing the need of reintroducing economic thought were raised. In regard to the new subject—Public Enterprises for M. A. Economics studies—, it was suggested that the time spent on it might be increased and it should lead to preparation of a project report. The setback in grading was noted and the importance of an All India system of grading being agreed upon by the Vice-Chancellors of the Indian Universities was emphasised. In both the Post-Graduate and M. Phil. courses, there is need for promoting independent thinking by the students.

Dr. N. SUBBU REDDY: (Prof. and Head of the Dept. of Anthropology, Madras University) introducing Doc. VII SS/2-II, raised the question of what would be the optimum teaching conditions for a Post-Graduate teacher in the semester system. There was general agreement that this would be two courses per semester per teacher with variations to meet individual disciplinary and departmental needs. The question of overload on students imposed by too frequent tests under the semester system was also raised. There was agreement that when a new course was introduced the UGC procedure should enable such courses to be fully funded, instead of awaiting the start of the next plan. The importance of structural linguistics in Social Science teaching and research was emphasised together with the need for greater flexibility in designing and operating the M. Phil. courses.

Dr. P. V. RAJKUMAR (Prof. of Economics, Madras University PG Centre, Coimbatore), introducing Doc VII SS/2-III, referred to the difficult problem of getting qualified staff for his department, and the perennial problem of motivation of candidates for research. A wide ranging discussion about the place of quantitative methods in Economics resulted in agreement that students should be equipped with these methods, provided they are also made aware of the social reality in the country against which these methods should be used. On a specialised post-graduate programme in Econometrics, there was the question as to whether there is need for a separate cadre of qualified specialists.

Dr. E. T. MATHEW (Dept. of Economics, University of Kerala), introducing Doc VII SS/2-IV, referred to the restructuring of the post-graduate course in Economics in his university, which involves taking 5 compulsory courses and 3 optionals along with the *viva voce*. The problem of the quality of students, again, is a common one and the need to provide fellowships for students of merit was emphasised. The need for research methodology being built into the M. Phil. course was reiterated.

Dr. V. RAJAGOPALAN (Prof. and Head of the Dept. of Agricultural Economics, Tamil Nadu Agricultural University, Coimbatore), introducing Doc VII SS/2-VI called attention to the rapid rate at which his staff and graduate students are migrating to employment by the Nationalised Banks. The problem of the levels of Education for such bank personnel was raised, together with the need for expanding the enrolment at the undergraduate and post-graduate levels to meet this demand.

Prof. G. PARTHASARATHY (Head of the Dept. of Co-operation and Applied Economics, Andhra University), introducing Doc VII SS/2-VII, called attention to the problems that are being faced in the university in the operation of the Semester system, raising questions concerning observing the rules of the game in this particular form of learning. This problem is also being generally faced by some other universities. Due to various interruptions, the semester time is being reduced from 16 to 12 weeks which is a further problem. The *University has also introduced an* M. A. programme in Economics on Rural Development in which the following courses are covered: Macro Economics, Micro Economics, Development and Planning, Social Change, Statistics and Research Methodology for Rural *Development*, Agricultural Administration, Co-operation, Regional and Area Planning, Rural Development and Policies and a project report. In the discussion it was suggested that a more general *sociological approach would be on* social structures. This is one approach to a post-graduate programme in Rural Development. There should be others based on other social science disciplines, as well as an interdisciplinary programme.

Dr. A.M. NALLA GOUNDEN (Prof. and *Head of the Dept. of Economics, Madras* University), introducing Doc. VII SS/2-VIII, called attention to the proposal to replace logic and scientific method in the M. A. *programmes by Mathematical* methods. There was a question as to whether research methodology should not *also be taught at the M. A. level.* This university as well as some others run parallel M. Phil. programmes for teachers and students, whereas other universities run a single programme for both groups It is important that M. Phil. programme for teachers should bridge the knowledge *and research gap* between the student and teacher groups.

Dr. P. D. MAHADEV (Head, Dept. of Geography, Mysore University), introducing Doc VII SS/2-IX, referred also the problem of the semester lag which is made up by extending the semester period. The University operates a credit *system which involves obtaining* 64 credits in the course of 4 semesters. In the 3rd semester some of the students *are allowed to submit a dissertation* in place of taking courses. It is found that the credit system can be operated with the existing staff, provided they are willing to take on some additional load.

Dr. GOPALA SARANA (Prof. and Head of the Dept. of Anthropology, Karnataka University), introducing Doc VII SS/2-X, *referred to the post-graduate programme* in the university under which the 1st semester is shorter and together with the 3rd semester has a total internal evaluation system, whereas in the 2nd and 4th semesters internal evaluation to the extent of 60-65 per cent operates. The *university has not yet decided to* introduce the M. Phil. programme, but the Ph. D Programme is continued without interruption.

Dr C. LAKSHAMANNA (*Prof.* and Head of the Dept. of Sociology, Osmania University), referred to the post-graduate programme which offers 16 courses out *of 22 for the students. In each semester* 5 courses are offered including 1 practical and 15 marks are allocated for *internal* assessment out of the total of 35 marks. The pre-selection of students for post-graduate courses and also the various regulations with regard to the semester examination system continue.

*The general review in the teaching and research of social sciences in the univer*sities highlighted the following issues:

(a) The problem of quantitative methods in the teaching of Economics and the place of Statistics, Mathematical Economics and Econometrics, in various M. A./M. Sc. courses need further study and *consultation* among the departments of economics in the Southern Universities.

(b) When a new department is started in the universities, UGC rules need to be amended in order to ensure full financing of such new departments.

(c) Post-graduate fellowships by the UGC and universities need to be increased in order particularly to attract and keep meritorious but poor students in research programmes.

(d) The Association of Indian Universities and UGC should ensure All India decisions by the Vice-Chancellors which are executed with regard to:

(i) the length of the undergraduate and post-graduate programmes namely 3 years for undergraduate and 2 years for post-graduate programmes and

(ii) the grading system to be operated by all universities.

(e) There should be further discussion by the Heads of Departments on the important post-graduate programme in Rural Development now being experimented by two universities. This could be one of the subjects to be considered at the next summer workshop which is devoted to village studies.

(f) The Conference of the Southern Vice-Chancellors is requested to arrange for a study of the M. Phil. programmes in the southern universities, with a view to the universities learning from each other's experience.

5. Item 3:

Review of the Report of the Methodology workshop held in Hyderabad—May 1977:

The report of the Director of the Hyderabad Workshop, Doc VII SS/3 was noted with interest. In the discussion that followed, there was general agreement that the workshop did attract wider social scientists' participation and its duration ensured full participation by all social scientists present. It continued the dialogue opened up between the various social scientists. In this connection it was felt that the participation of political scientists in the workshop should be ensured. For this purpose it might be necessary to have an alternative list of social scientists in each discipline so that if one person is unable to participate another can take his place. The subject for the next workshop should not be a repetition of the subject of the last one namely Past Village Studies. The focus of discussion should probably be changed. In this connection the recommendations made in Dr. Kurien's report for the 1977 Heads of Department Meeting (Doc VI SS/5) namely the Image of man as understood by different disciplines, Perspectives of Human Development. Need, Alienation and property, Marx and Gandhi and their portrait of man in society, were referred to. It might be advisable to concentrate discussion on certain concepts which need interdisciplinary clarification. Otherwise the procedure followed for the Hyderabad Workshop which was good and successful might also be followed for the next workshop.

In light of the discussion of the Hyderabad workshop it was decided to set up a small interdisciplinary group with Dr. B. Sarveswara Rao (Emeritus Prof. of Economics, Andhra University) as Convenor. Dr. N. Subbu Reddy, (Prof. and Head, Dept. of Anthropology, Madras University), Dr. C. Lakshmanna, (Prof. and Head of the Dept. of Sociology, Osmania, University), Dr. Venkateswaralu, (Head. Dept. of Political Science, Andhra University) and Dr. Mathew Kurian, (Senior Prof. and Director, Indian Institute for Regional Development Studies, Kottayam), to follow up the recommendations, particularly with regard to building up a typology of villages and interdisciplinary scrutiny of village studies made at the Hyderabad workshop. It was also decided to place a sum of Rs. 20,000/– at the group's disposal in order to meet their travelling, research and study expenses. This sum would be shared equally between the Regional Centre, ICSSR, Hyderabad and the Madras Institute of Development Studies, Madras.

6 Item 4:

Methodology Workshop to be held in May 1978—Doc VII SS/4:

Dr. Mathew Kurian introducing Doc VII SS/4 outlining a proposal for the Methodology Workshop to be held in May 1978 to be organised by the Indian Institute of Regional Development Studies, Kottayam, referred to the valuable experience he had in attending the Wardha workshop on Rural Development a week ago. As a result, he proposed that the third objective of the workshop might be recast from Identification of obstacles to and the agents for socio-economic and political processes of attacking poverty to. Alternative approaches to rural development, which would cover working for the development of villages within the existing power structure—local and All India—or changing the power structure as a pre-condition for village development. The work of the Centre for Science in villages in Wardha was also referred to, and some of the development problems of ecology, water pollution, health hazards cost of the new technology, limitations of land reforms, etc. that the Kuttanad Development Project has demonstrated were also mentioned. In the discussion that followed, there was a preliminary exchange on whether the proposed theme which is a continuation of the last workshop should be followed or whether a more limited and concentrated approach on a theme like 'Agraian Reform' should be adopted. It was generally agreed that for the next workshop, Dr. Mathew Kurian's proposals should be followed. Among the documents for the workshop, it was proposed that the study group set up under item 3, should be responsible for preparing preliminary documents on the typology problem. Reference was also made to the ICSSR seminar on Health and Nutrition, held in Bombay, whose document might serve as a good study of working within the existing power structure.

In light of the above discussion on Doc VII SS/4, the following decisions were made:

1. The theme of the workshop would be Research Methodology of Village Studies focussed on the problem of poverty.
2. Place: Kottayam, Kerala.
3. Date: May 20–23, 1978
4. Sub theme:

a. Typology of Villages.

b. Interdisciplinary review of past and existing village studies.

c Alternative approaches to Rural Development.

5. Study Group: A study group referred to under item 3, comprising: Dr. B. Sarveswara Rao, Emeritus Prof. of Economics, Andhra University, Waltair, as Convenor.

Dr. N. Subbu Reddy, Prof and Head of the Dept. of Anthropology, University of Madras, Madras.

Dr. C. Lakshmanna, Prof and Head of the Dept. of Sociology, Osmania University, Hyderabad.

Dr. Venkateswaralu, Head, Department of Political Science, Andhra University, Waltair.

Dr. K. Mathew Kurian, Senior Prof. and Director, Indian Institute of Regional Development Studies, Kottayam, Kerala, will help in the preparation of the workshop.

6. Documents:

(a) Document for the 1st theme: Typology of Villages will be prepared by the Study Group referred to under item 3

(b) Document for the 2nd theme: *Interdisciplinary review of past* and existing village studies *would be prepared by:*

(i) The village survey by the Agro-Economic Research Centre, Andhra University, *to be reviewed by:*

Dr. Gopala Sarana, Prof. and Head of the Dept. of Anthropology, Karnataka University, Dharwar.

Dr. P. D. Mahadev, Head of the Dept. of Geography, Mysore University, Mysore and

Dr. C. T. Kurien, Prof and Head of the Dept. of Economics, Madras Christian College, Tambaram, Madras.

(ii) The studies of West Godavari and coastal Andhra villages made by Dr. G. Parthasarathy, Prof. and Head of the Dept of Co-operation, and Applied Economics, Andhra University and Dr. B. Sarveswara Rao, Emeritus Prof. of Economics; Andhra University, to be reviewed by Dr. C. Lakshmanna, Prof. and Head of the Dept. of Sociology, Osmania University, Hyderabad.

(c) Document for the 3rd theme: Alternative approaches to Rural Development will be:

(i) a basic document by Dr. Mathew Kurian,

(ii) Dr. C. T. Kurien's forthcoming publication 'Poverty, Planning and Social Transformation',

(iii) the ICSSR seminar on Health and Nutrition, and

(iv) a paper on Gandhian approach to Rural Development to be requested of Dr V. N. Deshpande, Dept. of Philosophy, Karnataka University, Dharwar.

7. The workshop will also undertake the planning for the 1979 workshop.

8. If there is time, the workshop would also examine a postgraduate course for the universities in rural development.

7. Item 5:

Progress of Post M. A. Course on Research Methodology:

Introducing Doc VII SS/5–I, Dr. John D.K. Sundarsingh, Head and Co-ordinator, School of Social Sciences, Madurai University, Doc VII SS/5–II by Dr. N. Subbu Reddy, Prof. and Head of the Dept. of Anthropology, Madras University, Doc VII SS/5–III by Dr. P. V. Rajkumar, Prof. of Economics, Madras University PG Centre, Coimbatore, and Doc VII SS/5–V by Dr. Gopala Sarana, Prof. and Head of the Dept. of Anthropology, Karnataka University on the progress of research methodology course it was noted that the course is of very great interest to teachers in Madurai University and a distinction has to be made between methods and methodology as is done in the Coimbatore course. In the discussion which followed it was noted with interest that all universities except one, now have a research methodology course either at the M. A. level or at the M. Phil/Ph. D. level. The question was once more raised as to whether in Economics, the research methodology course should not be incorporated in the M. A. programme, as is done in the behavioural sciences. Here there is a difference both in practice and in concept between economists, flowing possibly from the nature of the disciplines. In this connection, it was also suggested that specialist books in methodology which are developing most in anthropology and sociology might also be developed in Economics.

8. Item 6:

Work on production of Text-books:

Introducting Doc VII SS/6–I by Dr. P. V. Rajkumar, Coimbatore, and Doc SS/6–II by Dr. P. D. Mahadev, Mysore, and on the basis of oral presentations of the Andhra experience by Dr. C. Lakshmanna and that of Kerala by Dr. E. T. Mathew, it was noted that outside of Andhra where the Telegu Academy continues its text book work for undergraduate and postgraduates and a programme of postgraduate references works in Tamil started by Madras University this field is still in need of further encouragement and development. The qualities of a textbook writer were discussed and it was agreed that the manuscript should always be subject to review by a Professor or Reader. In general, the most successful experience in social science text book writing which is that of Andhra Pradesh shows that this programme must be in the hands of the university teachers and must be guided and directed by them. One way in which the corpus of information and documents in the regional language can be increased and enriched is by organising lectures in the regional language by eminent persons. Again as demonstrated in Andhra Pradesh, this helps the development of a body of literature in the various social science disciplines in the regional language.

9. Item 7 :

Future of Annual Meeting of Heads of Departments of Social Sciences of Southern Universities—Doc VII SS/7 :

The Chairman introduced the question of the future of these meetings in light of the fact that he would be handing over the Directorship to Dr. C. T. Kurien, and therefore asked the meeting to express its opinion on :

(a) the desirability of continuing this annual gathering,

(b) the content of the meeting if it was to be continued, and

(c) any other related issues on which the Director wishes to advise him when he takes over the Institute's Directorship.

After a general discussion of the future of this annual meeting of the Heads of Departments of Social Sciences it was agreed :

1. The Annual Meeting of the Heads of Social Science Departments of the Southern Universities performs a very useful function both for the Institute and the Universities, and the community of social sciences research scholars and should be continued.

2. The membership of the meeting should as at present include those Vice-Chancellors who are social scientists and who wish to participate in the meeting. The Vice-Chancellors present testified to the value of the discussions and conclusions of the meeting for their work as Vice-Chancellors.

3. The meeting should continue to be the main planning instrument for the annual methodology workshop.

4. It could pick up particular problems which have been highlighted in the present and past meetings such as methodology in postgraduate courses and should at the same time allow for a general review of teaching and research so that new problems which arise may be identified and solutions sought at the level of the individual university or the conference of State Vice-Chancellors, Southern Vice-Chancellors, Association of Indian Universities or UGC.

5. In regard to the problem of the very poor share of southern universities in approved ICSSR research programmes, the remedy would be :

(a) for this to be brought to the attention of the Dandekar Committee by the Southern Social Scientists, and

(b) for the Institute to have staff resources which can help the Southern Universities in preparing projects in accordance with the ICSSR requirements.

University Events :

On November 1, following the meeting of Academic Council on October 11, there was a meeting of Principals and students in the University Centenary building to discuss, review and agree upon means of dealing with problems involved in the semester system. There was in November the ordinary monthly meeting of the Syndicate to review and approve programmes and to prepare for the University Senate. There was also a special meeting of the Syndicate in late November to review the interim report of the University Commission on flood damaged colleges and decide on the advance funds for them. The Senate met on November 30 and reviewed the functioning of the the University and approved the proposals of the Syndicate and the Academic Council placed before it on new courses, syllabi and staff.

December Development Seminar:

The paper for the December Seminar, "Rural Development Perspectives" by Prof. T. C. Mohan, together with a summary of the discussion of the paper at the Seminar held on Monday 26th under the Chairmanship of Mr. R. T. Nar-endra appears as the first article in this issue.

Second Article :

A paper, Indian Economics: Prospects and Problems appears as the second article.

Book Review :

A review by Prof T. S. Venkataswami of MIDS Publication No. 14 'Status of Unemployed ITI Craftsmen in Tamil Nadu' by T. C. Mohan and C L Narasimhan appears in the book review section.

RURAL DEVELOPMENT PERSPECTIVES

By
T. C. MOHAN
Madras

Problems and Concepts of development :

It is true that the politicians, the planners and the academic economists have shown varied but keen concern with the problems of the poor and the downtrodden, especially the rural poor ever since independence. What successive governments in office both at the centre and in the states have so far attempted has touched only the fringe of the problem of development of our village economy, rural reconstruction, growth of agriculture, abolition of impediments to the uplift of the weaker sections of the rural population, especially the small farmers and the landless labourers, besides provision of employment to the unemployed poor as well as fuller employment for those who are underemployed.

At the All-India level, our planning so far has concentrated mainly on the provision of infrastructure for the growth of urban-based large, medium and small industries, as well as the construction of irrigation dams and canals and hydro-electric power generating stations. The community development programme, the only organised attempt at rural development though comprehensive in its concept and coverage, has not succeeded in actively involving the majority of village population in rural development efforts, and has remained a routine multiplication of departmental activities by officials with or without a semblance of participation by the local people for which and by whom the programme was to be implemented.

The fault cannot, by any means, be attributed only to the Indian bureaucracy being thoroughly insensitive to social sensibilities. It is also true that economic planning alone cannot tackle the aim of establishing a social and economic democracy in the face of the prevailing social and political attitudes of the people with caste and class loyalities in all of which religion and politics are hopelessly intertwined and secular ideals are threatened. Unless some of the attitudes are set right through corrective social and administrative action and a clear programme of direct action to fight these attitudes and tendencies mounted, very little can be achieved through any economic planning. The persistence of these attitudes is the most glaring failure of the process of political and social education so far in India is the view of many enlightened economists and sociologists. If a most outstanding feature of our economic policy during the past plans has been the adoption and implementation of many programmes which, instead of checking concentration of wealth and countering inequalities, bringing about a more equitable distribution of the ownership of the instruments of production and incomes, have in practice worked in favour of the distribution of public largesse to the not-so-poor, all in the name of "socialistic pattern of society" a change of direction, a shift in our objectives and a recasting of socio-economic policy frames would be needed to deliver the goods at least in the future.

If all this is to be reversed and remedied and economic planning for the upliftment of the poor especially in rural India is to bear fruit speedily within a decade or so, a basic requirement would be an attempt to restructure the social and economic organisations at the village, district and state levels so as to provide the right kind of machinery which alone will be able to carry through the programmes of planned development with success in the sense of bringing about appropriate changes in modes of organisation of production and distribution of wealth and incomes.

It is said that development has become an "inter-disciplinary concept, which is no longer the exclusive concern of the professional economist, as the goals of development become the enrichment of the quality of life, both individual and collective, and its universalisation in terms of minimal if not equal availability to all sections of the population—development could well be described as *Sarvodaya* or promoting the welfare of each individual and of all individuals into relevant society". [1]

Also "development is no longer identified with a mere increase in GNP or even per capita national income. The increased income is expected to be so distributed as to result in a significant diminution of inequalities of income and wealth. Thus, less unequal distribution is also a part of the accepted goal of development. So also is the abolition of absolute poverty, with employment at minimum levels of remuneration to all who seek employment and enough of increase in productivity to ensure minimum levels of income to all who are self-employed." [2] Besides, development also includes the areas of health, education, culture and welfare.

Strategy of rural development :

In recent years the emphasis in regard to development in India has shifted to rural development on account of the obvious failure of our erstwhile planned development to bring about any appreciable improvement either in the living conditions of the weaker sections of the rural population or in reducing poverty or in reducing unemployment. The new strategy suggested is to launch an integrated rural development plan in the villages. This strategy as contained in the so-called New Economic Programme of the Government of India[3] aims at the

1. Integrated rural development, Dr. V. K. R. V. Rao, article in Eastern Economist Vol. 69-No. 16 Oct. 14, 1974.
2. Ibid
3. Brochure on 'Strategy for the integrated Rural Development,' C. Subramaniam, March 1976.

need to bring about not just some improvement in the yield per unit of land of a few crops or the propping up of the poor through make believe programmes of employment, but a more comprehensive and fundamental change—a systematic, scientific and integrated use of all our natural resources. And as part of this process to enable every person to engage himself in a productive and socially useful occupation, and earn an income that would meet at least the basic minimum needs. It is also recognised that this new strategy would call for a radical departure from traditional principles, practices and priorities in the entire range of developmental activities. [4] The lines on which the new strategy should be evolved are listed in terms of the following objectives :-

a. Full employment of labour and physical resources.

The idea is to activate the 100 million or so people in the age group 15-59 years in the total work force of 300 million people and draw them into the mainstream of economic activity, in well-conceived programmes of improved production and productivity.

Also our land resources should be put to rational use, through resloping, soil-conservation and the like; water to be utilised scientifically, the output of essential food crops and fibre increased through scientific farming, and the diet, health and educational attainments of the masses improved by deploying a massive cadre of extension workers.

In short, full employment and a sustained growth of the national product are the two aspects of the same policy to be pursued in integrated rural development.

b. Creation of Agro-industrial Complexes :

Among the presently unemployed or underemployed people, about 75 million may have to be found jobs in activities other than direct cultivation of land and the growing of crops. These may be found jobs in making improvements of a capital nature to our land and water resources, in animal-based industry and in non-agricultural pursuits. In fact these in turn may be based on the processing of agricultural raw materials, by-products and 'waste' materials.

c. Minimum productivity standards :

Minimum standards of productivity or efficiency, will have to be laid down for those who own or use precious natural resources, particularly land and water, in the overall social interest.

d. Minimum standards of performance by public agencies :

Guaranted norms of efficiency are to be prescribed for the functioning of public and private agencies that are expected to provide the essential facilities and services to the producers as a counterpart to the obligation laid on the owners of land and users of water.

e. Temper steeped in science :

The approach to integrated rural development will not be confined to physical norms and targets like crop

4. Indian Science Congress session held in Waltair in Jan. 1976 has discussed the new methodology.

yields, consumption standards, etc., though they are important. What is more important is a changing of the mind, and old habits of thought and action. Economic incentives and mass education are to be used as instruments of this change. The effects of this scientific temper may be reflected in the whole spectrum of everyday activity, from sanitation and health to nutrition and family welfare.

Apart from the objectives, and the specific measures to be adopted to fulfil these objectives,which are relevant to any programme of integrated rural development, one must realise the importance of identifying the unit of area to be adopted as the unit of planning and development. So far all our planning, including the recent proposal to have area planning and district level planning, has not touched the individual village in its entirety, its socio-economic organisation, administrative organisation, production organisation in agriculture or other rural industries, its resource potential both human and physical and its occupational pattern and income distribution, to the extent of identifying the basic economic and *production needs of each village,* its specific income disparities, poverty level, unemployment among various sections of the population and its potential for future growth in employment, and income as well as abolition of destitution and poverty.

Needs and resources of villages :

Assuming that integrated rural development should get the highest priority in national planning to transform rural life, nothing short of an intensive survey of the needs and resources, potential for generation of additional employment in agricultural and non-agricultural occupations in each village will be useful, as a first step in framing a suitable strategy for development (a) of each individual village and (b) of a group of villages, say, 20 or so comprising an area of not more than 50 to 60 square kilometers and a population of 15-20 thousand. If rural development is to be based on clearly identified needs and potentials of each village and each viable group of villages for integrated development, it is absolutely essential that the data base, the planning base and the implementation base are all derived from the village level itself. [5] This survey could be carried out in all the villages in each district with the help of students and teachers from the colleges located in the district within a *period of a year or so.*

There can be no integrated development unless infrastructural facilities are provided in the unit area in terms of transport and communication, energy and fuel, soil conservation and contour bunding, afforestation and minor irrigation, water supply and drainage, school, health and community buildings, market places and storage and training in developmental skills covering both agricultural and non-agricultural activities. Plans for infrastructural development should be drawn up locally and also implemented locally to the maximum extent possible. Village development committees composed of representatives of youth, agricultural labourers, unemployed among the weaker sections of the village society, scheduled caste/tribe plus technically qualified citizens available in the neighbourhood like agricultural scientists, engineers,

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5. A Report on Rural Development Planning in a typical village Sekkadu in Chingleput district, T. C. Mohan, 1977.

economists, bankers and sociologists are a must, one in each village to make proposals for development, monitor performance in implementation and review the village plan from time to time, to watch the progress of the weaker sections and propose special measures for providing productive employment to them. This committee will be apart from the village panchayat which is an official administrative body, but will advise and help the panchayat in formulation of local plans for development of the village.

Plan for the village :

A production plan for the village and technology that will make for the production within the area of a maximum share of the marketed output of goods and services within that area may be attempted in most of the villages, thereby creating new village industries, small industries; cottage industries and agro-based industries to cater to each group of 10 to 20 villages. A village—cluster approach for location of such industries may be fruitful in bringing about a marketing of resources, needs, demand and supply of goods and services, etc., to a considerable extent—the chinese experience as well as Gandhiji's village development concept could serve to prepare working models in this regard. It is in the light of this objective, that economies of scale, choice of inputs and of the *output-mix, and technology* used have to be determined if integrated village development is to be a real success. Models of area plans or district plans could not deliver the goods in each village until and unless each village is made the real base for formulation of its own local plan and the village people themselves are involved in this through the village development committee which is really a peoples committee.

What we need are local planning bodies rather than merely district, state or national planning bodies—in fact local seminars dealing with the local problems of each particular village and attended by local persons is really the device to generate ideas and proposals to formulate a plan for each village or group of villages—this alone will lead to a fundamental change in the direction of decentralisation of *planning and people's* participation without which planning and its implementation will be nothing but *a chimera as for as our rural* masses are concerned.

Plan Strategy :

The criteria to be employed for the adoption of an acceptable strategy should include (a) maximisation of wage employment, (b) increase in self employment, (c) optimum return to self employment (d) maximisation of the multiplier effect of rural economic activity within the unit area of integrated rural development—in this respect, economies of scale should not be taken up in isolation nor confined only to production without reference to the costs of *making* it available to the final consumer, (e) special attention to the uplift of the *backward and poor among the rural* community (f) providing a more equitable direction to the distribution of the gains from increased production, (g) the *minimum* concomitant participation of the whole village, including the landless and jobless, in determining the *production* plan for the village in agriculture and other non-agricultural sectors through the village development committee, (h) *the* minimum necessary readjustment of rights in village common assets like water, forest, grazing land, fisheries etc. (i) the minimum required reallocation of ownership of land and other natural resources to remove poverty, increase output, income and employment, (j) reservation of selected production items for the rural sector, (k) price policies to ensure that prices of agricultural inputs are on a par with the agricultural prices in the previous season and the prices of agricultural products excepting that of cereals (foodgrains) oilseeds, milk, poultry products and pulses have a floor which compares favourably with the index of prices of manufactured goods and industrial products in the previous season, (l) credit at differential rates of interest, (m) allocation of investment in the different sectors in each village or village-cluster area of 10 or so villages (n) a specific plan for provision of wage-employment/self-employment to the weakest 10 per cent of households in in each village population in the first year, 20 percent in the second year and so on, (o) location of one or a few small industrial establishments agro-based or otherwise in the neighbourhood of each cluster of 5 to 10 villages depending upon local physical and manpower resources.

In terms of unemployment in rural India, the case of Tamil Nadu is an illustration of the general malaise. The following table taken from the Perspective Plan for Tamil Nadu proposed by the State Planning Commission shows the projections of the number of jobs required and the number of jobs estimated to become available and the resulting unemployment as a difference between the two during the period 1970-71 to 1983-84.[6]

TABLE: I

(in lakhs)

Year	No. of jobs required	No. of jobs available	Unemployment
1970-71	160.29	114.99	45.30
1973-74	171.60	129.35	42.25
1978-79	190.71	154.77	35.94
1983-84	214.80	211.85	2.95

6. The Perspective Plan for Tamil Nadu, 1974-1984 State Planning Commission, 1974.

Employment Generation :

The inference to be drawn from this table is that almost full employment can be reached by the end of the sixth plan. The plan has put forward proposals for tackling unemployment in the short run through providing jobs for unemployed secondary grade teachers, setting up agro-service centres to absorb skilled and semi-skilled workers, identification of entrepreneurs, employment of educated unemployed, road construction schools, modernisation of the occupations of washerman, carpenters etc, rural industrial estates for housing *and finally developing an integrated scheme for meeting the rural unemployment problem.*

It was estimated that about 46% of the rural people were below the nutritional *poverty line (i. e. those who spend* Rs. 27.9 per month *in rural areas* at 1969-70 prices. An assement that 28.71 million people are denied their minimum needs and an investment of Rs. 651 crores on meeting *the minimum non-food* needs of those people during 1973-74 to 1983-84 has also been presented.

If unemployment in Tamil Nadu is likely to be only around 52 lakhs during 1973-74, and if we assume that about 3/5 to 4/5 of this will be found in rural areas then unemployment in rural Tamil Nadu can be roughly estimated at 30-40 lakhs. This can be further broken up on a *probable* basis that in an average village in Tamil Nadu about 200 adults in the labour force of the village are likely to be unemployed. Further, it is likely that half this number is constituted by unemployed women *leaving 100* unemployed *men in each village*. Even assuming that employment in agriculture cannot be found for all these 100 unemplyed persons in each village and assuming that a capital investment of Rs. 3,000—5,000 would be required to have them settled in handicrafts or village industries or in self employment of some kind, the total investment expenditure to *be undertaken by government or other public agency would amount to* Rs. 3 lakhs-5 lakhs for *each* village. For the *state as a whole with* 13,900 villages the total investment will work out to Rs. 40,500.00 lakhs to 67,500.00 lakhs (approximately Rs. 400-700 crores).

Investment for near full-employment in rural society :

Working at the projected income growth and investment *in* the Perspective Plan Period it appears in retrospect after three years of the Perspective Plan report in 1974 that the projections of income, investment and growth rates made in 1974 have been rather too optimistic.[7] For example, the rate of growth of aggregate income as per cent is assumed to grow from 4.55 per cent in 1974-75 to 11.25 *in* 1984-85 *on* the assumption of *investment growing* from 14.30 per cent to 25.30 during the period with a projected capital-output *ratio* declining from 2.9:1 during the Fifth Plan to 2.25:1 during the sixth plan period. The objective of doubling the per capita *income from* Rs. 654 (at 1970-71 *prices*) to Rs. 1,308 in 1983-84, though laudable does not appear feasible in view of past experience in as much as the growth rates in the state have been falling instead of rising from the First Plan to the Fourth Plan, with no indication that the achievement *will be* better during the current Plan period ending 1978-79. The growth

7. op. cit.

rate achieved during the Fourth Plan was estimated at 4.4 per cent compound per annum during 1969–73 whereas the rate envisaged by the Plan was a minimum of 5 to 6 per cent. During the Third Plan the actual rate of growth realised was only 2.7 per cent per annum (compound). The three annual plans (1966-69) witnessed a growth rate in the state of 3.6 per cent *against the National Income* growth of 4.3 per cent per annum. This experience should be taken into account in our expectations of the state of the income, growth rate etc by 1983-84. At the most we should be pleasantly surprised if the per capita income achieved at the end of the Sixth Plan is as much as 50 per cent higher than at the beginning of the Fifth Plan.

As far as the increase in agricultural production and growth rate of income in agriculture are concerned, if a 9.2 per cent growth rate is to be achieved by the end of the Sixth Plan, the investment required during the sixth plan in *agriculture and animal husbandry* should be probably much higher than Rs. 1,115 crores (Rs. 849 + 266 crores) envisaged as per the projections. This is for the simple reason that as it is this investment works out to only about 18 per cent of the total investment in the Sixth Plan of Rs. 6,510 crores. This investment should have to rise to at least 30 per cent if a dent is to be made in rural stagnation and unemployment, if minimum needs are to be provided to all, let alone doubling the per capita income.

A critique of the assumptions of the Perspective Plan :

Regarding the assumption of ICORs in the Perspective Plan for Tamil Nadu, the projection of past trends (1960-70) as claimed, has indicated a falling of the overall ICOR from 2.90 in the Fifth Plan to 2.25 in the Sixth Plan and hence this lower ICOR has been taken as a favourable factor for a higher growth rate of income envisaged for the sixth plan.[8] It is a moot question if this assumption is not overoptimistic if not misleading, as the experience in the past has shown that from plan to plan upto the Fourth Plan the aggregate ICOR has been known to exhibit an upward trend. Investment in the Fourth and Fifth Plans has run into difficulties and there is not likely to be available during the Sixth Plan considerable idle capacity over a wide segment of manufacturing industries, and as the pipelines of investments on projects *initiated during the Fifth Plan are not* sizable enough to bear fruit in the Sixth Plan, the over-optimism showed in assuming a very favourable ICOR during the Sixth Plan does not seems to be warranted. If we look at the performance of the state economy, especially in the sectors of power, irrigation, transport, cement, sugar etc the possibility of a declining ICOR in these sectors is very remote.[9]

The only alternative which seems to promise a lower ICOR lies in agriculture, rural industries, handicrafts and other farm based activites like animal breeding, dairying and processing of agricultural outputs.

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8. op.cit.

9. Planning and the poor; B. S. Minhas, Table I.

This reinforces the desirability of stepping up investment in agriculture and rural development by much more than the outlay envisaged in the Perspective Plan for the state.

TABLE II

SECTORAL AND AGGREGATE NET ICORs IN 1967-68 PRICES

Sector (1)	I Plan (2)	II Plan (3)	III Plan (4)	IV Plan Assumption (5)
1. Agriculture and allied sectors	1.06	2.58	2.30	1.76
2. Mining, Manufacturing and construction	1 50	3.83	3.00	4.25
3. Transport and Communications	5.76	5.25	5.90	6.81
4. Aggregate (based on actual NDP)	1.52	2.69	2.23	2.27
5. Aggregate (Based on exponential trend of NDP)	1.68	2.58	2.86	—

Further it is important to note that a future step up in the growth rate of agriculture (the projected growth rate of agriculture from 1951–65 to 1969–74 was from 3.1 per cent to 5 per cent in the latter year) would have to come from either or both of the following : (a) a very distinct increase in the rate of growth in double-cropped area, (b) sharp increase *in productivity per gross crop acre.* The growth rate in output attributable to area expansion had come down to an insignificant 0.12 per cent during the Fourth Plan from 1.8 per cent during the first ten years of planned development.

As the above two methods of increasing the growth rate agriculture are alone *open to us now, Indian agriculture as* well as our state agriculture would have to put in tremendous effort in the field of irrigation, scientific soil and water management, plant nutrition and improvement of the genetic capabilities of crops.

It is well to be aware of our woefully inadequate knowledge and efforts particularly in the field of scientific soil and water management. Apart from this, the achievement of sharper increases in double cropping are very much dependent upon the introduction of selective mechanisation of certain farm operations, especially to close the gap between the need for more labour during particular agricultural operations in the village and the shortage of such labour during those operations in peak seasons. The right kinds of agricultural machines suitable for our conditions should be made available and our agricultural planners should seriously look into this problem.

Hence, though the long-term possibilities of agricultural growth are by no means meagre, with our present knowledge of soil-water plant relationship the rate of growth in productivity per acre during the short period of 5—10 years of the Perspective Plan may not be very substantial.

The other alternative of a growth in double-cropped area combined with increase in the output of dry-farming areas seems to hold the key for faster agricultural growth rate from the 3 per cent per year during 1970-73 for the country to 4.2 per cent in the Fifth Plan and 9.2 per cent in the Sixth Plan.

In view of the pitfalls that may be present in our facile assumptions regarding continuous and steep increase in the growth rate of agriculture during the perspective plan period, it would seem safer to rely on the sector of small industries, rural industries, cottage industries or handicrafts to provide additional income growth and growth of employment not only to provide the minimum needed income to the weaker sections of rural society, but also to increase the per capita incomes of the rural households. Though the organisational problems involved in developing this sector seem formidable, imaginative initiation of steps in this sector should not be infeasible if the combined wisdom and efforts of technical experts, scientists, engineers, economists, industrialists and financial institutions, besides the local leaders and representatives of the development departments of the government are harnessed towards this end.

A model for rural development :

The critical determinants of economic development in a village could be presented in a rough model as shown below: assuming a mix of agriculture and industry.

1) $G = (f)\ C_a + N_c + W_m + M_s + E_f$

2) $E = (f)\ A_n^{2/3} + I^{1/4} + S^{1/12}$

1) G is growth rate; C_a refers to cropped area; N_c is number of crops per year, W_m refers to number of months supply of water available in the local water resources. M_s *refers to mechanisation* (simple) adopted; E_f refers to Functional education of farmers.

2) E stands for employment; A_n refers to the normal maximum capacity of agriculture to absorb the local population in its activities more or less fully during the year.

I stands for the normal maximum capacity of small industries, village industries agro-industries and crafts to absorb a part of the local labour. S refers to the normal maximum capacity of services of all types *(including trade) to absorb a part of* the local labour.

Summary of Discussion

In the discussion of the paper at the seminar held in the seminar room of the Institute on Monday 26th December 1977, under the chairmanship of Mr. R. T. Narendra of the Information and Planning Group of the Electronics Commission, the author in his presentation, stated that the previous seminars had discussed various other facets of development. The problems and concepts of development are not be treated as the exclusive concern of economists. Rural change cannot be achieved effectively solely through planning from above and funding of projects, but a principal pre-requiste is the attitudinal change required among the rural population. Without this a dent cannot be made in levels of poverty and existing inequalities. Development of the rural sector should not be equated only to advances in agricultural production, but implies overall enrichment of rural life and an improvement in the levels of living The main components of such an integrated approach are Health, Education and Social Welfare, which in practical terms can be disaggregated into, full employment of labour and physical resources, creation of agro-industrial complexes, laying down of minimum productivity standards and a scientific approach made possible by mass education and economic incentives. The focus of this integrated strategy should be the village with its entirety of needs. Todate plans have been usually for regions or areas and have been failures because the potential beneficiaries have not been involved in the planning. Hence the unit for effective planning should be a smaller area, even smaller than a block. Information required for this type of planning can be gathered by voluntary agencies already in the field and students working through college forums, covering a group of 10 or 20 Villages or less. If the study of Sekadu village is any indicator, the priorities emerging are likely to be very different from those established hitherto by planners and administrators. In the context of this fresh approach, the author suggested the formation of Village Development Committees which would serve as local planning bodies, ensure popular participation and help in implementation. This committee should not be constituted on the basis of the panchayat which generally reflects party, and pluralistic interests and does not necessarily represent the weaker sections. This involvement would ensure the formulation of plans which would be meaningful in terms of the social, economic and infrastructural priorities of each village. An acceptable strategy should include maximisation of wage employment, increase in self employment with optimum returns, the minimum necessary re-adjustments of rights in village common assets, special attention to the uplift of the poor and the backward sections of the community etc. Reviewing the Tamil Nadu State Perspective Plan, the author questioned some of its assumptions on the doubling of the per capita income over the period of the Plan and a favourable ICOR during the VIth Plan (1979-84), because the growth of per capita income is linked with a level of investment which has not materialised. There have been considerable fluctuations in the overall growth rate up to 1974. The extra capacity and resources required for a favourable ICOR have also not materialised. The author presented a preliminary model for village economic developnent. The guidelines emerging from the model indicate selective mechanisation in agriculture, to provide for the two-thirds of the labour force and diverting the rest into small industries utilising the resources of a cluster of villages.

During the discussion it was pointed out that experience showed that the block was too large a unit for localised planning and that the attitude, of the village people was generally one of apathy. The instance of a health care centre in a group of villages near Madras was cited. One of the causes of failures was that the decision making authority was too far away from the village or group of villages. Another impediment was the fact the present village administrative organisation like the Panchayat generally serve political and party interests. A suggestion was made that the pensioners should go back to villages and a non-political functionary should be available for every 20,000 of the population. A doubt was expressed that even the village committees as envisaged in the paper may be ultimately politicised and become ineffective. The present village administrative structure was not designed to carry out welfare programmes and some restructurisation was neccessary to serve development needs. It was thought that establishment of polytechnical institutions in the rural areas and providing better facilities for doctors prepared to work in the villages might improve the situation. Arrangements for non formal education, organisation of farmers service socieities and formation of agricultural labour unions would help the development process. It was observed that the structural aspects of rural society had not been pictured in the paper. Natural resources like land and water were concentrated in a few hands with consequent disparities in income. Hence redistribution of assets appears to be a prime necessity. Further there appears to be a wide gap between research in technologies and the users which it should serve.

In conclusion it was necessary to realise that motivation is a pre-requisite to all development processes and that it is absent in not only the rural sector but among other sections of society at present. Development policies and programmes should not depend on politically motivated decisions but should aim at progress of the entire community.

Indian Economics: Prospects and Problems*

Economics and Economists

Sixty years represent old age for us, the people in this country: they represent the coming of age in the life of an Institution. And so it might be appropriate on this sixtieth anniversary of our Association, to look back for a moment and reflect over the development of Economics and Economists in the country over the period.

The two—the content of a *science and* the life and action of its practitioner, the scientist—are intertwined. In fact at this *late stage in my life I have come* to the conclusion that the best definition of a science is to be found in what the scientist in question is and does. In that sense, Economics is *what we economists* are, what we do and how we behave and react. One of our Cambridge colleagues epitomized my definition when she said that "the purpose of studying economics is not to acquire a set of ready-made answers to economic questions, but to learn how to avoid being deceived by economists", which incidentally is what she lives by.

The Heritage

From this point of view, when we lock at the lives, writing, thought and action of the first group of economic thinkers so ably outlined for us by Dr. B. N. Ganguly in the Association—sponsored publication—Indian Economic Thought—Nineteenth Century Perspectives —comprising such stalwarts as Raja Ram Mohan Ray, Subramania Iyer, Gokhale, R. C. Dutt, Ranade, and Gandhi, one impression is left. And that is that this group of thinkers, seemed to detach economic thought and speculation in this country *from its nomothetic* moorings and were instead concerned with the analysis, the beginning of conceptualisation, *and some rather* **bold** synthesis in relation to the economic environment in which they were living. They had no *interest in following* the classical economic tradition, which was the discovering of universal laws and identifying them in quantitative terms as mathematical functions or ordinal relations; they were rather concerned with the analysis of the imbalance of the Indian economy, the deepening character of the poverty of its people, the vicious circle of low

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* Extracts from the address delivered by Dr. Malcolm S Adiseshiah to the Diamond Jubilee Conference *of the* Indian Economic Association at Madras on 28th December 1977.

incomes, low productivity, low employment, low saving, low capital formation and low incomes, the export surplus and the annual drain, and finding ways out of this economic morass.

It is true that this phase of our economic thinking belongs in a sense to pre-history as far as the Indian Economic Association is concerned. None of those great thinkers belonged to or presided over the Association because the Association came into being only later, in the early part of the twentieth century. However, there is one rather precious heritage that they have left behind, a heritage that we in the Association must nourish and cherish, and that is that economics is concerned with our economic environment in this country. And that message which we have incorporated into our research needs to find its way into our economics classrooms.

In fact, this heritage was carried on by the second generation of our economic thinkers, whose writings and contributions have been presented equally ably by Prof. Bhabatosh Datta in the second Association sponsored publication—Indian Economic Thought: Twentieth Century Perspectives—which has just been published this week. Both groups of economic writers had one interest in common—that of safeguarding the economic interests of the people and the country against the alien government, whose major preoccupation was the protection and furtherance of the interests of the metropolitan investment, trade and economy generally. As I read what in effect is the third volume in this series on Indian Economic Thought brought out by the Indian Council of Social Science Research, namely, the seven part publication on the Trends in Modern Economics Research in the Country under the chairmanship of Prof. D.T. Lakdawala, I wish there was apparent in our research and writings a similar consensus among us, the current generation of economists, with regard to safeguarding and furthering the interests of the people against the various forms of exploitation and injustices that they are subjected to by our own elites.

The Present

That thought is borne in on me also as I look back on the honour roll represented by 60 presidents who guided the destinies of our Association over its 60 years of existence, over a score of whom are happily present with us today. I wonder how many of them and how many of you experience the dichotomy and conflict that I have experienced, and still do as a researcher or executor of a development programme on the one hand, and a teacher of economics in the classroom on the other. In the field of what we call Economic Analysis and Theory, more familiarly termed Micro-Economics and Macro-Economics we used to follow Marshall and Wicksell; we now follow Samuelson and McConnell. All these have nothing to do with our economic institutions and environment. It has to do with passing the economics undergraduate or post-graduate examinations, for which our teaching is that individuals and firms behave in accordance with the price indications of the market adjusted to conditions of imperfect competition, oligopoly, and after Keynes and his destruction of Say's Law to active state intervention. The dichotomy arises when in our research work we cast aside this classical and neo-classical model and deal with real sources as well as the effects of decision-making in our society. The conflict arises from the fact that this classroom concentration on prices, costs, utility, oligopoly and monopoly diverts the attention of the future generation of economists in our class-room from the awesome fact that the real source of decision-making is not the individual consumer or the small firm but the owners of material and intellectual assets—the owners of physical and human capital. And what is taught is also an attractive distraction. It holds the field. There is no respectable alternative and students have to be taught to pass their examinations. And so there we are. At least we have not gone as far as our compatriots in the industrialised countries who are engaged in unending theoretical refinements, giving their models an air of profundity at a time when their claims to represent reality were shown up in the memorable words: "what is good for General Motors is good for the United States and *Vice Versa*." This is not to say that our pragmatic research does not also have similar dangers of unreality lurking around the corner. Referring to Adam Smith's logical professional advice to his government that colonists should pay taxes, C.R. Fay warned his fellow—countrymen: 'I submit, though the temple fall on me as I say it, that in the last analysis it was professional advice which lost us the first empire.

The Perspective

Not all of us fortunately face this intellectual dichotomy and divorce: I have a sneaking suspicion that our President this year teaches what he preaches in monetary theory and practice. More generally our agricultural economists, labour economists and others dealing with real life problems are gradually building a theory arising out of our institutional structure.

I believe that they represent the wave of the future for all of economics in this country. And it is with that thought and wish—that economics will represent for us in the coming 60 years, not civilization which for us is freedom from poverty, but the prospects of civilization, it is with that modest but challenging thought that I bow in admiration to the past 60 years of the Association and lift my hand in hope and salutation to its future perspectives.

BOOK-REVIEW

The Status of Unemployed ITI Craftsmen in Tamil Nadu :

T. C. MOHAN AND C. L. NARASIMHAN;

Sangam Publishers, Madras-600 001; Pp. xi + 136; Rs. 20.

By.

Dr. T. S. VENKATASWAMY

In the ultimate analysis the solution for the massive and grinding poverty which characterizes the countries of the Third World lies not merely in an equitable distribution of assets, but, more importantly, in providing full employment as well as increasing the productivity of labour which alone can sustain a higher real wage and raise the standard of living of the masses. The solution demands both an improvement of the skills of the people through technical education and providing jobs for them. The Nation and the State have achieved notable success in the first aspect; but they have failed in the task of providing jobs for the skilled labour. And the result is the emergence of widespread unemployment among the educated and technically trained.

The monograph under review is concerned with the problem of unemployment in one of the sub-groups of the technically trained persons, viz., the craftsmen of the Industrial Training Institutes (ITIs). The authors have set themselves a two-fold task : (a) to identify the causes of unemployment among the craftsmen of the ITIs of Tamil Nadu and (b) to suggest possible remedial measures. This study uses secondary as well as primary data. It relies primarily on the Employment Exchange information for assessing the overall magnitude of unemployment and utilises the data of its sample survey conducted among 849 trainees to find out some of the specific causes of unemployment.

According to Employment Exchange information, some 1,348 trained craftsmen were unemployed in 1964; but this level of unemployment was not considered serious, since it constituted only 3 per cent of the total trainees employed. But in subsequent years the problem became more and more serious and the number of unemployed increased to 15,677 in 1972 and to 20,000 in 1975. Even as unemployment was increasing, the ITIs kept on producing trainees at an increasing rate. The annual output which was 2,229 in 1964 rose to 7,000 in 1975.

A constantly increasing supply of trained manpower with various skills is a necessary condition for raising productivity and wage level and for achieving rapid economic growth. However, a rapid growth of supply of trainees, unless accompanied by an equal increase in demand, will cause unemployment. The first aim of the authors is to find out the causes for the excess supply of ITI craftsmen in relation to demand. One of the most basic reasons for the growing unemployment among the ITI craftsmen is the industrial stagnation suffered both by the Nation and the State over the past decade. The employment specialists have stressed that a 15 to 20 per cent annual increase in the rate of employment is required for rapid modernization and industrialization; but the country had been nowhere near this required rate of growth. The State Planning Commission has assumed a growth rate of 8 per cent per annum in the manufacturing sector for achieving full employment. But the actual growth rate of industrial production, which was somewhat satisfactory during the fifties and the early sixties, markedly declined in later years. For instance, the annual growth rate was about 8 per cent during 1950–65; but it dropped to 3.5 per cent during 1965–73 as against the targeted growth rate of 9 per cent during the Fourth Plan. This Industrial stagnation inevitably resulted in a slow and halting growth of demand for the ITI craftsmen and, consequently, caused unemployment. Viewed from this angle, the problem of unemployment, as pertinently observed by the authors, may be treated as a case of insufficient demand rather than an excess of supply.

However, the massive unemployment of the ITI craftsmen could have been brought under control, had there been appropriate planning on the supply side. But the ITIs failed to regulate their output in accordance with the manpower needs of the industry. They were either unwilling or unable to restrict admissions in the face of declining rate of demand. The decline in demand became noticeable as early as 1965 and unemployment figures showed a continuous increase thereafter. Instead of cutting down admission, the ITIs increased the intake year after year in the wishful thinking that the trainees would somehow and someday find employment and thus considerably contributed to the problem of unemployment. According to present expectations only one fourth of the 9,000 trainees currently admitted in the ITIs are likely to find employment.

The sample survey conducted by the authors yields additional information on some of the more specific factors contributing to unemployment. These factors include the nature of trade, rural or urban residence of the trainee, the educational qualification and the age level of the trainee, his unwillingness to resort to self-employment, and lack of apprentice opportunities. Tradewise distribution of unemployment shows that unemployment is predominantly concentrated in certain trades like fitter (general), welder, turner, motor mechanic, wireman, and machinist. These six trades together account for about 78 per cent of the total unemployment. The excessive concentration of unemployment in particular trades indicates that the inability of the ITIs to adjust their training programme in tune with the demand requirements for different trades is a major cause for the aggravation of the problem. It is, however, to be noted that there is no trade which does not suffer from at least some degree of unemployment, the sole exception being the craft instructor which is unimportant anyway. Lack of apprentice opportunity is another factor of some significance. The rest are, in the view of the reviewer, of minor importance.

The remedies recommended by the authors are naturally based upon the causes of unemployment. The ITIs should effect some drastic reduction in their intake, particularly in the trades where unemployment is predominantly concentrated. Their pattern of functioning and admission should be restructured in keeping with the changing needs of the industry by abandoning outmoded courses and introducing new ones to meet new demands. The employability of their trainees could be enhanced by providing sandwich courses designed to impart alternately class-room teaching and practical training. The authors also suggest that the ITIs should start self-financing production centres for providing employment for their trainees. This suggestion seems to be highly unrealistic, for it is simply not possible for the training institutes to become successful business undertakings.

The sample survey reveals that the Employment Exchanges have not been functioning effectively, since only 63 out of 849 trainees were able to find temporary placement through them, while 309 secured such employment through their own efforts. The authors, therefore, recommend that the scope of the functioning of the Employment Exchanges should be expanded by making obligatory on the part of the private business establishments to recruit candidates through the former. The opportunities of employment for the ITI craftsmen could also be increased by modifying the occupational structure of the industrial establishments so that the number of craftsmen employed bears a prescribed proportion to the number of degree holders.

The authors are unduly optimistic about the scope for self-employment in spite of the fact that their own findings clearly reveal that the trainees were utterly unable to utilise the financial and other facilities already available for self-employment. But they are on right track when they emphasize the need for close and constant collaboration between the Training Institutes, the Technical Education Authorities, the Department of Labour and Employment and the employers for assessing employment potential and streamlining the curricula as well as admission patters in harmony with the demand requirements of the industry.

Action on the demand side by both the Central and State Governments to accelerate the pace of industrial development is of utmost importance. But the strategy of industrial development must itself be based on full employment as the primary goal. The postwar experience shows, it may be noted, that the attainment of full employment will accelerate growth of income but the reverse is not necessarily so. Therefore, in a labour surplus economy like India, the adoption of fuller employment as a specific target will not only accelerate growth but also promote equality of incomes.

The book has made a valuable contribution by bringing into focus the causes of unemployment among the ITIs trainees and suggesting remedies many of which seem feasible. But it suffers from lack of proper organization which has inevitably resulted in avoidable redundancies and tedious repetitions.

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