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EDITORIAL—SOME HIGHLIGHTS

I General Economic Scene

State:

Tamil Nadu Economic Appraisal—1976: The State government's Economic Appraisal document published in September 1976 covers the year, 1975-76, with complete data upto December 1975. It was a year of recovery. Against the −10.8 per cent fall in State income and —12.8 per cent fall in per capita income for 1974-75 at constant prices (from Rs. 374 in 1973-74 to Rs. 326 in 1974-75), the forecast is that for 1975-76 State income will increase by 5 per cent over the 1973-74 high level of Rs. 1,626.45 crores. While in 1974-75 food production declined by 30.69 per cent to 50.77 lakh tonnes for 1975-76 the provisional estimates are 77.71 lakh tonnes, comprising 58.67 lakh tonnes of rices, 17.02 lakh tonnes of millets and 2.02 lakh tonnes of pulses. The first part of the Agricultural Chapter is a dismal review of the poor performance in 1974-75, showing that there is no contingent planning to meet drought situations—though the severity of the drought would have surpassed the dimensions of such a plan. The progress of the net irrigated area recorded is not satisfactory both in terms of hectarage which is stagnant between 1971 and 1974 and in terms of the decline in government canals and the increase in well irrigation. The area under HYV declined in 1974-75 both under rice and millets but what is serious is the decline trend for paddy since 1971-72. The distribution of quality seeds, fertilisers and credit show an improvement. The appraisal reports a decline in the State's live stock population between the 1966 census when it was 2,45,68,961 and the 1974 census when it was 2,34,33,414, due to a variety of causes reported—migration to Kerala, high cost of maintenance and a 33 per cent decline in pasture and grass lands and replacement of cattle power by pumpsets. The various programmes for development of cattle, sheep, piggery etc. should reverse this trend. On the Industrial side, the State record in 1975 was poor, showing a —0.1 per cent over all decline, with steep production declines in bicycles (—23 per cent), sugar (—23.1 per cent), hydrogenated oil (—22.5 per cent), rubber products (-15 per cent), motor vehicles (—14.8 per cent) and heavy chemicals (—7.9 per cent). Other lines such as cotton yarn with an increase of 1.8 per cent, textiles at 5.3 per cent were in reality stagnant. There are reasons given in terms of cost escalation and recession, but in reality 1975 registered a backward step for industry. An interesting time *series analysis of the growth* of industries shows that in 1975 industries with a weight of 57.60 per cent recorded less than 5 per cent increase, and those with a weight of 20 per cent declined by more than 10 per cent. This analysis supports the evidence reported in Vol VI pp 72-73. The power sector was normal in 1975-76 due to the improved hydel storage position, but the continued heavy reliance on hydel power constitutes a constraint on agricultural and industrial growth. Power consumption has increased from 1,865 million units in 1960-61 to 5,057 million units in 1970-71 and increased at a slower rate to 6,053 million units in 1975-76, with industry accounting for 50 per cent, agriculture 30 per cent and domestic and commercial consumption 14.4 per cent of total consumption. The trend is for increase in agricultural and a decline in industrial consumption which needs watching. As usual the Employment section is the least satisfactory in the appraisal document as it deals only with organised labour employed which shows an increase from 16.29 lakhs in 1974 to 16.56 lakhs in 1975. The industry-wise classification of this small number is not significant, nor is the small increase in public sector employment from 9.8 lakhs in 1974 to 10 lakhs in 1975 any more significant. The price situation in the State, as noted in the various issues of the Bulletin, did not follow the All India price trends. Prices remained stationary at high levels in January and February 1975, rose in May, June and July, noticeably in the foodgrains groups. To a large extent this was a spill over of the 1974 price inflation which was 76.3 per cent in the foodgrains group, but also due to the inadequate public distribution system—the 1975 food price rise was 17 per cent. The Chapter on State Finance reflects prudent financial management in a difficult economic situation. The planned increase in planned outlay for 1976-77 in agriculture, irrigation, power and social service is matched by additional tax revenues estimated at Rs. 9 crores and an anticipated deficited of around Rs. 10 crores for the year. The economic classification of the budget shows a 35 per cent outlay on gross capital formulation at Rs. 241.33 crores. In the *population tables, the recorded birthrate is* 2.2 per cent in 1974 compared to 2.3 per cent in 1973 and death rate 7.8 and 8.2, with an explanation that these may be partial results. For 1976 by interpolation, the State population is estimated at 4,69,06,000. The Statistical tables, incorporated in the appraisal document as a single volume, provide important information except in regard to education where enrolment rather than attendance continues to be reported and the labour force and employment estimates which are partial.

Fiscal: Tamil Nadu's second State loan for Rs. 11.50 crores as part of the loans of 12 State governments for Rs. 82.75 crores was notified on August 30. On September 15, when the loans were opened for subscriptions, Rs. 30.39 crores were submitted for the Tamil Nadu State Government Loans and Rs. 221.64 crores for all the 12 loans. These are cash loans unlike the first series of loans in August (see Vol VI p. 369) which were cash cum conversion loans. This trebled offer of subscriptions for the securities is in part a reflection of liquidity position of the financial institutions, and in part a response to the RBI requirements about reserve requirements.

Drought and Prices: As a result of the visit of the second Union government team to the drought hit areas on September 1-5, the Union government announced on September 1, an additional allotment of Rs. 8.2 crores for drought relief in the State, against the State government's request for Rs. 15 crores, to finance mainly the composite pipe-line water supply schemes outlined in the last issue (p. 488), in Tirunelveli and Ramanathapuram Districts and other areas where the well water is brackish. For September and October, the Government is planning to spend Rs. 12 crores on this programme. By mid October such a pipe water supply scheme for 46 villages in Ottapidaram Panchayat Union of Tirunelveli District and 6 villages in Rameswaram area will be completed. Similar comprehensive schemes are underway for 162 villages— 100 villages in Tiruvadanai and Devakottai taluks in Ramanathapuram district, 26 villages in the Tuticorin block providing good drinking water to 1.21 lakh people so far exposed to various diseases from infected water. By early September 5,600 bore-wells out of the target of 6,700 had been constructed and to provide repair and maintenance service to the bore-well pumps, a maintenance organisation with one junior engineer to cover for 1,000 wells has been set up. This whole drinking water supply programme in drought hit areas is being rationalised through a resurvey of the water supply in the State, being undertaken with the help of Panchayat Union staff to be completed by January next. Also in all municipalities except eight involving 92 schemes urban drinking water supply is being assured. Rs. 12 crores for rural water supply and Rs. 10 crores for urban water supply are being expended this year. Also a special programme of Rs. 53.65 lakhs is underway for areas in Thanjavur, Orathanad, Pattukottai, Peravurni, Mannargudi and Papanasam taluks of Thanjavur district served by the GA canal and the new Vadavar channel. Rs. 28.5 lakhs of this amount will provide drinking water through bore-wells, and the rest will be for employment oriented works like deepening ooranis, desilting and repairs to tanks and channels and road improvement work. Rs. 25 lakhs is being expanded on the additional Accelerated Minor Irrigation Programme in the Ramanathapuram district as a means of increasing employment to agricultural labourers in the district. A further Rs. 16.12 lakhs has been sanctioned for reclamation of land in the wind swept villages of Ramanathapuram district. This involves reclaiming wind swept lands at a cost of Rs. 10 lakhs, desilting 134 wells costing Rs. 93,800 desilting supply channels, preparing tank bunds to benefit 2,563 acres at a cost of Rs. 4.15 lakhs, and raising wind breaks and shelterbelts for 1,000 hectares at a cost of Rs. 10,000. Meanwhile the irrigation needs of the Thanjavur farmer is causing anxiety. By the end of September, the Mettur Level was 7.24 meters against the normal 36.62 metres at this time. The government has assured farmers that the present arrangements for letting out water in the Cauvery and Vennar systems through the turn system will continue till the North East Monsoon. It has advised farmers in the lower reaches of the GA canal to go in for broadcast farming. The State government has once more appealed to Karnataka to let further water from the Krishnaraj sagar reservoir and has requested the Union government to support its appeal. In response, the Union government in mid September appointed a 3 member committee (Member Planning, CWC, Director CWC and Director CEA) to make a study tour of Karnataka and Tamil Nadu to assess the immediate water requirements of the Cauvery valley, with special reference to he storage position of the reservoirs of the 2 States. The problem is that Karnataka has constructed the 2 reservoirs, Krishnaraj sagar and the Kabini, is impounding waters which in the Krishnaraj sagar case is irrigating 2,50,000 acres of paddy and sugarcane including 90,000 acres of sugarcane, requiring water all the 12 months. With a scanty South West monsoon, it is unlikely that there will be much relief from this source. Prices in the State in the first months of the calendar year showed a downward trend, from 286 in January to 272 in March, including a fall in food prices by 24 points and a rise in cloth prices by 14 points. Rural prices during the period were higher by 10 points and in the case of food by 26 points. The price levels in Madras and Tiruchy were similar, with a 17 point decline in the case of Madurai —according to CSO reports.

Power: To enable industrial units to conform to the 25 per cent power cut in the State, the government acceded to the report of the Employers' Federation, to grant factories exemption from certain sections of the Factory Act during the currency of the power cut. These sections relate to restricting hours of work for males, rest and meal times, women workers times etc. The Mettur power station stopped power generation from August 19. On the other hand, Nyeveli will be supplying 260 mu of additional power at 17.3 paise per unit from September till June (with some reduction during the monsoons when the plant and machinery will have to be overhauled). Kerala supplied the Tamil Nadu power grid 15 lakh units per day and Andhra pradesh 1.5 to 1.8 mu daily as from September 1. The long term problem of power in the State has several facets. First out of the 2,364 MW of installed capacity, thermal capacity is only 1,140. In fact there is still heavy reliance on uncertain hydel storage. For instance the 1976 September hydel storage is equivalent to 650 million units against the September 1975 storage of 2,060 mu. Second there is still too long a gestation period in constructing thermal and hydel stations. A thermal station takes 5 years for construction after 2 years of preparation. A hydel station takes 7 years plus the period of detailed investigation and design formulation. This can be sharply reduced by making one agency responsible for the entire operation instead of the multiple agency responsibility at present. Third there are the problems of operational failures, poor coal quality which interferes with the proper functioning of the thermal steam boilers, and defective equipmet—all of which can be corrected. Finally there is the problem that has been amply demonstrated that power is a regional resource which should be dealt with regionally. Kerala and Andhra Pradesh are power surplus, Karnataka and Tamil Nadu are power deficit States. The 230 ku lines connecting Kerala and Tamil Nadu grids can handle 3.5 mu per day. The regional grid should be upgraded to handle 400 ku capacity to meet the deficits in the State and Karnataka, and also it is through interconnections between the power system via extra high voltage transmission lines that economies in inventories and savings through sharing capacity to serve peak demand can be realised.

For the country as a whole, power supply was deficient in September in Maharashtra, Madhya Pradesh, west Bengal in addition to the 2 Southern States, with some improvement in the North East region. The power position in the Northern Region in all States was satisfactory. The transfer of surplus power from this region to Bihar and from Orissa to the Southern region began in the month. In September Karnataka announced increased power cuts from 10-25 to 25-40 per cent, with a large number of high and low tension industrial and commercial consumers being pushed from the 10 per cent to the 40 reduction class—due to the low storage in the Linganamakki reservoir. In the North East region, power position in lower Assam was better and restrictions on industries were relaxed.

South Food Zone: In September, Union government discussions with the 4 Southern States for the formation of a single Southern Food Zone were undertaken. The initiative for the Zone came from Andhra Pradesh which has a sizeable stock of rice from the last season, and expects an equally heavy procurement from the coming kharif and rabi harvests. The single Zone will mean no restriction on the movement of rice within and between the 4 States and within the overall policy each State would be free to follow the pattern of procurement suitable to it. For Tamil Nadu, this will mean free movement between districts and also to neighbouring Karnataka. Kerala stated that it wanted a Union government assurance of rice supply to it to enable it to maintain 160 grammes per adult through its ration distribution. As a result, the discussions on September 23 between the Union minister for Food and Agriculture and the Chief Ministers of Andhra Pradesh and the Governor of Tamil Nadu resulted in the suggestion for the formation of a 3 State Food Zone—Andhra Pradesh, Tamil Nadu, and Karnataka, which after consultation with the Chief Minister of Karnataka will be formalised, probably in October.

Transport: The declining trend of cargo being shipped through the Madras harbour due to its high handling costs and the demurrage charges after a short waiting period is leading to a study of the total pattern of trade that passes through the port in order to decide on lowering the port charges on selected general cargo commodities. Thus while 8,501 tonnes of tobacco exports from Andhra Pradesh (Guntur) was shipped from the Madras port in January to August 1975, in the first eight months of this year only 2,598 tonnes have been shipped, the rest being exported through Kakinada—a minor port with lower handling costs. The same is the case with the export of 20,000 tonnes to Russia of Andhra tobacco. Again 1,00,000 tonnes of groundnut oil extracts from Andhra Pradesh used to be shipped through Madras and is now diverted to Goa with its cheaper rates. Also, Madras hides and skins are being exported through Cochin and even a truck manufacturer four miles from Madras is using Bombay for his exports. It is time that these trends be studied and Madras port charges be made competitive. At long last, the stacking of iron-ore at the outer harbour, a gigantic ore handling facility is now being created to handle 4,000 tonnes of iron-ore per hour instead of 3,000 tonnes per day through conventional loading at a cost of Rs. 22.19 crores. With the deep drafts available for berthing large carriers, 2 streams are being erected for mechanised loading of ore at the rate of 8,000 tonnes per hour on five million tonnes per annum doubling the intake from MMTC and Annamalai. There will also be saving for the railways in relieving congestion at the port railway siding. The Cheran Transport Corporation reports an increase in its profits of Rs. 5.41 lakhs to Rs. 17.54 lakhs for 1975-76. Its 3,580 workers will receive a bonus of 20 per cent, Rs. 3.46 lakhs will be used for workers raising at

Coimbatore and Pollachi, with similar contributions to the Drought Relief Fund, the Institute of Road Transport and workers welfare activities. In the telecommunications area, the Fifth Plan allocation of Rs. 25 crores for the State is being used to provide 25,000 additional lines, telephone and telegraph facilities to 5,000 population villages, 3 telex centres at Erode, Tuticorin and Coonoor and international telex exchange facilities linking Madras with London and Singapore—an infrastructure which will help the State recoup its industrial and trade lags.

Rural Housing and Welfare Legislation: The State government is creating a monitoring unit to oversee allotment of house sites to the rural landless and ensure that proper use is made of the allotments. The Harijan Housing Corporation has built 30,000 houses and Rs. 3.5 crores is being spent this year on slum clearance and improvement to build 3,600 tenements to house 18,000 persons. Out of the HUDCO sanctioned funds of Rs. 19.66 crores, Rs. 9.53 crores have been released and the LIC has alloted Rs. 1.25 crores for this year. 4,680 houses have been built for EWS and 4,382 units for LIC. Under the Tamil Nadu Cultivating Tenants (Protection from Eviction) Act published at the end of August, cultivating tenants in the State, who are in arrears of rent payable to landlords are protected from eviction from January 16, 1976 to January 15, 1977. The Act provides also for the restoration of possession of lands to such tenants who have been evicted after January 16, 1976. But welfare legislation produces sometimes its own unexpected fall out. A survey of 1,000 slum families reveals that with the moratorium on urban debts in force (see Vol VI p 257) and the pawn brokers' credit having dried up, the more well to do slum dwellers have emerged as a new class of money lenders. There are 2 to 4 such unofficial money lenders for every 100 slum families, where using informal methods, loans are made at 10-15 per cent per month interest. On pay day, after paying back the debt, 8 per cent of the families have enough for 3 or 4 days and then borrow again, and four per cent of the families manage for 10 to 15 days. Nearly 82 per cent are in debt because of marriage celebrations, pilgrimages to Tirupathi or Periapalayam and sickness costs and funeral expenses. In 1958 such borrowing without security per family ranged from O—Rs. 75 and from the pawn broker from O—Rs. 25. In 1976 the average loan from the unofficial money lender was Rs, 2,000—reflecting in part the inflation that has occurred but more importantly the increasing knowledge of the people. The study concludes that illiteracy, superstition, ignorance, profligacy and vanity are obstacles to the families reaching a debt free status. The State also announced in September the total exemption from urban land tax to all educational, religious, charitable and philanthrophic institutions and a 50 per cent concession to land owned by recreational centres and cinema studios. In the former, the educational and charitable institutions *had no income from which the tax could* be paid. In the case of the cinemas, the difficult stage of the film industry led to this half concession, Also the government issued an executive order banning the slaughter of cows and heifers as part of countrywide action under article 48 of the constitution, which provides for this ban to improve the animal husbandry industry. In effect a milch cow is not slaughtered and the order in a sense underlines this economic fact.

National :

Fifth Plan: The National Development Council meeting on September 24 and 25 approved the revised Fifth Plan, which provides for an outlay of Rs. 69,000 crores against the Rs. 51,000 crores of the Draft Plan. Public sector investment has been increased to Rs. 39,303 crores, compared to the Rs. 37,463 crores in the Draft Plan with emphasis on agriculture, industry, power, steel and irrigation. The sectoral allocations compared to the Draft Plan allocations given in brackets are: agriculture Rs. 4,643.59 crores (Rs. 4,041.03 crores): irrigation 3,440.18 (Rs. 2,804.86 crores): power Rs. 7,293.90 crores (Rs. 6,076.65 crores): industry and mining Rs. 10,200.60 crores (Rs. 9,031.11 crores): transport and communications Rs. 6,881.43 crores (Rs. 7,110.62 crores): education Rs. 1,284.29 crores (Rs. 1,708.85 crores): social and community services Rs. 4,759.77 crores (Rs. 5,286.60 crores): hill tribes and areas Rs. 450 crores (Rs. 500 crores): others Rs. 333.73 (not provided in the Draft). The private sector investment has been increased from Rs. 16,000 crores to Rs. 27,000 crores. Just as out of the Draft Plan's Rs. 16,000 crores, Rs. 10,216 crores were household saving, out of the Rs. 27,000 crores household savings have been increased to Rs. 17,646 crores and will be directly invested. However in real terms the private sector effort will be larger than the Draft Plan and the public sector somewhat smaller. The resource mobilisation target has been increased from Rs. 6,000 to Rs. 14,000 crores, and the net foreign aid component of the Plan increased from Rs. 2,400 crores to Rs. 5,400 crores. Deficit financing has been assumed at Rs. 600 crores for the last 2 year of the Plan. The Central Sector outlay is Rs. 19,954 crores and State sector Rs. 18,265.08 crores. The revised physical targets which except for crude are lower than the original are coal 124 million tonnes, (original, 140 million tonnes), iron ore 56 million tonnes (original 58 million tonnes) foodgrain 132 million tonnes (with a minimum of 125 million tonnes), (original 135 million tonnes) finished steel 8.8 million tonnes: (original 9.4 million tonnes) fertilisers (nitrogen) 2.9 million tonnes (original 4 million tonnes) and phosphatic 7,70,000 tonnes: crude 14.18 million tonnes (original 12 million tonnes) sugarcane 165 million tonnes, cotton 80 lakh bales, jute 77 lakh bales, oil seeds 120 lakh tonnes, sugar 54 lakh tonnes, iron-ore 56 million tonnes, cotton yarn, 1,150 million kg. cotton cloth 4,800 million metres, (decentralised 4,700 million metres, leather footwear 18 million pairs, petroleum products 27 million tonnes, (original 34.8 million tonnes) cement 20.8 million tonnes, (original 25 million tonnes) agriculture tractors 55,000 aluminium 3,10,000 tonnes, (original 3,70,000 tonnes) copper 37,000 tonnes, (original, 45,000 tonnes) zinc 80,000 tonnes (original 1,00,000 tonnes) electricity 116.117 gwh, (original 120 gwh) railway wagons 18,000 and bicycles 3,00,000. Among the decisions made by the Council when adopting the Plan were: (a) a study for the floating of rural debenture to mobilise part of the increased farm incomes for financing rural roads, bridges, school buildings, and co-operative processing units: (b) the evolving of a national wage policy: (c) the continued use of the gadgil formula for the allocation of funds to the States: (d) increased irrigation rates to cover both working costs and improved management of the system: (e) power systems to cover both working costs and yield a return on the investment through (i) using capacity to the maximum, (ii) reducing overheads, minimising losses and thefts and improved collection of dues, (iii) completing projects on schedule through efficient project management and (iv) raising rates where necessary: (f) ensuring peoples participation in the Plan. The Council reaffirmed the need for containing inflationary trends in the economy and maximising the effort to implement the New economic Programme, the 20 point programme. The Revised Plan is a good working document for the remaining 2 years of the Plan. In effect it is a series of annual plans which continues the short term priorities of the first two years of the Fifth Plan, comprises the spill over of uncompleted Fourth Plan projects and bases itself on the distortions introduced by the 2 years inflationary impact of the economy reflected the serious reductions made in the targets. There is need for planning the Sixth and Seventh Plans from now, on the basis of opening up fresh investment activities, particularly through expanding capacities and planning additional agricultural and industrial activities, to meet the objectives of poverty eradication and attainment of economic self-reliance.

Prices and Anti-inflation: The Index number of wholesale prices for August registered a rise of 1.5 percent (4.5 points) at 311.3 for the week ending August 28, compared to the 306.8 registered for the week ending July 31 (see last issue p 489). The sharpest price rises occurred in Industrial raw materials (over 3 per cent or 10 points), followed by liquor and tobacco (2.6 per cent or 8.8 points) and food articles other than rice and wheat. In fact while the price of rice registered a slight fall (0.8 per cent) and wheat rose marginally (1.3 points), it was the price of meat, fish, vegetables and fruits which sent up the food prices index by 4.6 points or even 1.5 per cent. This is confirmed also by the 3 per cent rise in the Economic Times general price index for greater Bombay for August, the major cause being the rise in prices of condiments and spices by 15.8 per cent, oils and fats by 6.4 per cent, meat, fish and eggs by 8.2 per cent and vegetable and fruits by 5 per cent. The inflationary trend was thus at work in August. The long term anti-inflation programme is increased production and increased investments, to which reference will be made in the next section. Steps in this direction include getting the enlarged Plan outlay for the year to be invested speedily and using the increasing foreign remittance and exchange reserves for promoting further investment. A first step was taken in September in the government allocating Rs. 400 crores of these reserves (which had accumulated by September to Rs. 2,100 crores excluding gold and SDRs) for importing strategic goods and equipment for stock piling. In the short term, anti-inflation measures act on the supply of money. On September 11, RBI imposed a ceiling on further credit expansion, limiting its growth to last year's level. It is to be Rs. 2,100 crores compared to last year's Rs. 2,048 crores. This means that money supply this year will increase by 12 per cent (excluding food procurement and fertiliser imports advances) and its effect on prices will depend on the rate of growth of the economy. The usual practice of announcing the credit policy on the eve of the busy season (November to April and May to October) has been given up with this announcement for the year, because of the system of quarterly credit budgets within the frame of annual budgets now in vogue. The regulations on interest rates structures cash and liquidity ratios, (see last issue p 489) inventory and working capital norms will continue unchanged. Some of the industrial sectors have offered to contribute to this anti-inflationary effort.

The Indian Cotton Mills Federation has offered to increase the production of controlled cloth beyond their quota to meet the festival demand. The Indian Sugar Mills Association has agreed to keep the retail price of sugar at Rs. 4.98 per kg. all over the country during the season. Vanaspathi producers will keep their production at the June/July level and the price at Rs. 16.5 per kg. The Finance ministry is negotiating with the Central government employees the withdrawal of the last two D.A. instalments as a result of the price index having fallen—as a further anti-inflationary step. This however may have to be reviewed in light of the recent (the last 4 months) price rise.

The Economy and Industry: Two reviews of the Indian Economy—one by the RBI and the other by the World Bank—register a positive note. The RBI report referring to the discipline imposed by the emergency and the gains registered as a result of the 20 point programme along with price stability, the bumper agricultural production, the increasing rates of saving and investment and the cushion provided by the growing foreign exchange reserve, estimates a 5.5 per cent growth of the economy in 1975-76 and forecasts an even higher rate for 1976-77. Along with the increase of national income in 1975-76 by 5.5 per cent, agricultural production increased by 8 per cent (which it attributes to investments in fertilisers and water as much as to the good rains), the successful procurement of 6 million tonnes of rice (against the 4.6 million tonnes target) and 4.1 million tonnes of wheat and the import of 7.4 million tonnes of foodgrains—are all positive achievements. In the industrial field, the core industries like coal, power, steel, fertiliser, cement, and non-ferrous metals registered a plus 10 per cent growth, while textiles and some consumer durables and a minus growth rate, making the industrial growth for 1975-76 about half that of agriculture at 4 per cent. The World Bank report, while agreeing with this broad assessment refers to two basic weaknesses of the Indian economy. First, the agricultural sector has not really shifted to ensure long term growth which in the last 15 years has grown only as fast as the country's population and hence the need for imports. This is being corrected by the new emphasis on irrigation, fertiliser and HYV seeds, which are necessary as future foodgrain increases will not come from increase in the area under cultivation but from intensive use of these inputs and if this is successful, the World Bank report points, foodgrains production could move to an annual growth trend of 3.7 per cent. The second weakness of the economy is the sluggish pattern of industrial activity, due to inadequate supplies of industrial imports and poor demand for industrial products. This lack of buoyancy for industrial products can be corrected by ensuring intensive development of raw materials and power supply, it points out. RBI lists a number other measures such as the stepped up plan outlay in the public sector, reform of licensing procedures, easing of restrictions on the declaration dividends and issue of bonus shares, reduction in excise, income and wealth taxes, the relaxed import policy, the increased farm incomes and growing export demand which are countering industrial slackness, and points to the 11.5 per cent increase in industrial production between January and April 1976 as evidence of this upward industrial trend. The fiscal policy of the Union and States governments are reviewed and are shown to be aimed at maintaining price stability and mobilising resources—though the increase of non-development expenditures by 26.6 per cent as again the increased 19.3 per cent in development outlays was not a positive factor. Two rather important events noted in the reports are the increase in domestic savings 12.8 in 1973-74, 13.1 in 1974-75 and 14.5 per cent of Net National Product in 1975-76, due to mainly to increased public sector and household savings. The other event noted by the World Bank is the Bombay High find and its commercial production. The RBI report calls attention to the possibility of further increasing the saving rate by mobilising rural savings, due to increased rural incomes resulting from the bumper harvest, and as some return to the massive public investment in the agricultural sector over the years. Irrigation and power costs have also risen and there is need to raise resources from the beneficiaries in the rural areas, who in 1975-76 contributed only 6.2 per cent of the total tax receipts of the States governments and 3 per cent of the rural development outlay. It concludes with emphasising the need for continuing demand management in fiscal and monetary policies and pointing to the economy now having the capability for a higher growth in the next few years. On Industrial growth, the Union government's industrial production index for the first six months of 1976 shows a rise of 13 per cent. It was 18.2 per cent higher in June 1976 compared to January 1975 but in June it declined by 3 per cent compared to May and in April by 12 per cent compared to March. These monthly deviations are reported to be due to seasonal factors and estimates are for the year's industrial growth at 14 per cent. An official survey of 28 industries in July shows that in steel, textiles fertiliser, electricity, aluminium, tractors, agricultural machinery, paper etc. the rate was above the average of 9 per cent, while in zinc, lead, jeeps, soda-ash, jute, sugar and soap, there were small increases or decreases. The result was a growth rate of 14 per cent for the industries which carry a weight of 48 per cent in the industrial index. To further increase industrial growth, the Union government in mid September liberalised the policy regarding capacity utilisation under which those given permission for fuller use in 1972 can increase their production by 25 per cent over their licensed capacity, provided no additional machinery or foreign exchange is required. A further help in assessing the economy's performance is the decision of CSO to undertake a national economic census to collect information on the unorganised non-agricultural sector. The census will cover mining, manufacturing, trade, transport, construction and service sectors, covering over 2 million establishments employing one or more workers. This will provide a firm base for State and district level planning.

Public Sector Performance: 10 industries in the Department of Industries have during the five months, April-August, increased their production by 41.42 per cent, at Rs. 47.31 crores compared to the same 5 months in 1975-76, representing actually 98.61 per cent of their target. Hence the Department has increased their targets for the year by 26.5 per cent at Rs. 126.50 crores. HPF achieved in August 120.27 per cent of its target, with similar records by Instrumentation and Nepa. National Instruments and Hindustan Salts however registered a decline of 23 and 57 per cent respectively due to high inventories in one case and floods in the other. The industries under DGTD also recorded a growth of 13 per cent between January-July 1976—with baby food increasing production by 18 per cent, fertilisers 32 per cent, viscose yarn 45 per cent, polyester fibre 73 per cent, chloramphenicol 80 per cent, aluminium 47 per cent, machine tools 27 per cent, scooters

56 per cent, bicycles 22 per cent, structurals 34 per cent, transmission towers 34 per cent. The low performers were newsprint 13 per cent, commercial vehicles 12 per cent and Indian type leather foot-wear 5 per cent.

Steel: Steel production is on the increase, during the five months—April to August—the integrated plants producing 27,35,000 tonnes, a 26.9 per cent increase over the production for the corresponding period of last year. SAIL plants with a total production of 19,13,000 tonnes registered a growth rate of 39.3 per cent. Bhilai operated at 10.6 per cent capacity in July and 107 per cent in August, producing 1,75,200 tonnes of saleable steel. Rourkela operating at 101 per cent capacity produced 1,26,700 tonnes ingot steel in August. ASP producing 4,450 tonnes of saleable steel exceeded the target and Durgapur operated at 72 per cent. TISCO operated at 105 per cent, producing 1,31,300 tonnes saleable steel and IISCO producing 44,800 tonnes exceeded its target by 10.6 per cent. Bokaro also produced 108 of its capacity in 75,851 tonnes of pig-iron, with 28,744 tonnes of pig-iron for home despatches and 50,575 for exports. The increased cost of Bokaro from Rs. 1,270 crores to Rs. 1,910 crores provided in the Fifth Plan has had to be at the cost of the 3 Southern plants for which the allocation is reduced from Rs. 370 crores to Rs. 30 crores. (This means the Rs. 120 crores for Salem in the Fifth Plan will not be available). Three features of the steel situation in August/September should be noted. The demand for steel is not picking up—the August 1976 stocks were 12.8 lakh tonnes compared to 7.20 lakh tonnes in August 1975—an increased fall of 78 per cent over last year's demand. The direct sales from the steel plants between April-July declined by 1.5 lakh tonnes compared to last year and in most cases steel prices in the open market are below official steel prices. The urban ceiling legislation has brought construction to a stand still and further reduced steel demand. Second, steel exports are increasing. SAIL reports booking export orders for Rs. 320 crores and between April and August exports exceeded one million tonnes at Rs. 133 crores (in the whole of last year it was 92 lakh tonnes at Rs. 110.38 crores). Third, SAIL computes that for this financial year there will be an import of 3.5 lakh tonnes of stainless steel, sheets, plates, and strips valued at Rs. 113 crores.

Crude: In 1975-76, 13.67 million tonnes of crude was imported at a cost of Rs. 958 crores. The import of petroleum products was 3.2 million tonnes. In planning for the last two years of the Fifth Plan, indigenous oil production is increased from 12 million tonnes in the Draft Fifth Plan to 14.18 million tonnes taking into account Bombay High production. The refineries need 29 million tonnes of through-put, which means about 15 million tonnes will have to be imported in 1978-79, with petroleum products at 27 million, demand at 28.5 million tonnes and an import of 1.5 million tonnes of petroleum products. Thus our import bill of Rs. 1,150 crores for crude and petroleum products of last year will still be the same in 1978-79, unless petroleum prices are further raised. World wide oil production went up from 52.7 million barrels a day in January to 54.6 million barrels, the OPEC countries increasing their output by 8.2 per cent or 30 million barrels, which is near their record of 32 million barrels. With the world economy recovering, the demand for oil is increasing and there is a possibility that prices in 1977 may be increased by 15 per cent. This would add some 200 crores to our crude import bill, unless indigenous production is stepped up. The World Bank estimates rather conservatively that ONGC will increase internal crude production by 11.5 per cent in the next 5 years, excluding ONGC's Iran and Iraq finds, and its onshore finds in India. According to the report, India has 27 sedimentary basins, a very small number of which has been extensively explored. Kalinin the Soviet Geologist on the basis of his studies of onshore and offshore areas estimates India's oil reserves at 4,000 million tonnes, of which ¾ are onshore. At the present rate of consumption, these reserves will last 160 years. Current programmes are concentrated on onshore intensive exploration, where so far out of 3,000 million tonnes, only 120 million tonnes have been proven (4 per cent). The Fifth Plan outlay for ONGC has been increased four folds. ONGC has taken deep drilling operations in 2 onshore areas in the Ganga valley at Puranpur and Nurpur in Punjab, located in the fresh water rocks in South Himalayas. The takeover of caltex at between Rs. 10-15 crores—the buying of the 26 per cent ESSO shares, the takeover of Assam Oil Company and majority control over Oil India will be agreed upon by next month, giving the government complete control over the oil Industry. The Union government has increased from early September the rate of royalty payable to crude and casing oil from Rs. 15 to Rs. 42 a tonne, giving Assam Rs. 11 crores and Gujarat Rs 6 crores per annum for deployment in their plan programmes.

Coal: Western Coal fields, a Coal India subsidiary, reports production of 22 million tonnes for the current year, with plans to increase it to 25.40 million tonnes next year and 28.70 million tonnes in 1978-79, to meet the projected demand for coal from 57 mines in MP, 14 in Maharashtra and 4 in Orissa. It maintained its despatches in April-June 1976 at 47.69 lakh, despite the comfortable stocks of its main consumers—power houses, railway loco sheds, cement, textiles, paper, chemicals industries because of the quality of its product. On the export front, Japan is trying out Indian coal for the first time in Asia, in addition to Taiwan which has just imported 5.5 lakh tonnes of coal. In Europe Holland, Denmark, West Germany, Belgium and France import 6 lakh tonnes. The current year's export target is 15 lakh tonnes at Rs. 40 crores.

Copper, Aluminium and Non-ferrous Metals: The production of copper, aluminium, zinc and lead increased during the April-August period by 30 per cent. All 4 aluminium units are now operating at 88 per cent capacity, with Bharat Aluminium at the highest at 102 per cent. The target for aluminium production for the year is 2.2 lakh tonnes and for the 12 months preceding July 36,000 tonnes of aluminium have been exported, for this year the export will be 40,000 tonnes. Production of wire copper has increased by 36 per cent and wire bars by 64 per cent over the twelve months since August 1975. The targets for this year are 30,000 tonnes and 32,500 tonnes respectively. Zinc production was 27,829 tonnes in 1975-76, a 14 per cent increase, the zinc smelting capacity this year increasing from 38,000 to 95,000 tonnes (with the expansion of Debari and the commissioning of the Vishakpatnam smelter). Lead production increased by 7 per cent and the capacity of the modernised Tundoo smelter will increase from 3,600 tonnes to 8,000 tonnes. In view of the expected pick up in industrial activity, the decline in non-ferrous metals imports during the last 3 years is likely to be reversed (for last year it was Rs. 48 crores) and the government is planning larger imports of these non-ferrous metals to help industrial growths.

Textiles : In September attention was once more concentrated on three aspects of the textile industry. First the possibility of developing an integrated cotton textile policy is being studied in order to reverse the declining per capita cloth consumption from 16.8 metres in 1964 to 14.8 metres in 1972. For this cotton production must be increased by concentrating on higher yields and specific areas. In the meanwhile to arrest the rising trend in cotton prices, the government in September contracted to import a further 1.2 lakh bales, beyond the 2 lakh bales earlier decided (see Vol. VI p. 499). Second and simultaneously there is need to increase utilisation of installed spindles by the mills from the current 75 per cent to 96 per cent which will increase production per spindle by 50 per cent. Even more urgent is the need to modernise the plant and machinery of the textile mills. The government set up in September a high power committee to work out the modernisation requirements of this and the jute industries. It has been computed that the textile industry modernisation would require Rs. 400 crores and the jute industry Rs. 100 crores. The committee will examine these estimates and arrive at important conclusions in this regard, including the means of financing the modernisation programme. In this latter regard, the use of the accumulating foreign exchange resorces for quick import of some machinery may be examined. The government has also extended from September the excise duty relief scheme to certain items of the textile industry (staple fibre, nylon yarn and wool tops) to encourage higher production. This is the third point—due to exemption, from producing controlled cloth granted to NTC mills and those that export 20 per cent of their product, the supply of controlled cloth has declined: the production of 200 million metres per month was reduced by these concessions to 140 million metres from January, and still further reduced because of the spurt is cotton prices; the mills are producing shirting, whereas the festival demand in for dhoties and saris. Mills have been therefore asked to change over their production and meet this demand for controlled cloth, which now faces a sellers market. NTC plans for modernisation with the Rs. 67 crores allotted to it has reduced its losses from Rs. 5.08 crores per month last year to Rs. 92 lakh this July. Also the budgetting and costing control system has contributed to these reduced losses.

Sugar: On September 16, the Union government announced its decision to maintain the minimum cane price for 1976-77 at Rs. 8.50 per quintal and like last year related it to a basic recovery of 8.5 per cent, with a premium of ten paise per quintal, for every 0.1 per cent increase in recovery. Levy and free sale sugar will be maintained at 65:35. ISMA wanted Rs. 10 per quintal and the Southern States wanted Rs. 15 per quintal but once more price stabilisation terms have been dominant. The sugar industry in the South will be a difficult position, unless the State governments and the mills agree on a remunerative cane price for the farmer, which they should do. The Union government on September 21 announced excise relief to encourage higher sugar production in the coming season, under which excess production for the first 2 months over that of the average of the past 5 years will be charged only 25 per cent of the duty. For the rest of the season, the excess over the average of the last 3 years will pay 75 per cent of the excise. This is some relief to the industry, which must expand production this year to make up for the last 2 years lag. The government has also set up a 12 member national committee to examine the sugar industry problems to ensure higher efficiency, production and productivity, quality and improved processing Instrumentation. The decision of the industry to lower prices to below Rs. 5 per kg. has been noted earlier, along with the larger releases for the festival season.

Engineering Industry and Cement: A Survey of 157 engineering units with a capital of Rs. 1,002 crores and employing 2.26 lakh persons for the period October 1975 to March 1976 and April to September 1976 by the Association of Indian Engineering Industry shows that employment increased in 26 per cent of the companies in the period April to September against 21 per cent in the former period, 33 per cent of the companies faced financial stringencies due to non-payment of bills by customers, but with expending order books if development outlays release the needed funds. Capacity use is only 60 per cent and the expected increase in demand should improve this situation. Average unit costs were high for 40 per cent of the Units in the first period but was reduced to 27 per cent in the second period, with steady avarage selling prices. Though the steel offtake is slack as noted earlier, 45 per cent of the companies reported shortage in the special steels that they need which imports should relieve. In the wagon industry sector, where only 35 per cent of capacity is being used, the product mix is being diversified and a market minded product diversification is being planned to increase wagon production and so increase once more the demand for indigenously produced steel. To this end, the Railways are offering 3 year orders to manufacturers who will produce items still being imported by the Railways, including import licenses for unavailable raw material. On the cement industry front, the Planning Commission starting from the 1973-74 base of 14.67 million tonnes estimates that by 1978-79 the internal demand for cement will be between 19.33 million tonnes and 22.40 million tonnes plus 1.5 million tonnes for export. This results from applying the growth trend of the past 24 years of 7.7 per cent per annum, leading to a production of 21.26 million tonnes by 1978-79.

Agricultural Production: The consultations between the Union minister of Food and Agriculture and the States Chief Ministers resulted in the decision to maintain the price of coarse paddy and other kharif cereals at Rs. 74 per quintal. This was the recommendation of the Agricultural Prices Commission which also recommended the procurement target of rice at 5.5 million tonnes against last year's 4.6 million tonnes, with Andhra and Punjab at 12 lakh tonnes, Uttar Pradesh 7.5 lakh tonnes, Haryana 4.75 lakh tonnes, Tamil Nadu 4 lakh tonnes, Madhya Pradesh and West Bengal 3 lakh tonnes each, Assam and Orissa 2 lakh tonnes each, Karnataka 1.5 lakh tonnes, Maharashtra one lakh tonnes, Bihar 50,000 tonnes, Jammu and Kashmir and Kerala 40,000 tonnes each, Gujarat and Rajasthan 30,000 tonnes each and other States 35,000 tonnes. Bonus to the States on the basis of their supplies to the Central Pool should be continued and used for inputs supply, including fertilizers at lower prices. There was general agreement with these recommendations, particularly to reduce the price of farm inputs. On coarse grains, no procurement target has been established but support price action will be taken to prevent their prices from falling as they are doing in Rajasthan and Haryana. The Union government is also working out with the State governments the rabi strategy to ensure the timely supply of inputs—fertilizers, pesticides and HYV seeds and adequate irrigation, which, with the improved power and diesel position, should make the position comfortable. The excess rainfall in the Northern States, Punjab, Haryana, UP, Rajasthan and MP which contribute more than three fourths of the rabi output will ensure a good crop. On the food production target, the Planning Commission agreed to review its lowered production target—from 140 million tonnes to 125 million tonnes—in consultation with the Union ministry of food and agriculture and the result is 132 million tonnes referred to earlier. The government reports that its September information was that the kharif harvest will be a bumper one, with cane production 5 per cent higher, the groundnut crop in excellent condition and coarse grains—bajra and jowar—at last year's level. It estimates that the production for the year ended will be 119 million tonnes rather than 118 million tonnes. In this context, the government also reports that its official committee on the size of bumper stock of foodgrains has proposed for the Fifth Plan a buffer stock of 11 to 12 million tonnes, a pipeline stock of 5 to 6 million tonnes and a peak level stock of 3 to 4 million tonnes, adding up to a total of 20 million tonnes. The FCI holds a stock of 13 million tonnes and the total storage capacity of the Union and State governments amounts to 19.8 million tonnes. In addition to this year's allotment of Rs. 20 crores, Rs. 40 crores is being made available for the next 2 years to increase storage capacity of 1.5 million tonnes annually. A decision on the buffer stock policy can and should now be elaborated. Fertiliser consumption according to the government during the rabi this year is expected to increase by 35 per cent, with a 26 per cent increase in nitrogen, 59 per cent in phosphatic and 61 per cent in potash fertilisers. FAI more conservatively estimates an increase of only half that rate 15 per cent, based on the wide gap between actual fertiliser consumption during kharif against the earlier estimates. But FAI also estimates that there will have to be built 5 additional large fertiliser plants to meet the nitrogenous consumption demand in 1983-84, in addition to the projects now under construction. The present gap between production and demand is 5,50,000 tonnes and by 1983-84 will be 103 million tonnes, which the 5 plants to be built will meet. In September, the annual 2 day conference of State irrigation ministers met, gave their general support for the draft model irrigation bill aimed at removing variations in the irrigation practices of the country, emphasised achievement of targets in physical terms and not financial ones, identified priority irrigation projects for each State, approved preparation of perspective plans, cells to monitor of projects agreed upon, steps for increasing operational efficiency of canal systems and modernisation of the entire system, the setting up of cost control organisation and the integral planning of irrigation and agricultural operations at the micro level. The question of the National water Resources Council was not discussed at this meeting. On the farms strategy side, the ICAR recommends for Sutlej Ganga alluvial plains an integrated wheat based farming system, breeding of sugarcane varieties for achieving better productivity and higher sugar recovery, and sustained and strengthened ecological infrastructure for increasing total production. The government has introduced a programme for introducing improved farm implements in the new wheat growing areas of Assam, Bihar, Maharashtra, Orissa and West Bengal both to popularise the growing of wheat in this rice growing area and also counter the shrinking markets for agricultural implements in Punjab and UP since 1970. In Punjab rural artisans displaced from their work on the Persian wheel by canals and tube wells, and UP Khatris and Vaisyas took to producing threshers and other implements. Because of the fall in demand for the implements in these States, the new areas offer a good compensating market for these enterprises. A related problem is the findings of a Karnataka study of 1,000 marginal farmers and 500 agricultural labours which is that land holdings of these groups cannot be made economically viable within the available technological framework without transferring some of them out of the farm sector. Centres for the supply of agricultural implements like sprayers, powertillers, diesel pumpsets to these farmers on hire and a change in their cropping patterns is recommended. Another national study points out that the investment in the country's agriculture has about kept pace with income originating in that sector during the five years ending 1973-74. The income from agriculture increased from Rs. 15,283 crores in 1969-70 to Rs. 24,541 crores in 1973-74, investment in this sector in this period increased from Rs. 1,124 crores to Rs. 1,642 crores. That is income from Agriculture recorded an increase of 60.6 per cent and investment in agriculture increased by 46.1 per cent in the 5 year period. The higher growth in income due to both the higher prices in 1973-74 and restricted investment in irregation. Taking the percentage of investment to income from agriculture, it was 7.3 per cent in 1969-70, 7.1 per cent in 1970-71, 6.9 per cent in 1971-72, 7.7 per cent in 1972-73 and 6.7 per cent in 1973-74—a range of 6.7-7.7 per cent.

Exports: Again for the fourth month a trade surplus was registered. From April to July exports were Rs. 1,466 crores and imports Rs. 1,384 crores, yielding a trade surplus of Rs. 87 crores. Exports increased by 32 per cent compared to April-July 1975 and imports declined by 12 per cent compared to that period. The rise in exports was due to increase in non-traditional exports, steel (Rs. 133 crores), engineering goods (Rs. 140 crores) and leather manufactures (Rs. 75 crores) marine products (Rs. 44 crores), coal exports will be 14 million tonnes, tea (Rs. 38 crores) etc. For the year, exports will reach the target of Rs. 4,500 crores. On the import side, food and fertiliser imports have been suspended but there will be a sharp expansion of imports in response to industrial recovery and the Rs. 400 crores of imports that are planned. The imports at the end of the year will be Rs. 4,700 crores giving a trade deficit of Rs. 200 crores, which is right. This decline in the deficit (compared to last year's Rs. 1,075 crores) coincides with a rapid growth in the country's foreign exchange reserves which increased by Rs. 183 crores in July to Rs. 2,312 crores. During 1976-77 remittances from abroad will be of the order Rs. 1,200 crores. IMF was repaid 62 million SDRs (Rs. 61.44 crores) in April. However, the foreign exchange reserve should be used for boosting production and investment, and not for repaying debts. Also allowance must be made for some erosion of the export earnings due to the decline in its dollar price. According to a World Bank assessment the expansion of Indian exports in volume terms is currently declining from 8 to 6.5 per cent for 1975-76 because of the 1.5 per cent decline in dollar prices. But the most sobering fact about the export performance is that India's share in the total world exports of $ 764,900 million in 1974-75 was a mere 0.51 per cent and in 1975-76 is expected to rise to 0.54 per cent. (The share of the developing countries is 27.4 per cent, about 10 per cent of it being oil exports from OPEC countries). The chemical units are planning an export of Rs. 150 crores, while the chemical industries will surpass last year's exports of Rs. 1,200 crores. The projects and exports division of STC exported railway and engineering equipment of Rs. 18.4 crores in the April-August period, an increase of 63 per cent compared to last year's first five months. India's export to EEC of textiles and leather will for now continue without quotas, as a small help towards India's widening trade deficit with the EEC countries. During the first 4 months of the financial year, spices exports earned Rs. 10.3 crores, engineering exports which are running at the rate of Rs. 500 crores this year will reach Rs. 650 crores by 1979, thus emerging as the top foreign exchange earner, replacing in this regard the traditional items like jute and tea. Garment exports to US running at the rate of Rs. one crore per month and hand-knitted carpets running at the rate of Rs. 3.5 crores per month are also expanding. As noted earlier, the Union government has allotted Rs. 400 crores of foreign exchange for the import of essential raw materials and industrial inputs both to meet the needs of growing industries and build a buffer stock in them—as a boost to exports. Also Lok Sabha, before it adjourned in early September, adopted a bill amending the Central Sales Tax Act in order to exempt export sales from the tax. This exemption from the Central Sales Tax of export sales will make them a little competitive internationally. The government has also under consideration the estimate of the Engineering Export Promotion Council that the export oriented engineering units need soft loans amounting to Rs. 100 crores for their modernisasation, in order to cut down costs and become competitive in the world markets. This is one of the projects the IDBI has under study. Towards the end of September, the Rupee was revalued vis a vis sterling, being the eighth time the revaluation was undertaken since being delinked from sterling. The Rupee value was maintained at Rs. 9 to the dollar for imports. This means that importers should book their non-sterling foreign currency requirements speedily and exporters should take their export cover not in one go but on a continuing basis.

Aid: Despite large foreign aid receipts (the World Bank reports that India received $ 894 million in fiscal 1976, an increase of $ 54 million over the previous year), the government reports that the Fifth Plan foreign aid percentage of total investment will be 3 per cent compared to 7 per cent in Fourth Plan. Out of the total Fifth Plan investment of $ 63,000 million the net foreign aid will be $ 1,935 million. In September, the World Food Programme announced commodity aid of $67 million to irrigation projects in Maharashtra and Karnataka. UK aid to India this year is expected to amount to £ 45 million, all in the form of outright grants.

International :

World Monetary Reform : On September 15, IMF held its third gold auction at which 7.80 lakh ounces of gold were sold to 14 biddders at an average price of $ 109.40 per ounce, the actual sale price ranging from $ 108.76 to $ 114. The auction earned $54 million for the special fund to the poorest nations. $ 184 million have been earned in the 3 auctions so far held and another 13 will be held in the coming months. The Fourth auction is to be held on October 27. The price at the third auction was better than the market expected, the gold price ranging around $ 115 per ounce throughout September. Sterling once more fell in the month and on September 20 was quoted at $ 1.715 to the pound (a 42.2 per cent depreciation since December 1971)—caused by Deutsch mark speculations, rise in UK money supply and the discouraging IMF report. The dollar, on the other hand, was rising during the month. India's quota in IMF will increase from SDR 940 million to SDR 1,145 millions—being the 8th position—within the year when the comprehensive reforms in monetary reform become effective. India is one of 39 MSA countries to whom IMF disbursed SDR 13.8 million, including SDR 7.2 millions to India. Also India is one of 61 countries eligible for 25 per cent of assistance from the Special Trust Fund, set up out of the proceeds of the auction, under which concessional loans at 0.5 per cent interest repayable in 10 years after a 5 year grace period will be available to the country.

World Economy: The IMF 1976 annual report to its Board of Governors meeting in Manila refers to the recovery in 1975-76 of the world economy from the *worst recession of the last 4 decades*. In 1974 and 1975 the affluent countries economies declined by 1.5 per cent, with the short of revial in the first half of 1976. In the second half of 1975 they brought their inflation to 8.5 per cent, in dealing with inflation, unemployment, excess plant capacity and general economic slack. But they face the threat of revived inflation as they tackle the necessionary forces. It therefore proposes a judicious combination of fiscal and monetary policies aimed at restraining aggregate demand to ensure stability and curtailing unemployment. Also an income policy should be added to this demand management based on nominal GNP, involving a rate of growth only marginally above the assumed rate of growth in economic capacity. The non-oil producing developing countries faced severe balance of payment difficulties due to recessionary condition in the industrialised countries. The developed countries through avoiding large scale resort to restriction on current payments or competitive devaluations went in for import and trade controls which reduced world trade and hit the developing contries trade in particular. The industrialised countries reduced their imports and expanded their exports and so turned their balance of payments deficit into a $ 25 billion surplus mainly at the cost of OPEC countries. For the non-oil producing countries, the recession involved worsening of their terms of trade, resulting in a current account deficit of $ 35 billion in 1975, compared to the deficit of $ 28 billion in 1974, to meet which they borrowed external funds heavily and drew on their reserves. Out of 202.8 billion SDRs of official reserves, as at 30 April 1976, industrialised countries held SDR 106 billion, oil exporting countries SDR 50.8 billion, the more developed of developing countries SDR 15.5 billion, and the least developed SDR 28.4 billions. The World Bank in its Annual report refers to the developing countries maintaining high average growth rates in 1974 and 1975 at an average of 5.4 per cent. But the poorer countries in Asia and Africa had a growth rate of only 2.8 per cent which offset their population increase. These countries faced their difficult economic problems by tax reforms, hiking domestic petrol and food prices, stimulating agricultural production, adjusting their exchange rates, increased resource mobilisation, strict fiscal and monetary policies and increase in public investment. They also faced dilemmas in activating the poor in maintaining farmers incentives, holding back wage increasing productivity. The report states that the long term prospects for adequate food supplies in these countries are not bright; by 1985, seventy seven million tonnes will be needed by them to fill the gap between domestic production and demand. They are spending 30 per cent of their export earnings on food imports. In 1974 the external debt of the developing countries rose by 24.2 per cent (compared to the 1973 rise of 20.4 per cent) at $ 29,531 to $ 1,51,399 million. The total flows of resources to developing countries in 1975 according to OECD, the report says, was $ 35.832 million or 1.02 per cent of the combined GNP of the industrialised countries. ODA increased from 0.33 per cent in 1974 to 0.36 in 1975. It should be noted however, that only 46 per cent of the net disbursements of the OECD countries was on concessional terms—and it is this component that must increase for their development. Thus the fifth replenishment of $ 9 billion for IDA becomes vital and this together with restructuring of the IMF system to meet the needs of non-developing oil countries will be one of the major issues at Manila in October.

UN Law of the Sea Conference : The fifth session of the UN Law of the Sea Conference adjourned on September 18 without agreement on the basic issue of the deep sea bed mining for nickel, copper, cobalt, manganese and other resources. The US, Japan and other industrialised countries wanted that multinationals and smaller private units should have the same access to the sea bed as the International Sea Bed Authority's (ISBA's) mining arm Enterprise. The developing countries, fearing the development of the industrialised countries' monopoly in this area, wanted Enterprise to be the supreme and regulatory authority for mining the sea bed. The US in an effort to arrive at an agreement, offered to put Enterprise on its feet with money and technology, simultaneously with the operations of private firms, provided the Treaty guaranteed for 25 years the activities of private firms, after which there could be a review. The offer, however, lacked details and the developing countries therefore could not commit themselves to this formula. In the absence of agreement on this major issue, all other issues—the extent of the coastal States' continental margin with oil potential, the exclusive economic zone, the rights of free navigation claimed by super powers, pollution control, free access of research vessels and the rights of land locked countries—were shelved. The issues involved are so complex and important that there is no use holding such frequent sessions without prior intergovernmental negotiations. The seventh session is planned from May 23, 1977, and in the intervening 8 months governments should consult together to arrive at a working agreement.

Conference on International Economic Co-operation (CIEC) : CIEC Co-Chairmen prepared a document along with these proposed by 19 developing countries. Sweden and EEC for the meetings of the 4 commissions in September, October and November. Commission I will deal with energy—resource availability, its forecasting, conservation and development, energy prices and purchasing power of energy export earning, *including* proposals for the preservation of energy export earnings. Commission 2 will deal with raw materials within the framework of UNCTAD IV's integrated commodity programme and will concentrate on improvement in commodity market structures, export earning and commodity trade. Commissions 3 and 4 will deal with the debt problems of the developing countries, balance of payments financing, development and agriculture and co-operation on industrialisation and technology transfer. The preliminary discussions in September do not augur well for the CIEC session. Industrialised countries have rejected a global approach to the problem of third world indebtedness, as they did at Nairobi. There is likely to be some hard bargaining at the October sessions.

Developing Nation's Conference: Developing countries—the group of 77—met in September for 9 days at Mexico to discuss and agree upon economic co-operation among themselves—on the basis of a 50 page document, developed by a preparatory committee proposing creation of new groups of raw material producers, multinational companies jointly owned by developing countries, financial and technology co-operation without any interference from outside. One outcome was the launching of a *Centre for Economic and Social Studies* of the developing countries in Mexico city to bring together information and studies on development projects undertaken by the developing countries. The conference approved a list of proposals calling for further expert study, with the help of UN agencies, such as new corporations to be jointly owned by developing countries' governments, new grouping of raw materials producers under a single umbrella organisation, wide spread of market information and technology, a special bank, monetary unit and a payments union for the third world. The conference is part of the movement of the development of the third world consciousness of their rights and responsibilities for a new world order.

World Trade: The value of world trade in 1975 according to a GATT study, was $880 billion, as pointed out earlier which was a 5 per cent increase over 1974, but the volume in real terms declined by 5 per cent compared to the 5 per cent rise in 1974. This was due to the world recession, with export prices ruling high, the value of international exports rose by a small 2.9 per cent. In this context India's export increase of 10 per cent was no unsatisfactory. For the developing countries the value of exports fell by 5.2 per cent, their quantum by 14 per cent, and *their unit value rose by 4.5 per cent in* 1975. 1974 was a boom year, with primary commodity prices rising by 71 percent and falling in 1975 by 1.9 per cent, minerals rising by 172 per cent in 1974 and by 5 per cent in 1975, crude by 228 per cent in 1974 and 1.7 per cent in 1975 and fertilisers by 146 per cent in 1974 and 82 per cent in 1975. In a sense 1975 was a year of technical correction of the 1974 boom prices. GATT forecasts a rise of 10 per cent in world exports in 1976, mainly due to the need for restocking raw materials and semi-manufactures by the industrialised countries. This continued recovery of demand in industrialised countries, a continued import demand rise in oil producing countries. and further expansion of the socialist countries' foreign trade will raise the global export trade in 1976. Non-oil producing developing countries will, however, have a current account deficit of $33 billion in 1976, with a lowering of their per capita income and consumption unless offset by adequate foreign aid and credit.

World Agriculture and Food: FAO's annual commodity review and outlook 1975-76 forecasts an 8 per cent increase in world production of wheat and coarse grains in 1976-77, with increased world trade in agriculture and improved agricultural prices. In 1974 world trade in agriculture fell by 4-5 per cent but expanded to 14 per cent in 1975. But for developing countries there was a fall of $900 million in their earning from exports of agricultural and fisheries products, which would have been larger but for the large $1,500 sugar export earnings. On the food production front, both FAO and IWC forecast good harvests in 1976-77. FAO estimates good to excellent crops in Latin America, North Africa and East Asia, and average rice crops in South Asia, except Sri Lanka which is facing a drought. It forecasts wheat production at 393 million tonnes (11 per cent above 1975-76), coarse grains at 703 million tonnes (6 per cent above last year) and rice at 227 million tonnes (minus 2 per cent from last year). IWC estimates world export of wheat in 1976-77 at 68.5 to 73 million tonnes, with stocks in the hands of major exporters remaining unchanged at 37 million tonnes. Its forecast of world wheat production is slightly below that of FAO at 374 to 387 million tonnes—US 57 million tonnes, Canada 20m to 21m, Argentina 9m to 10m, Australia 8m, EEC 39m to 40m and USSR 80-85 million tonnes.

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II Agricultural Development

Paddy and Foodgrains:

Paddy production for the Kuruvai season is in a parlous position with the failure of the South West monsoon as a result of which Mettur is, as noted earlier, almost empty and all other irrigation systems like Vaigai and Tambaraparani are dry. In consequence, only 5 lakh acres are under Kuruvai paddy, so that the year's target of 81 lakh toones of foodgrains seems a long way off. In Thanjavur sowing is going on and agricultural operations are on a day to day basis. The inadequate flow of irrigation water in the Cauvery basin area is a source of worry to the farmers and the visit of the two Union teams referred to earlier—one on drought and the other on sharing of the Cauvery waters between Karnataka and Tamil Nadu—have not brought any relief in September to the farmers, depending on the GA canal. The teams saw for themselves the limited growing of paddy in their visits to Thanjavur, Pattukottai, Orathanad, Peravurani and parts of Mannargudi and Kuruvikarambai. If Karnataka is not able to release any further water from Krishnaraj Sagar and it faces its own needs in this regard, some part of the kuruvai crop will be lost. The State Department of Agriculture is, in the Northern districts of the State, getting farmers to switch to large scale cumbu cultivation in place of the traditional ragi. Raising ragi the farmers got an average of 300 kg. per acre and a gross income of Rs. 300. KMI cumbu on rainfed conditions yields 600 kg. per acre and Rs. 600 per acre. Two villages, Chittalpakkam and Vittalapuram, have been selected for growing cumbu in place of ragi on a large scale compact block. 50 farmers over 100 acres have been provided with the inputs and within a short period of 90 days, the cumbu can be grown and be replaced by a second crop. The demonstration has caught on with the good performance of the cumbu crop and the Department is planning a Statewise campaign to grow cumbu for the next season. In the meanwhile, present farming conditions are difficult. Even the groundnut crop has been affected and over 20 per cent of the area where groundnut crop is normally grown, there is no sowing this year.

Research Results:

The Central Rice Research Institute has evolved new paddy strains capable of yielding 5-6 tonnes per hectare with low doses of fertilisers, average management and minimum plant protection measures. They have good milling and hulling capabilities and can be grown in those areas in the State where HYV cannot be grown. ARI in Patna has developed early maturing drought resistant varieties of paddy for cultivation in dry lands. They are Bala, Cauvery, IET-3226 and EET-2914 and can be used in areas in the State where paddy is grown in the monsoon season, even when the monsoon is weak. Varieties resistant to brown hopper have also been devoloped hy the Centre and among them MR-1523 is being diffuses widely and should be propagated in this State in HYV areas where the hopper menace is serious. Also the Department had devised measures against the hopper pest, including draining the field of water, dusting the basal clumps with sevin or BHC 10 per cent dust and protective spraying of pesticides such as Endrin, Parathion etc. These prophylactic measures are needed in Karikkanchal, Nechikkattumoola, Kalanjuttapadam, Mannupadam and Edathira in the neighbouring State and are spreading into the nearby districts. Another pest referred to in Vol VI p 455 the bunchy top disease affecting banana plantation in the 30,000 acres of the Palani hills is being tackled under a Rs. 18 lakh Union scheme. 10,000 acres of this area is being cordoned off and the virus which results in a decline in productivity of the crop affecting plants and its suckers, are being treated for their eradication. The Tamil Nadu Agricultural University's Regional Coconut Research Station at Veppamkulam has developed a hormone weed killer 2 which counters the excessive shedding of coconut buttons when the coconut plant suffers from long periods of drought and restores normal health to the fruit set. The Station has also made large scale trials to the coconut varieties best suited for large scale cultivation in the Thanjavur district climate and soil and the result is that Tall X Dwarf hybrids yielding 97 nuts on the average and the East Coast Tall yielding 74 nuts are the best suited ones, with 167 grammes to 222 grammes of copra content for the nuts and also are generally disease resistant. The University has also started a kind of agricultural engineering service to meet the engineering problems faced by the farmers with regard to their pump-sets which are not well maintained, the sprayers and spraying gadgets which often break down, the dry lands engineering problems of soil conservation, water harvesting and management, drainage etc. There is need for this service to be officially organised and made available to all districts where modern technology and inputs are in use.

Vegetable Gardening :

The unseasonal heavy rains in the Northern parts or the State are being used to promote vegetable gardening and also to help bring down the prices of vegetables. Seeds, fertilisers and plant protection measures are being made available to families and households, the milk booths in the Madras City areas serving as a good distribution outlet, in addition to co-operatives, super markets and educational and cultural institutions and centres. During the campaign run by the Department upto the end of August, Rs. 20,000 worth of seeds were sold, and it is planned to further intensify this vegetable gardening campaign. The Tamil Nadu Agricultural University's plant pathology department has come out with a package of vegetable gardening programme. For bendai, the pests can be treated at the seed stage with Agrosan G, followed by small applications of pesticide such as aldicrab granules and Endosulfan. For tomato, the nursery can be treated with wet ceresan a fortnight after sowing and the same pesticides used at periodic intervals,

Farmers Service Societies and Tamil Nadu Agro-Industries Corporation :

26 Farmers Service Societies are to be started in the State to make, available all requirements of the farmer including essential commodities under one roof. The Societies are being formed by merging village agricultural credit societies and from each society, the farmers will get short term, medium term and long term credit, fertilisers, pesticides, servicing of farm equipment like pumpsets and sprayers and assistance for local village industries. Also small scale industries will be organised, regular consumer activities undertaken along with marketing of the farm produce and the grant of consumption loans by the societies. Each society will be under a managing director and an agricultural official and two gram sevaks will work in the society. A start is being made in Gudalur (Madurai district), Mugavoor (Ramanathapuram), Marudur (Trichy), Alangudi (Pudukottai), Madapalli (North Arcot), Pallipalayam (Salem), Urundurpet (South Arcot), Malayadipalayam (Coimbatore), Middalam (Kanyakumari), Mangudi and Poovanur (Thanjavur district) and Kaliyanpundi (Chingleput). In addition to these 12 centres, proposals for 14 other locations are being finalised, 3 lead banks—Indian, Canara and IOB—are providing funds for farmers to buy 100 tractors and the National Co-operative Development Corporation has been requested to provide Rs. 37 lakhs for rural consumer schemes for 432 societies. The Tamil Nadu Agro-Industries Corporation in collaboration with Hindustan Machine Tools is taking up the manufacture of tractors and for providing farmers with equipment and inputs and help in marketing their product. In the Tirunelveli district, a project in co-operation with the Central Indian Medicinal Plant Organisation for extraction of sennacide from the senna plant is being started. The plant grows widely in waste and marginal lands. Also a fruit processing plant for processing the 25,000 tonnes of

pineapples grown by the Malayali tribals in the Kolli hills is being set up to help them secure a better return for their fruits. The take over from the North Arcot District Co-operative Marketing Society of its sick fruit processing plant, the setting up of the CFTRI macaroni plant at Guindy using the Gummidipoondi area tuber crop grown over 2,000 acres, an extension plant for the manufacture of blended foods, plants for the extraction of papain and pectin from the papayya fruit, liquid glucose from tapioca, tannin from myrobalan and essential oils from jasmine and geraniums are other projects being developed by TAIC. Its pesticide formulation factory at Ambattur will be commissioned by the end of the year. The Corporation is also planning the manufacture of power tillers, paddy thrashers, winnowers, maize husk hullers to be used by the small and marginal farmers.

Dairy Farming:

The Tamil Nadu Dairy Development Corporation is setting up fodder farms at Dharampuri and Nilgiris to popularise the use of green fodder by cattle owners, sell fodder and multiply the fodder crops and supply seeds and planting materials to the farmers. It is proposed to use the TNDDC vans going to the villages to collect milk also to transport fodder to the door step of the dairy farms. Certain varieties of fodder like Kozhukattaipul are being raised on fallow lands as a dry crop, along with a number of short duration wet crops which will not interfere with the paddy crop. A good fodder supply to the cattle is one means of bringing down the cost and price of milk.

Fruit Farming and Pearl Culture:

The growing of mandarin oranges in 250 hectares in the lower Palani hills is being launched on a 5 year basis at a cost of Rs. 4,32,500 and an income for this year of Rs. 1.25 lakhs. It is also a relief to farmers in Adukkam and Kumbarayur, where farmers have been seriously affected by the bunchy top disease in their banana plantations, as noted earlier. A 3 hectare estate at Pannaikadu is being developed as a nursery for the orange plants to ensure that they are free from diseases and pests. Large scale commercial exoploitation of pearl culture will pe undertaken in 3 years on the basis of the success of the experiments in pearl culture at Tuticorin and Veppalaodai laboratories of the Central Marine Fisheries Research Institute. In one year the size and quality of the pearls produced in the 2 laboratories are outstanding and the Rs. 11 lakh pilot project is to be duplicated in this State. A six months training course was inaugurated for 10 candidates from Fisheries Department of Tamil Nadu, Kerala, Gujarat and Orissa at the end of September. There is here a large potential which in a sense the country will be recapturing in relation to its past achievement.

Tea:

On September 18, 15 countries, including India which account for 75 per cent of the world's tea trade, approved at a meeting in Geneva a draft agreement to set up an Association to promote tea sales. The Association which is to "foster development and intensification of co-ordination of policy and action" to maintain and increase the international demands for tea was proposed after 10 days of discussion which agreed upon voting rights, finance and other issues of the new body to be called the International Tea Promotion Association. The 14 countries,—India, Argentina, Bangla Dash, Brazil, Burundi, Indonesia, Malawi, Mauritius, Mozambique, Rowanda, Sri Lanka, Tanzania, Turkey and Zaire have till March 1977 to consider the draft text and sign it at the UN in April. The Governing Body will act normally by consensus but a two-third majority vote can be asked by any country or group accounting for 1/10 of total tea exports. The Governing Body will appoint the Executive Director and decide on the secretariat location. In early September, the annual meeting of UPASI was held at Coonoor at which Tamil Nadu's record tea production of 60.4 million kgs. in 1975 based on continuous R and D work at the Annamalai Station was referred to, and an appeal made for a pragmatic land policy for the healthy development of the industry. The government at the meeting announced its decision to start two more co-operative societies so that the co-operative tea structure will cover 60 per cent of small plantation growers. India's tea production has picked up compared to the report in the last issue (p. 509). Due to improved production in North East India, the flood damage caused referred to in the last issue has been made up. North Indian tea at end June is computed at 112.1 million kgs., compared to last year's 94.7 million kgs. at this time. South Indian production at the end of June was 51.8 million kgs, 2.7 million kgs. less than last year; the July and August rains have helped to make up this small deficit, the all India crop at the end June being 163.9 million kgs., an increase of 14.7 million kgs. at the same period last year. Sri Lanka had a reduced crop at 102.7 million kgs., compared to last year's 118.7 million kgs. at this time. With increased African production, world tea production at June end was 334 million kgs., an increase of 5 million kgs. over the same period in 1975. Indian exports in 1975 - 76 was 211 million kgs. compared to the previous year's 220 million kgs., but earned more because of the higher unit price in UK at 63 d per kg. compared to 53.5 d in 1975.

Coffee :

The Tamil Nadu Coffee production for 1975 - 76 was 8,185 tonnes compared to 8,784 tonnes produced in the previous year. For the country, the Coffee Board reports that the 1975 - 76 receipts were 82,527 tonnes compared to the previous year's 91,956 tonnes upto August 15. The 9,000 tonnes reduction was due to adverse weather conditions. Of the crop received this season 32,663 tonnes were exported. Instant coffee exports are increasing from 300 tonnes last year to 600 tonnes this year, leading to setting up a third unit. Coffee exports which earned Rs. 66 crores last year are targetted to earn Rs. 90 crores this year.

Rubber :

Rubber production in 1975 in the State was 7,596 tonnes compared to 6,911 tonnes in 1974. For the country, natural rubber production recorded an increase of 7.6 percent at 35,344 tonnes during the period April to June, compared to last year's 32,835 tonnes during this period. Rubber prices in the domestic markets are low at Rs. 610. Hence the persistent demand for export to take advantage of higher international prices. A new use for discarded rubber seed has been discovered by Sri Lanka scientists as animal feed. The kernel after oil extraction has been found to be as nutritious as linseed or cotton cake for the cattle and can be used whole or incorporated into feed materials.

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III Industrial Development

Tamil Nadu Industrial Enquiry:

The State government set up in September a five member committee headed by Mr. R. Venkatraman to make a comprehensive study of public sector industrial corporations in the State in order to improve their efficiency, their contribution to industrialisation and their assistance to entrepreneurs. The corporations to be reviewed are TIIC, TIDCO, SIPCOT, SIDCO, Tamil Nadu Ceramics and Tamil Nadu Sugar Corporation. They are 37 corporations in the State of which 14 are operational, 9 under implementation and the rest in various stages of project studies. The joint sector projects will also be reviewed by the committee which will identify the areas to be strengthened such as production, marketing, personnel and finance, advice on each corporation's course of further development, and make recommendations for the integration, co-ordination and rationalisation of these Corporations. In this connection, the Financial Express inter-State industrial indicators (September 13) compares the Pande Committee ranking under which Tamil Nadu in 1969 was the second most industrialised State with that of its own survey under which Tamil Nadu slips to 4th position after Maharashtra, West Bengal and Gujarat. The most serious slippage is in value added per worker where not only is Tamil Nadu well below the all India average but ranks 9th after Maharashtra, Bihar, Haryana, Karnataka, Punjab, Orissa, Gujarat and Rajasthan.

Salem Steel:

The revised Fifth Plan has not provided for the Salem steel plant's development as noted earlier. For all 3 Southern Plants for the last 2 years of the Fifth Plan only Rs. 30 crores have been provided which means that next year's allotment of Rs. 5 - 6 crores will be merely a holding operation. It remains to be seen whether some further funds can be found to invest Rs. 120 crores in the 2½ years left for the Fifth Plan in the Salem project.

Neyveli:

The civil works for oil gasification of the fertiliser plant costing Rs. 13.5 crores at Neyveli was inaugurated on September 1. With this, a start should be made to end the use of obsolete technology and the under utilisation of the plant. The conversion of the fertiliser unit feed stock to oil is against national policy to economise on oil in industrial operations. In Neyveli, the unusual decision was taken to conserve lignite for power generation and avoid the losses to the fertiliser unit from using lignite as the feed stock. FCI which is undertaking the conversion as a turn key project will complete the work by March 11, 1979. In fact a recent survey of Coal India of industries in the South using oil shows that one million tonnes of coal will be used by the industries surveyed if they opted to convert to coal. Tea gardens in Tamil Nadu and Kerala have started the conversion with one lakh tonnes of coal per annum. The textile industry at present consuming 96,000 tonnes of furnace oil per year could easily convert to 100 per cent coal, with an annual coal demand of 2.50 lakh tonnes.

Madras Surgicals and Madras Fertilisers:

A study by the Indian Institute of Foreign Trade has recommended a tie up between IDPL's surgical unit, Madras and small scale units manufacturing surgical instruments as a means of solving the twin problems of idle capacity in the surgical unit and the shortage of skilled workers in the small units. The surgical unit has an idle capacity of 90 per cent due to its high priced products, their over size and the unavailability of stainless steel. On the other hand the small scale units in Jullunder, Kerala, Bombay and Calcutta lack skilled workers for making the instruments. The two should therefore be brought together and both should submit to compulsory preshipment and quality control. To keep up with the latest developments in surgical instruments, it is recommended that CSIR should create a surgical instruments cell in CSIO at Chandigarh. With a view to enlarging exports, it is also recommended that the industry should diversify its product lines to produce disposal syringes, needles, blades and stethoscopes. To meet the growing Middle East demand, these small units should form consortia and keep in liaison with PEC, EIL and EPI to enjoy some of the advantages of scale. The government and the industry should act on these timely recommendations. Madras Fertiliser's third NPK unit was commissioned on September 26. The unit will produce 1.80 lakh tonnes additional complex fertilisers per annum which will mean that Madras Fertiliser will be producing annually 5.40 lakh tonnes of fertilisers. This was one project extension which cost Rs. 8 lakhs which was less than the cost estimate of Rs. 8.5 crores, and was completed in 23 months—2 months ahead of schedule.

SIPCOT:

SIPCOT reports removing financial constraints and co-ordinating its programme with TIIC for financing industries —using for example common application forms for the financial aid sought by entrepreneurs. SIPCOT has retained Tata's Economic Consultancy Service to prepare project profiles and feasibility reports for setting up industries in the State. The reports will be available for prospective entrepreneurs by the end of the year. SIPCOT is working on the third industrial complex in the State and has set up a revolving fund of Rs. 50 lakhs for advance aid to units in view of the long delays in obtaining Union government subsidies for backward areas industrial councils. It is also awaiting the State government orders of the liberalised interest free state loan equal to 48 per cent of assets repayable in 18 years as announced on August 30 by the Governor.

TIIC:

TIIC reports that it is extending immediate financial assistance to industrial units to set up their own generators in view of the power cut. TIIC will of course determine the level of ability which the generator will help to achieve compared to its past performance, as buying generators may also add to the problems faced by the unit. The Corporation is also assisting units to purchase diesel engines in case the engines with the necessary mechanical drivers will be adequate to run the unit—and will be cheaper than the generator set. To speed up the grant of loans, the managing director is now authorised to sanction loans, of up to Rs. 3 lakhs and the Executive Committee from Rs. 3 to Rs. 5 lakhs.

Sugar :

The State Government announced in September plans to increase sugar production by 50 percent in the next 4 years. At present the installed capacity in the private and co-operative sector is 29,400 tonnes crushed per day. Two co-operative sugar factories each with a capacity of 1,250 tonnes are coming up at Vellore and Tirupathur and will go on stream by 1977 January, as will the Thanjavur sugar factory with a capacity of 1,250 tonnes. Another public sector unit in Perambalur in Tiruchi district will be ready by July 1977. The government holds 6 more licenses to put up factories at Sankarankoil and Mayuram (Tiruchy district); Tirukoilur (South Arcot), Sivaganga (Ramanathapuram), Tiruttani (Chingleput) and in Coimbatore. Sugarcane cultivation is also being expanded and intensified. While 1975-76 sugar production in the State had fallen to a disastrous 20 lakh tonnes, the 1976-77 estimate is 38 lakh tonnes, still a long way from 53 lakh tonnes production in 1973-74. The priority should be to expand the area under cane cultivation in the State, to induce farmers to grow more cane through adequate incentives, even before expanding the capacity of the State to crush cane which does not exist.

Textiles and Groundnut Oil :

Southern Mills have formed a consortium in order to export sizeable quantities of yarn to offset the slack domestic market for yarn. 30 mills have joined in this consortium which will act as a Clearing House on foreign firms needs for yarn and its quality, augmenting exports to existing markets and identifying new export markets. On the groundnut oil side, the government on September 2 has fixed ceilings on stocks that can be held by manufacturers and dealers at any given point of time. The ceiling will also be extended to growers. Oil is being bought from other States as well as a part from the Sudan imports by the Union government.

Handloom :

The State government announced at the end of August a Rs. 4 crores time bound programme to free handloom weavers from the control of master weavers. The programme will increase weavers in the co-operative sector from 1.5 lakhs to 3 lakhs, bringing 30,000 this year, make existing societies viable and step up co-optex sales from Rs. 17.5 crores to Rs. 50 crores. On the reservation of certain varieties for the handloom sector, after several false starts, the Union government in September decided to transfer production of controlled saries and dhotis on an experimental basis—to 20,000 looms in 6 States, to produce 2 million square metres of dhotis and saries in the last quarter of 1976. Under this programme, Tamil Nadu handloom weavers along with those in Andhra Pradesh, Kerala, Maharashtra, Uttar Pradesh and West Bengal will produce these varieties. The State Directorate will organise the pilot programme in this State.

Leather :

Leather exports for the 3 months, April-June, earned Rs. 75 crores compared to Rs. 39 crores in April-June 1975. Exports of finished leather was Rs. 24 crores against last year's of Rs. 5 4 crores during this period. Semi-finished leather earned Rs. 42 crores (last year's first three months was Rs. 27 crores). Thus leather exports which earned

Rs. 172 crores in 1974-75, Rs. 226 crores in 1975-76 will reach the Rs. 300 crores target for this year, semi-tanned hides and skins contributing Rs. 100 crores, finished leather another Rs. 100 crores, foot-wear Rs. 60 crores and leather goods Rs. 40 crores. This year both the quantities and unit value realisations are high because, as the FAO study on out-look for hides and skins points out, with the economic recovery in industrialised countries, the demand for foot-wear and leather goods is expanding. It points to the looming sales of leather fashion boots and leather garments, together with the consumer preference for other articles of naturul leather. With raw hides and skins representing two thirds of leather manufacturing costs, the prices of leather products will keep moving up, but may also lead to contraction of future demand for leather and make synthetics more competitive and attractive. However prospects for leather in foot-wear uppers which is still the main end use for hides and skins will have a prolonged period of rising demand as many synthetic factories producing promorics have closed down. Against this good international outlook, the leather industry in the country should use the government's increased cash subsidy (since May) to develop speedily structural diversification of the leather industry to produce finished leather. A World Bank team was visiting the leather industry in Madras in early September and assessed the functioning of the industry, its infrastructure of effluent treatment. It visited leather units in North Arcot and Erode and Coimbatore and made a positive report of the state of industry in the State. It will be assisting 7 leather good export complexes in the country, to be operated as public sector units from early next year. Madras will be one centre, the others being in Agra, Culcutta, Kanpur, Bombay, Jullunder and Meerut. The World Bank will provide both capital and working costs. Two of the complexes will specialise in shoe making, one in sports goods and another in industrial products. As a result, one million pairs of shoes of high quality will be produced for export.

Private Sector Reports:

The annual report for the Aluminium Industries Limited for the year ending 31 March 1976 shows a good record, increased sales from Rs. 1,130 lakhs in the previous year to Rs. 1,884 lakhs, exports at Rs. 149 lakhs and net profits at Rs. 100 crores. Its construction division increased its output, but the steel products division, though its installed capacity was doubled, increased its production only marginally because of recessionary conditions in steel demand which was also the record of the machinery division. The switchgear division performed well as did exports generally.

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IV Education, Science and Health

Educational Reform:

The seven member committee on unrecognised schools in the State (see Vol VI pp 328 and 463) visited seven such schools in August and found crowded class room conditions in two of them. It heard the views of parents, managers of these schools and teachers in the Coimbatore area and has invited particulars about their teaching techniques, textbooks, syllabus, examinations, fees, teachers qualifications, school amenities etc., on the basis of a detailed questionnaire. The Deputy Inspector of Schools in each area has been made responsible for conducting the enquiry. In response to a request from 600 schools to open English medium sections, the government has authorised a second 100 schools (50 government schools, 22 municipal schools and 28 aided ones) to open such sections. As of now the State has 200 schools with English medium sections. Another problem to which the government's attention has been called is the unviable schools—both higher elementary and high—in rural areas. Here there is a conflict between economy and equity. Many of these schools are in rural backward areas and the total strength of such schools is not even equal to the strength of one class in the major urban schools. And while the urban schools are started for funds, resources are seemingly abundantly provided for the schools in rural backward areas. The problem is that if these opportunities are not provided in those areas, education will become even more an urban facility than it is now. The way out is to increase the number of intake, to decrease the drop-out incidence and use these facilities more purposively and extensively for education including non-formal education of rural students. At a similar level, the Union government scheme for setting up common kitchen centres for poor students in rural college campuses is now being launched in this State. These poor students do not stay in hostels and therefore do not benefit from the controlled hostel mess food prices. Under the new scheme, colleges will have to provide suitable accommodation for the kitchens, the State Civil Supplies Corporation the local milk distribution and IOC for cooking gas will be helping, and the Union government will provide share capital contribution as margin money for college consumer co-operative stores at the rate of Rs. 15,000 per mess or common kitchen unit of 100 students and make a grant of 50 per cent of the cost or Rs. 5,000 for the purchase of essential equipment per common kitchen. This will be of great use to the students from poor families. The State government is also launching in 20 selected blocks to start with a health education programme for prevention and cure of eye diseases among children in rural areas. A survey of the rural areas showed that South Arcot, North Arcot, Salem, Dharmapuri and Madurai had the maximum incidence of eye diseases and blindness and it is here that the programme will aim at preventive and curative treatment, including special nutrition programmes for children. Parallelly a comprehensive schema of special nutrition is being introduced in Coimbatore to benefit 14,000 pre-school children and pregnant and lactating mothers. The scheme is called Medical Umbrella, provides for the take home supplement of 700 grammes of Balahar, vitamin A concentrates every 6 months to the pre-school children, their de-worming twice annually, a complete immunisation schedule for all enrolled pre-school children and mothers and supply of iron and folic acid tables for 90 days every year to mothers plus free drugs and medicals service. Andhra Pradesh is experimenting with non-formal education by starting night primary schools in one Panchayat Samithi block in each district. This along with staggering school hours and vacations to suit local working conditions will it is hoped increase enrolments and decrease the number of drop-outs. The Union Ministry of Education on the basis of a survey and report on Sikkim by the National Staff College is taking steps to introduce in Sikkim free primary education, expand facilities for higher secondary schooling and set up one full time degree college. The State with 2 lakh population has 100 primary schools and 6 high schools. To combat malnutrition, it recommends a mid meal programme for which a small Rs. 50,000 is provided. Sikkim needs further aid to generalise and modernise its education. The Union government also at the end of August decided to make the Saraswathi Mahal Library, Thanjavur a library of national importance, which will provide the library with the resources it desperately needs for preserving its valuable manuscripts.

Adult Education :

Madhya Pradesh has launched a non-formal education project for the age-group 9 to 14 to cover the primary stage curriculum. The formal primary school curriculum is the base but it has been condensed, reshaped and adapted to local rural needs and is to be covered in 2 years. The effort is not to make it a sub-standard programme and so avoid discrimination against non-formal students in relation to those in formal schools. This is the familiar contradiction faced by non-formal education and so this experiment should be watched with interest. 50 centres, 5 in each of the 10 educational divisions of the State have been started with a total of 1,000 students. The government has made available essential instructional materials and books free of cost and personnel for the 50 centres. Teachers engaged in this programme are given Rs. 50 for each successful completer, with 50 per cent at the end of the first year. The cost per pupil per centre is about Rs. 85 and the supervision is provided by an education inspector visiting each centre once a month, a college lecturer supervising it once in 2 or 3 months, followed by senior education department officers. A similar technique adapted to conditions in this State might be followed.

Technical Education :

The Union government has asked NCERT to organise vocational surveys for the country to guide the vocational streams to be introduced at + 2 stage. NCERT has asked the State governments to organise districtwise surveys to identify the vocational needs and potentialities of each district. The Planning Commission, Ministry of Labour and some lead banks have together already made such surveys in 8 out of the 370 districts in the country. The Centre of Regional Development in JNU has been entrusted with the task of collecting and analysing the findings of these surveys. District vocational officers are meeting in Delhi in October for orientation in the methods to be used in conducting the district surveys. NCERT expects that the district level vocational surveys will be conducted and completed all over the country by February 1977 and their results available for vocational curriculum construction by the State units in the summer months of 1977. IIT, Guindy started in 1973 an industrial consultancy service to provide to industries access to its facilities and meet the follow up research and other needs of the industries. The effectiveness of the service is seen in the fact that in 1973 - 74 it earned Rs. 19 lakhs, in 1974 - 75 Rs. 42 lakhs and in 1975 - 76 an estimated Rs. 60 lakhs. Now the

Institute has set up a centre for policy studies to undertake a scientific study of data in all fields where science and technology make an impact and attempt futuristic projections for use by policy makers. It will publish its findings on subjects ranging food and fuel to employment and population and should in this regard work closely with the futurist centre in the University of Madras. The Union government is planning to upgrade the central Siddha Research Institute into a National Institute for Siddha offering a diploma course.

Satellite :

The national communication system in the country will have a satellite component, a multi-purpose one utilising the France German communication satellite "symphonie". Korattur, 12 kms from Madras, will have an earth Station to conduct experiments with the satellite from March 1977. In collaboration with Arvi and Ahmedabad set up in connection with SITE programme, Korattur will be used by telecommunication engineers and ISRO scientists to establish through the satellite communication with remote areas. During its 2 year use, 1977-78 symphonie will also be used to provide multilingual sound channels along with the television picture. A mobile earth station is also to be set up which could be removed to a remote area and communicate with the stations at Ahmedabad, Madras and New Delhi. It could also function as a stationary unit and provide communication facilities for activities like mining and survey. Thus satellite communication is becoming an integral part of the development programme of the country. A Commonwealth study team which visited SITE in April also concluded that the main benefit of SITE was the confidence it gave the scientists and engineers in the country to use modern technology for the peoples' betterment— a lesson of value to all developing countries.

Science :

A related scientific project; the Recon-on-line demonstration project atTIFR—was inaugurated in September under which India is linked to world sources of information, providing instantaneous access to science information stored at global distances. The project links Colaba with the data base in Rome and involves the co-operation of PTT, OCS ministry of communication, BARC, UNESCO and ESRO. The country has thus now access to all science developments in the world. A second important scientific event was the international seminar on Himalayan Geology which brought together scientists from 12 countries and the GSI, ONGC, NGRI, Oil India and Union ministry of Steel and Mines at New Delhi in mid September. The seminar recommended further exploration and exploitation of Himalayas terrain for locating hydrocarbon and mineral resources, intensified geological, geophysical and geochemical fields and laboratory investigations into the sedimentary basins of the Himalayan region including the Ganga and Brahmaputra valley for location of oil and gas reservoirs, examination of hidden marine tertiary formations in the lesser Himalayan belt, studies on regional tectonics and evolution of the Himalayas to throw light on the habitat of oil in the region, the development of sophisticated geophysical instruments and equipment of the country, deep seismic sounding profiles to unravel deeper structures and metalic deposits in the Himalayas, proper evaluation of the hydel, fossil, fuel and geothermal energy resources of the Himalayas, and closer national collaboration between GSI and the academic institutions and international co-operation in the periodic evaluation of the data from critical sectors across the Mezzo Cenozic mobile belt running through several Asian countries. Its call for systematic scientific efforts, using all relevant concepts to search and evaluate deposits of copper, tin, tungsten and other metals in the region should be answered without delay. The National Environmental Engineering Research Institute, Nagpur after a survey of Calcutta air points out that over 250 tonnes of particulates and over 75 tonnes of sulphur-dioxide and oxide of nitrogen generated by domestic and industrial coal burnings and vehicular emission are polluting the air. The winter season is particularly bad. Over 50 per cent of citizens in the city are suffering from respiratory diseases due to air pollution. While this enquiry identifies the sources of pollutants, locations and quantity of emissions, it has not suggested solutions which is the urgent area of research. The work on solar research at IIT, Guindy was noted with interest at an international congress in Melbourne—particularly its application on a large scale for the heating and cooling of buildings in hot, humid coastal climates. CECRI, Karaikudi has developed electrostatic photographic paper for copying documents using local raw materials. A plant for manufacturing 300 tonnes of this photographic paper will need a capital of Rs. 36.79 lakhs at a cost of Rs. 19,000 per tonne. The return on investment will be 41 per cent. This can replace both foreign imports and the 2 firms using foreign technology manufacturing the paper. The Institute has also developed a paint stripper based on organic solvents and can remove enamel rubber and bitumen and coal tar based paints. It can be developed commercially by a plant with a Rs. 2.70 lakh capital producing 1.50 lakh litres per annum at a cost of Rs. 6.70 per litre. Similarly it has developed a liquid concentrate which inhibits corrosion of steel reinforcements embedded in concrete constructions. This too can be commercially produced by a Rs. 1.75 lakh plant. Following CSIR's Karimnagar experiment, the Union government's Integrated Rural Development Programme has selected one district in each State for concentrated attention. In each of the 19 districts of the 19 States, a rural science and technology complex will be set up in one village, where various science and technology national laboratories will work together to provide basic housing components for the scientists and (a) dormitory for volunteers, (b) a permanent training centre for training in agricultural, industrial and technological skills with the necessary demonstration plots, and (c) a mobile training cum demonstration unit that will help the villages and people who cannot come to the centre. For each district, action plans are being established: (a) to provide gainful employment to the rural poor, marginal farmers, landless labourers, artisans, (b) the job opportunities should be through the employment of science and technology, to make optimum use of local resources human, animal, plant, soil water etc. and (c) the programme should be simple to operate, economically viable and promote self-reliance.

Health:

The major health emphasis in September was with regard to the Family Planning programme. The State Government announced a package of incentives and disincentives to promote the small family norm—as applicable to government employees, those serving local bodies, co-operative as well as urban slum dwellers and rural peoples. Under this package, maternity leave and free medical aid are restricted to the first children, those with 3 children or less and those who have undergone the sterilisation operation will have preference in apartment allotment under the slum clearance programme and land assigment under the land reform measures. New entrants to State government service will have to give an undertaking to limit their children to 2 per family, a third being permitted if both children are of the same sex. Local bodies are being given financial assistance to reach their family planning targets, Madras corporation Rs. 20,000, Madurai and special grade municipalities Rs. 10,000 selection grade municipalities Rs. 2,000 other municipalities and panchayat unions Rs. 1,500. Accouchement charges are increased for the fourth and subsequent children unless sterilisation operation is accepted. Government loans for housing, scooter and car purchase will be given by preference to those who have undergone sterilisation operation. Every teacher must get a minimum of 2 sterilisation cases and when targets are fulfilled will receive commendation entries, merit certificates, cash awards and advance increments. As at September 5, 1,27,466 operations had been made against the State target of 5 lakhs for the current year. In August 50,000 operations were performed, compared to the 60,000 in April through July and the momentum is picking up with 20,000 sterilisations in the first five days of September. The whole State—at district and panchayat union level—is engaged in an intensified FP compaign in September. The co-operation of industrialists, business houses and voluntary agencies is being solicited. The Union government has introduced a new clause, 121 A, in the Central Service conduct rules to promote the adoption of the small family by government servants—so that for each family children will not exceed 3. The General Insurance Corporation has announced that the risk of sterilisation will be covered under its Janata personal accident policy. Kerala announced that it over-fulfilled its FP target in 1975-76 at 105.5 and that 25 per cent of couples in the reproductive age-group were protected against the 16 per cent all India average.

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V Employment

In the last 12 months, 50,000 out of the identified 60,000 bonded labourers who have been freed have to be rehabilitated in fresh employment tasks. So far only 3,000 of them have been so rehabilitated. The Institute of Tribal Cultural Research in different areas are being asked to conduct surveys on incidence of bonded labour and the National Labour Institute is drawing up plans for the rehabilitation of the freed labourers. SFDA and MFAL programmes as well as direct financing from State governments are being used in creating employment opportunities for the personnel. Plantation workers in 63 estates in Yercaus from September 1, have been given an increase in wages from Rs. 3.36 to Rs. 4 and Rs. 2.66 to Rs. 3.30 by the plantation Labour and Advisory Committee. Besides recommending improved housing for labourers, the committee is setting up a Rs. 3 lakh holiday home, an ESI hospital with 250 beds and 2 tailoring units to provide the workers families with supplementary income. The Institute of Applied Manpower Research is undertaking a Rs. 1.5 crore survey project to establish the national manpower needs in different sectors of the economy in light of which the educational and training systems of the country will be oriented. 66 sectors are to be studied and results published by April 1979. The Institute has completed manpower studies for the paper and cement industries and has established the manpower profile for Goa for the next 10 years. It is also planning a similar study for Karnataka. The Public Accounts Committee of Lok Sabha has made harsh comments on the lack of adequate preparation and the consequent wastes involved in the Rs. 50 crores crash rural employment programme (see Vol. VI p 466). The government's reply that it was carefully prepared, based on past employment generated schemes and continuously reviewed by a Committee of secretaries does not really meet the criticism that it was not based on prior surveys of local needs and was not what many unemployed families needed. Its results in terms of SMIP, drainage, flood control, afforestation and other programmes have still to be carefully and statistically evaluated.

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VI Other Items

National Council of Women and Federation of University Women:

In September two seminars—one National and the other State—of women leaders and workers were held. The national seminar of the National Council of Women addressed itself to the role of women in the 20 point programme, particularly in regard to closing its gaps through mounting a campaign against the growing illiteracy of women, forming a consumers council to hold prices down, changing food habits, promoting FP and the moral values of the house and society. The other State seminar dealt with women as agents of change and called attention to the need to change the masculine character of our society and ensure women's participation in political, trade union and co-operative decision-making.

LIC:

The Life Insurance Corporation celebrated its 20th anniversary all over the country. In the State celebrations, its importance in a low saving economy such as ours and its mobilising Rs. 3,000 crores as savings in the country were highlighted. The priorities for investment of its funds were established as power, housing, water and drainage and land development on the one hand, and the coverage of the weaker sections of society through group insurance schemes on the other. The urgency of providing health insurance to the University staff and students in the 17 Southern Universities was also emphasised.

Teachers Day:

Two celebrations of Teachers Day which falls on September 5 of every year, in commemoration of the educator Dr. S. Radhakrishnan were organised in Madras. One was at St. George's Cathedral where a campaign to help students from poor families with scholarships and a review of the educational system, calling for a commitment of teachers to the values of education were the keynote. The other was at a meeting of the Association of University Teachers where the need to safeguard the service conditions of teachers in the minority colleges and implement the Fifth Plan UGC scales were emphasised.

NTEC and ICSSR:

A meeting of the Primary Education Committee of the National Teachers Education Council was held in September at which a curriculum, using pre-primary methods and content for the first two years of the primary school, was adopted. Also a correspondence course for updating primary teacher educators and an M.Ed. primary education course were adopted. A meeting of the Research Advisory Committee of the ICSSR was also held in mid September at which 60 projects and 50 fellowships were reviewed and decided upon. The Committee also reviewed and approved a format for a mid term appraisal of the Council's research and training programme and decided to take up at its next meeting some 30 other projects which had been processed and were ready for review.

IRD and UGC:

The Tamil Nadu Agricultural University organised a 2 day seminar in mid September around the Dharmapuri district, which has been chosen by the Union government as the location in the State of the Integrated Rural Development Programme. After a review of its resources, soil, water and infrastructure, and its population and social structure, it was decided to recommend that the Tamil Nadu Agricultural University should be the technical executing agency for the project, and that it should help to form a consortium of colleges, research institutions and government agencies to help in the execution of the programme. A UGC committee visited Manipal, to examine the application of its General Academy of Education to be accorded 'deemed university' status. Particular attention was paid by the committee to professional institutions in the complex and discussions centred with the Manipal authorities on the conditions involved in the status requested.

NSS and Tamil Nadu Board of Continuing Education:

The Ethiraj College contingent of NSS spent 10 days in September in 5 Covelong villages working on adult literacy, health, immunisation and family planning, cottage industry programmes and in cleaning up and making usable an old and disused temple in the village. The work of the group was supplemented by IOB making 12 loans to the villagers for starting self-employment programmes and making available also 2 sewing machines. The Executive Committee of the Tamil Nadu Board of Continuing Education met at the end of September, reviewed and approved the tour report of its secretary and arranged for representation at 2 seminars and the annual conference of the Indian Adult Education Association in the coming months.

Nutrition Society of India, Drugs :

The Nutrition Society of India held its annual meeting in the Sri Avinasilingam College, Coimbatore at which the nutrition specialists in the country reviewed the status of nutrition education in the country and the applied nutrition programme. Nutrition education at the University level is both comprehensive and advanced in this State at all levels but at the school and non-formal education levels, it is weak and it is this that must be corrected, it was felt. The applied nutrition programme needs both extension and use of nutrition experts in its functioning. The drugs addiction and control committee (see Vol VI p 472) held its second meeting at the end of September when in addition to the 7 research projects in the country, an eighth project in Calcutta and 6 quick surveys of drug users in 6 cities as well as questionnaires for the lay public and psychiatrists were decided upon. It decided to begin receiving evidence from enforcement authorities, students, teachers and principals from its next meeting in November in Bombay.

Madras University Teachers Association, Institute of Public Enterprises and Visitors :

The Madras University Teachers Association was restructured and inaugurated in September by the secretary to Government, Education. The main event on that occasion was his declaration that the UGC scales of pay (Fifth Plan) for the University and College teachers would be implemented in this State soon. The need for a functioning Association to care for staff welfare needs was emphasised. The executive committee of the Institute of Public Enterprises and Public Administration met in September and decided on a programme for a seminar on problems of productivity in public enterprises to be held in February of next year. For this purpose, the IIT is conducting a survey of the public sector units on the problems faced by them. The Minister of Education, Senegal visited the University in September and exchanged information on problems of University examination reform and curricular updating.

University Events :

The Southern Languages Book Trust directorship was taken over by the retiring Academic Deputy Registrar of the University who is preparing for a meeting of the Trust Board in November. The World University Service held its annual meeting, adopted its programme and budget for the coming year and elected a new set of officers. The University Research Scholars Association was inaugurated for the year by the Chancellor who emphasised the need for co-operation among scholars in writing the history of India's freedom movement and meeting the country's urgent economic problems. The second meeting of the joint and individual Boards of Studies met in September and planned the curriculum for 12 rural ancillaries for first degree course from next year. The Joint Committees of the Universities and governments met to plan admission dates and procedures for their next academic year to avoid students transferring from one course to another. Several selection committees met during the month, notably the 6 committees for the 6 departments of the post-graduate Institute of Basic Medical Sciences to fill some 30 vacancies. The annual convocation was held on September 27 in the old Senate House and conferred degrees on some 200 prize winners. The Chief Minister of Orissa was the Orator. The Syndicate met at the end of the month and approved a number of new courses and two new degrees—B.Sc. Health Sciences and M.A. Defence Studies—for submission to the Academic Council.

October Development Seminar :

The paper for the October Madras Development Seminar "Employment in Tamil Nadu", by Dr. T. S. Venkataswamy, Professor and Head of the Department of Economics, Presidency College, Madras together with a summary of the discussion at Seminar held on October 28 under the Chairmanship of Mr. M. N. Rao, Manager, M. Seshachalam and Company appears as the first articles.

Second Article :

A paper, 'Mid-term Review of the Economy' appears as the second article.

EMPLOYMENT IN TAMIL NADU

By
T. S. VENKATASWAMI
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1. Introduction:

The aim of this paper is primarily three-fold: (i) to analyse the trends in employment and unemployment in Tamil Nadu in recent years with particular reference to the Fourth Plan period, (ii) to assess the various measures undertaken so far to improve the employment potential, and (iii) to suggest a broad strategy for ensuring fuller employment in future.

2. The Sources of Data and their limitations:

One on the major hurdles confronting any one who attempts to deal with the questions of employment and unemployment is the non-availability of reliable, comprehensive, and regular data. The three major sources of data on employment and unemployment in India are: (i) the decennial Censuses, (ii) the various Rounds of the National Sample Survey (NSS), and (iii) the Employment Market Information (EMI) and the Employment Exchange data. Each one of these sources suffers from several limitations. The decennial Censuses provide information on the level of employment and unemployment but only once every ten years. Morever, the comparability of data from successive Censuses is limited by conceptual differences. Further the unemployment figures of the Censuses have been unbelievably low. The NSS has experimented with different concepts for collecting data on employment and unemployment. The relatively low incidence of unemployment reported by the NSS has been strongly criticised. As a matter of fact, the Planning Commission has found the employment exchange data on urban unemployment more acceptable from the figures reported by the NSS. The NSS discontinued its rural labour force surveys after the 17th Round (1961-62) as it felt that the concept of unemployment as the term is generally understood was not applicable to rural areas. It has, however, resumed its rural surveys from 1969-70 using more refined concepts of measurement.

EMI programme provides reliable and regular information on a quarterly basis on the level of employment in the organised sector. But the major limitation of the EMI programme is that its information is confined to the organised sector which is only a small segment of the total economy. The limitations of the Employment Exchange statistics on urban unemployment arise from (i) some persons already employed registering themselves, (ii) some persons not employed not registering themselves, (iii) some persons registering themselves at more than one employment exchange, and (iv) some persons from rural areas registering themselves at the exchanges.

3. The level of Employment :

Since information on the level of employment for the entire State economy is available only for certain years, whereas it is available regularly on a year-to-year basis for the organised sector and manufacturing sector within the organised sector, we shall deal with these sectors separately.

3.1. Employment in the Aggregate Economy :

According to the 1971 census, the working population of Tamil Nadu was 14.74 millions and the work participation rate (i.e. the ratio of workers to the total population) was 36.67 per cent compared to 33.54 per cent for all India. Despite the considerable increase in the population of the State between 1961 and 1971, its working population has declined from 15.35 millions in 1961 to 14.74 millions in 1971 and its work participation rate from 45 per cent to 37 per cent. However, any comparison of the 1971 figures with those of 1961 is meaningless because of the substantial change in the definition of workers. Whereas the 1961 definition of workers included most of the house-wives and full-time students, the 1971 definition excluded them from the category of workers. The NSS estimate of the work participation rate at 38.9 per cent for the year 1969-70 is much closer to the 1971 census estimate, although they are not strictly comparable.

If the work participation rate is taken as an indirect index to measure the level of employment in the State, the problem seems to lie not so much in the imbalance between available manpower and its utilisation but in under-employment and disguised unemployment which are camouflaged under the definition of worker adopted by the Census. The gross labour force is usually reckoned as the population between the ages of 15 and 59. If children below the age of 15 and and elders above the age of 60 are deducted, the rest constitutes only about 56 per cent of the State population. From this gross labour force, the non-participating labour force will have to be deducted to obtain the net labour force. The NNS conducted in 1969-70 has estimated the labour force of the State at 40.6 per cent and (38.9 per cent employed plus 1.7 per cent unemployed) of the population which is more or less equal to the percentage of labour force in the advanced countries.

3.1.1. The pattern of employment :

According to the Census Report of 1971, the pattern of employment in the State as well as in the Nation continues to remain along the traditional lines. The percentage distribution of the total working population of 14.74 millions in the State among the different sectors is as follows :

I.	Primary Sector	...	65
II.	Secondary Sector	...	15
III.	Tertiary Sector	...	20
			100

While 9.5 millions are engaged in the primary sector, only 1.3 millions of the working population are employed in the manufacturing sector. The concentration of the working population in the traditional sector has kept down the per capita

income of the rural population. The aim of the Fourth Plan to solve this problem by increasing agricultural production and diverting some of the labour force from agriculture to industry has scarcely been achieved. The swelling number on the live register of the employment exchanges shows that the urban sector has not been able to absorb adequately the rural labour seeking employment in the cities and towns in spite of the increase of employment in the organised sector.

3.2. Employment in the Organised Sector :

The Employment Market Information Programme provides not only reliable but regular time series data on the growth of employment in the organised sector. This sector includes all establishments in the public sector and non-agricultural establishments employing 10 or more workers in the private sector. But it does not cover the self-employed, persons engaged in agriculture, private establishments employing less than 10 workers, and defence forces. Although the organised sector represents only a small segment of the total economy employing about 10 per cent of the total workers of the State, it is, however, a significant component of the economy and the employment trends of this sector must be regarded as an important barometer of changes in the employment situation in urban areas.

Table I shows the growth of employment in the organised sector in the State and the Nation during the recent years which include the Fourth Plan period. One of the primary objectives of the Fourth Plan was to expand employment opportunities and the Planning Commission advised the Central ministries and the State governments to give employment orientation to the Plan programmes. During the Fourth Plan period as a whole, employment in the organised sector increased by 1.59 lakhs and the growth rate of employment showed an improvement over the period 1966-67 to 1968-69 but was below the level achieved during the Third Plan. Moreover, viewed against the enormous increase in the number of job seekers in urban Tamil Nadu from 2.76 lakhs in 1968-69 to 5.93 lakhs in 1973-74, it cannot be said that much headway had been made in the direction of generating more employment during the Fourth Plan. Year-wise analysis shows that employment increased in the first year of the Plan (1969-70) by 2.86 per cent as against the 1.3 per cent increase in the previous year, but the growth rate remained constant in the next year. During these two years the growth rate of the State was ahead of the National rate. But in 1971-72 while the growth rate of the State declined, that of all India increased. In 1972-73 although the employment growth rate of the State registered an increase, it was smaller than the all India average. In the final year of the Plan (1973-74) the State experienced a positive deterioration in employment situation, the growth rate turning negative (—0.10) while the all India growth rate was positive at 2.3 per cent. This retrogression was due to the decline in employment in private sector which was not adequately offset by the increase in public sector. The disquieting feature of the situation was that while the increase employment in the public sector was mostly in services, the decrease in the private sector occurred largely in manufacturing, construction and services. "Apart from the reduction in total employment these movements out of 'productive' to 'unproductive' areas are another special feature of the employment situation of 1974." [1] There was a revival of growth during 1974-75, but it was unimpressive, the rate of increase of employment being merely 1.7 per cent.

3.2.1. Public and Private sector employment in the Organised Sector :

From the commencement of the Third Plan onwards the share of the public sector within the organised sector has been speedily increasing and this trend has continued throughout the Fourth Plan period. Prior to the commencement of the Fourth Plan, out of the total employment in the organised sector the shares of the public and private sectors were 57 and 47 per cent respectively and at the end of the Plan the relative shares have changed to 60 and 40 per cent. And by the end of 1974-75 public sector accounted for 61 per cent of the total employment in the organised sector. A noteworthy feature is that while the public sector has shown sustained growth, the private sector was subject to unsteady growth, often marked by stagnation and even by retrogression.

3.2.2. Industry-wise classification of the Organised Sector :

Within the organised sector, manufacturing industries, transport and communication, and services are by far the most important ones which together account for nearly 80 per cent of the total employment. Manufacturing in the major field of employment in the private sector accounting for more than one-half of the total employment, whereas in public sector the major source of employment is services which provide more than one-half of the total employment.

3.2.3. Employment of Women :

The largest number of women employees in the organised sector are found in Tamil Nadu next to Maharashtra and Kerala. Changes in social outlook and economic compulsion have perhaps led to the increase in the number of women employed in recent years. The percentage of women to total persons employed in the organised sector increased from 14.63 per cent in march 1970 to 15 per cent in June 1975.

3.2.4. Employment Growth in the Organised Sector in the longer time period, 1961-73 :

The February 1975 issue of the RBI Bulletin provides valuable information on the employment growth in the organised sector during the period 1961-73. The employment growth rates (compound) in the organised sector for all India and Tamil Nadu were respectively 3.8 per cent and 3.9 per cent which were higher than the population growth rates. The long term growth rate of Tamil Nadu was better than its growth rate in recent years. The performance of Tamil Nadu compared to other States is indicated by Table II.

Between 1961 and 1973, Karnataka, Kerala, Punjab (including Haryana), and Maharashtra recorded, in that order, highest growth rates. Tamil Nadu ranks fifth in terms of growth rate. Assam finds itself at the bottom with a marginal growth rate of 0.3 per cent.

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[1] Dr. C. T. Kurien : 'Bulletin, Madras Development Seminar Series', February 1976, p. 117.)

TABLE I

GROWTH OF EMPLOYMENT IN THE ORGANISED SECTOR IN TAMIL NADU AND ALL-INDIA (Employment in lakhs)

Year ending 31st March	Public Sector	Private Sector	Total	Percentage change over the previous year: Public Sector	Private Sector	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			TAMIL NADU			
1969	8.31	6.39	14.70	+0.63	+2.39	+1.39
1970	8.62	6.50	15.12	+3.64	+1.85	+2.86
1971	8.89	6.52	15.41	+3.20	+0.51	+2.86
1972	9.35	6.39	15.74	+5.05	—1.81	+2.15
1973	9.59	6.71	16.30	+2.61	+5.01	+3.59
1974	9.80	6.49	16.29	+2.20	—3.30	—0.10
1975	10.05	6.51	16.56	+2.55	+0.31	+1.65
			ALL INDIA			
1969	100.3	66.0	166.3	+ 2.3	+ 1.3	+ 1.9
1970	103.7	66.9	170.7	+ 3.3	+ 3.3	+ 2.5
1971	107.3	67.6	174.9	+ 3.4	+ 0.9	+ 2.4
1972	112.1	67.7	179.8	+ 3.9	+ 0.1	+ 2.8
1973	118.8	69.4	188.2	+ 6.0	+ 2.7	+ 4.7
1974	124.9	67.7	192.6	+ 5.1	— 2.5	+ 2.3
1975	128.4	68.0	196.4	+ 2.8	+ 0.4	+ 1.9

Source : Tamil Nadu—An Economic Appraisal, 1976, pp. 45-47.

TABLE II

STATE-WISE GROWTH IN EMPLOYMENT

State	Ratio to Total Employment in the Organised sector as at the end of March 1961	September 1973	Growth rate (compound) of Employment during 1961-73
1. Andhra Pradesh	5.9	5.6	3.3
2. Assam	6.1	4.0	0.3
3. Bihar	8.7	7.2	2.2
4. Gujarat	6.0	5.6	3.3
5. Haryana / 6. Punjab	3.6	4.4	5.5
7. Himachal Pradesh	—	1.2	3.1*
8. Jammu and Kashmir	N.A.	0.6	—
9. Kerala	3.2	4.2	6.0
10. Madhya Pradesh	6.5	5.8	2.8
11. Maharashtra	13.0	14.7	4.9
12. Karnataka	3.6	4.8	6.2
13. Orissa	2.8	2.2	1.6
14. Rajasthan	3.6	3.4	3.4
15. Tamil Nadu	8.4	8.6	3.9
16. Uttar Pradesh	10.8	10.5	3.6
17. West Bengal	14.1	13.0	3.0

Source: Reserve Bank of India Bulletin, February 1975, p. 133.

* Refers to period 1970 to 1973.

At the end of September 1973, Maharashtra, West Bengal, Uttar Pradesh, Tamil Nadu, and Bihar together accounted for 54 per cent of the total persons employed in the organiaed sector. Compared to the position in 1961, the proportion of Punjab, Kerala, Maharashtra, Karnataka and Tamil Nadu has increased in 1973, whereas in the case of other States it has declined.

3.3. Growth of Employment in the Manufacturing Sector :

Separate analysis of the organised manufacturing sector (covered by the Annual Survey of Industries) which contributes about 50 per cent of the industrial output of the State throws interesting light on the magnitude of employment provided by industries classified on the basis of capital and labour intensiveness.* In the manufacturing sector as a whole employment increased at the rate of 7.5 per cent per annum between 1962 and 1971. The annual growth rate of employment was 12.8 per cent in capital-intensive industries, 10.3 per cent in medium group, and only 3.5 per cent in labour-intensive industries. These paradoxical growth rates are explained by the fact that both investment and output have recorded a much greater increase in the first two categories than in the last. Investment between 1962 and 71 increased by seven times in capital intensive industries and by four times in the medium group but only by 50 per cent in the labour-intensive industries. It means that the State has concentrated on capital intensive industries during the period under consideration. Table III shows the variations in Investment, output and employment in the three groups of industries.

TABLE III

INVESTMENT, OUTPUT AND EMPLOYMENT-ORGANISED MANUFACTURING SECTOR

Categories	1962	1971	Compound annual growth rate (in percentage)
1. Capital Intensive—			
(a) Investment (Rs. in lakhs)	11,165	83,340	25.0
(b) Output (Rs. in lakhs)	9,724	47,495	19.2
(c) Employment (number)	65,395	1,93,935	12.8
2. Labour Intensive—			
(a) Investment (Rs. in lakhs)	9,851	16,269	5.7
(b) Output (Rs. in lakhs)	24,108	62,948	11.3
(c) Employment (Number)	1,76,922	2,41,048	3.5
3. Medium—			
(a) Investment (Rs. in lakhs)	2,680	11,160	17.1
(b) Output (Rs. in lakhs)	5,122	22,083	17.6
(c) Employment (Number)	36,583	87,711	10.3
4. All Industries—			
(a) Investment (Rs. in lakhs)	25,514	1,27,042	19.5
(b) Output (Rs. in lakhs)	42,062	1,51,263	15.2
(c) Employment (Number)	3,02,186	5,83,974	7.5

Source; Tamil Nadu — An Economic Appraisal 1974, Part I p 56.

* *Capital-Intensive*: Labour employed 1 to 6 per Rs. one lakh of investment:
Medium: Labour employed 7 to 10 per Rs. one lakh of investment.
Labour Intensive: Labour employed 11 and above per Rs. one lakh of investment.

4. The Extent of Unemployment :

The limitations of the three major sources of data on unemployment have already been noted. The Dantwala Committee, while making recommondations for improved methods of analysis, computation and presentation of estimates on unemployment, observed that many of the limitations of the estimates of labour force, employment, and unemployment are inherent in the socio-economic conditions of our country and cannot be wholly overcome by conceptual refinements or improvements in the technique of estimation. The Committee, therefore, came to the conclusion that in the peculiar socio-economic conditions of the country, precise estimate of unemployment is not possible. Nor is it meaningful or useful to express unemployment and under-employment together in a single-dimentional magnitude, since the two are analytically different requiring different types of remedial actions.[2] The Bhagavati Committee attempted one-time estimate of unemployment and the Draft Fifth Plan neither refers to it nor makes any attempt of its own to estimate unemployment.

We do not really have reliable estimates on unemployment. No serious attempt has been made at the State or National level to estimate the magnitude of unemployment on a year-to-year basis covering all the facets of the problem. Dr. Malcolm S. Adiseshiah, who was appalled at the lack of a data base on this vital area of national and State action, had urged that each State government should "......establish an annual survey of the unemployed and under-employed by sex, age, geographical location, number of hours worked, income earned, and educational qualification......" [3]

Until such survey is undertaken and the results are made available, there is no other alternative but to rely on the imperfect data available at hand to analyse the problem of unemployment. The phenomenon of unemployment is too pervasive and serious to be debated purely in terms of concepts and statistics. Its nature and urgency are such that its solution will not permit the luxury of a leisurely collection of adequate data and the refinement of analytical techniques.

4.1 The Extent of Unemployment : All India :

The total number of unemployed on the live registers of the employment exchanges was 40 lakhs in December 1970, this number swelled to 96 lakhs in December 1974. West Bengal leads all the States in unemployment and Tamil Nadu comes next.

According to the Bhagavati Committee, the number of unemployed and under-employed in 1971 may reasonably be taken as 18.7 millions of which 16.1 million were in the rural areas and 2.6 million in urban areas. The Committee also pointed out that of the total of 18.7 millions, 9.0 millions were unemployed and 9.7 millions under-employed. The estimate of 2.6 million unemployed in urban areas seems to be a gross under estimate, for the number of unemployed even on the live registers of the employ-

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2 Planning Commission, Government of India : "Report of the Committee of Experts on Unemployment Estimates, 1970", p 30.

3 Malcolm S. Adiseshiah: "Bulletin, Madras Development Seminar Series", April 1974, pp 322-326.)

ment exchanges was about 5 millions in 1971.

According to the Committee, between 1966 and 1972, the number of matriculate job-seekers has tripled, the number of under-graduate job-seekers had quadrupled and that of graduates had risen six fold.

4.2 Employment Exchange Statistics and urban unemployment in Tamil Nadu:

If the number of work seekers (including the educated unemployed) on the live registers of employment exchanges is taken as a rough indicator of unemployment in the urban sector in Tamil Nadu, the level of unemployment more than doubled during the Fourth Plan. The number of job-seekers increased from 2.76 lakhs in 1968-69 to 5.98 lakhs in 1973-74. It increased further from 5.93 lakhs in 1973-74 to 6.54 lakhs in 1974-75. In 1974-75, 16.56 lakhs of people were employed in the organised sector and 6.54 lakhs of people were seeking jobs who represented about 39 per cent of the people employed in the organised sector. The employment exchange data, whatever may be their limitations are the only source available on the latest situation regarding urban unemployment.

4-2-1 Educated unemployment

The employment exchange data on educated unemployment may be treated as somewhat more reliable than the data on the total unemployment in the urban sector. If the number of matriculates, graduates, and post-graduates, on the live register of employment exchanges is taken as an indicator of educated unemployment, there were 3.60 lakhs of educated unemployed in December 1975. The Fourth Plan witnessed nearly a three-fold increase in educated unemployed. The employment exchange figures of graduates and post-graduates on the live register reveal an important phenomenon which runs counter to the popular conception. The extent of unemployment is considerably higher among the science Degree holders than among the Arts Degree holders exploding the myth that the former enjoy better job opportunities than the latter.

4.3. The estimates of urban and rural unemployment of the NSS, 1969-70:

The National Sample Survey conducted during the year 1969-70 covered inter alia unemployment in both urban and rural areas of Tamil Nadu. The results of the survey are presented in Table IV. According to the survey only 1.3 per cent of the rural population and 2.3 per cent of the urban population are unemployed. In all, 1.7 per cent of the State population is unemployed. About 45 per cent of the rural population and 29 per cent of the urban population (accounting for 39 per cent of the State population) are employed in gainful activities.

4.4. Disguised unemployment in the Agricultural Sector of Tamil Nadu:

It is widely believed that while there is very little open or outright unemployment, there is a large amount of disguised unemployment and under-employment in the rural areas. The estimation of the extent of under-employment and disguised unemployment is a complex and difficult task and the estimates of a limited number

TABLE IV

PERCENTAGE DISTRIBUTION OF POPULATION BY SEX AND LABOUR FORCE STATUS IN TAMIL NADU: 1969-70.

	Rural			Urban			State		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Labour Force—									
Employed	57.5	32.7	45.4	47.0	10.5	29.1	53.3	23.9	38.9
Unemployed	2.4	0.1	1.3	3.0	1.5	2.3	2.7	0.7	1.7
Total	59.9	32.8	46.7	50.0	12.0	31.4	56.0	24.6	40.6
2. Outside the Labour Force	40.1	67.2	53.3	50.0	88.0	68.6	44.0	75.4	59.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.ı	100.0
Sample Persons	6,032	5,743	11,775	3,930	3,771	7,701	9,962	9,514	19,476

Source: Tamil Nadu — An Economic Appraisal 1971, p 55.

of studies undertaken show considerable variations. The Second Agricultural Enquiry (1956-57 estimates under-employment in Tamil Nadu at 32 per cent. Sakuntala Mehra has estimated the maximal and mean disguised unemployment at 21.4 per cent and 10 per cent as against 29.1 per cent and 17.1 per cent for India. Viswanatha Murthi and Narasimhan, defining disguised unemployment (which is called disguised employment) as the excess of labour over that which is required to produce the same output and using a variety of computational methods including the one adopted by Tarlok Singh, have estimated that in 1971 some 12 lakhs of persons representing 21.5 per cent of the rural work force were wastefully and disguisedly employed in Tamil Nadu. In addition to this magnitude of disguised unemployment, some 38 lakhs of workers were under-employed, under-employment being defined as under-utilisation of labour arising mainly out of seasonal unemployment.[4] A study conducted under Tamil Nadu Government Research Fellowship Scheme has estimated disguised unemployment in the year 1972-73 at 7.91 lakhs representing 8.7 per cent of the agricultural workers and 1.8 per cent of the total population.[5]

If employment is defined in terms of income, a person cannot be treated as fully employed if his income is not sufficient as a means of subsistence. But if insufficiency of income is used as an index of under-employment, then about 52.5 per cent of the people of the State falling below the poverty line are under-employed!

5.1. Specific Measures to improve employment potential in urban areas

The Department of Employment and Training has undertaken additional functions designed to improve employment intelligence and skills of the job seekers. Such functions include realms of Employment Market Information, Vocational Guidance, Occupational Research and Analysis and skill building programmes.

With a view to redress the problem of growing unemployment, the State Government has in recent years introduced many special schemes which include: (i) Special Apprenticeship Training Programme, (ii) Special Apprentice Scheme for Engineers (1970), (iii) Youth Service Corps (1971), (iv) Apprentice Teachers Scheme (1972), and (v) the Half-a-Million Job programme. Most of these programmes aim at creating fresh job opportunities for the educated youth and simultaneously at increasing the employability of their talents.

The multiplicity of the new programmes has not made any serious dent on the problem of educated unemployment which has assumed alarming proportions as revealed by the employment exchange data. As against the educated unemployed of 3.60 lakhs in 1975, it has been estimated that these programmes have provided employment to only about 26,000 people. The problem has to be tackled by taking simultaneous action on both demand and supply sides to increase the job opportunities and control the output

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4 J. Viswanatha Murthi and C. L. Narasimhan: Rural Employment in Tamil Nadu, pp 147-154.

5 Tamil Nadu—An Economic Appraisal 1974, Part I, p 57.

of unwanted graduates. Employment opportunities can be sufficiently increased only by evolving and implementing a strategy of economic development which incorporates fuller employment as a specific goal and not by resorting to unco-ordinated, adhoc measures. As to the supply aspect of the educated unemployed, the entire system of school and university education should undergo a thorough going and radical change and a new pattern of education consistent with manpower requirements should be implemented. In recent years, a vast quantitative expansion of education, matched only by an equally vast qualitative deterioration, has taken place. It is high time to stop further quantitative expansion and to imitiate measures to improve the quality of education. The number of seats in various courses and colleges must be determined primarily on the basis of the requirements of the economy and admission to different courses must be limited to the students who have the requisite merit and aptitude.

5.2. Measures to mitigate rural unemployment and under-employment

The earliest action taken by the Government to tackle the problems of unemployment, under-employment, and disguised unemployment was the implementation of the Community Development Programme and the development of Khadi and Village Industries. In recent years, the Rural Man-Power Programme, Crash Schemes for Rural Development, the Intensive Rural Employment Pilot Project, High-Yielding Varieties, and Small Farmers Development Agency have been introduced in quick succession. The formulation of the various rural works has been found much easier than their implementation. Even formulation of these projects has been far from satisfactory leading to unnecessary duplication, neglect of maintenance of assets created, and lack of evaluation of the working of the programmes. What is needed is a thorough evaluation of each programme and the formulation of an integrated programme incorporating the successful features of each that will provide steady and self-sustaining employment in the place of crash programmes competing with one another.[6]

Agro-Industries

In addition to an integrated rural works programme which would help reduce under-employment, a well-thought-out programme of agro-industries would provide a remedy to the problem of rural unemployment. The working of the private as well as co-operative sugar factories in the rural areas has been quite successful. As in the case of sugar factories which are located in or near cane farms, rice mills and wheat mills should be started near paddy and wheat farms respectively. By developing wheat flour mills, modern rice mills, vegetable processing and food processing industries, cold storage of milk and meat products, dairy farming, etc., in rural areas in a big way, it will be possible to assure remunerative prices to farmers, to increase employment opportunities to agricultural labour, and also to adopt modern methods of production and management in the field of agriculture.

Decentralisation and Dispersal of Industries :

Serious thought must also be given to

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[6] J. Viswanatha Murthi and C. L. Narasimhan : Rural Employment In Tamil Nadu. P. 147.

decentralisation and dispersal of industries, particularly small-scale and medium-sized industries, from the crowed industrial cities to the countryside. Private enterprise must be encouraged and assisted to establish industries in the rural areas. The decentralised location of industrial factories will provide not only enlarged employment opportunities but also the necessary "diffusion mechanisms" that are critical in launching cumulative process of economic growth. The development of a semi-modern sector of small-scale firms in rural areas using labour-intensive techniques would be facilitated by the stimulus of the rural demand for inputs and consumer goods.

Adopting Japanese pattern of Intensive Cultivation :

In recent years productivity of paddy has increased primarily as a result of using HYV of seeds. But our productivity is much lower than that of Japan which however, uses much more labour input per hectare than India. If we could follow the Japanese pattern of labour intensive cultivation, we can increase productivity per hectare and also eliminate rural unemployment to a large extent.

6. A Broad Strategy for Achieving Full Employment :

During the last two decades the major preoccupation of the under-developed countries has been the acceleration of the pace of economic development in terms of GNP and per capita income on the assumption that high growth rates will automatically lead to more employment, less income in equality, and disappearance of absolute poverty. In the past few years, however, there has been a growing realisation that the high rates of growth achieved by many developing countries during the second development decade of the sixties have neither been accompained by fuller employment nor by more equitable distribution of income and reduction in poverty.

It has been pointed out that even countries showing striking rates of growth, ranging from 6 to 10 per cent a year, are faced with increasing rates of open unemployment, under-employment, and disguised unemployment. For example, Venezuela and Jamaica which both achieved a high annual rate of economic growth of about 8 per cent have also experienced high rates of unemployment of more than 11 per cent of the labour force. This pattern, which is repeated in varying degrees over the major portion of the third world suggests that rising employment is by no means a necessary concomitant of economic growth.[7] The grave problem of increasing unemployment facing the less developed countries was described as follows by the Pearson Commission on International Development : " The failure to create meaningful employment is the most tragic failure of development. All indications are that unemployment and under-utilization of human resources have increased in the 1960s and that the problem will grow even more serious".

Similarly more than a decade of rapid growth in under developed countries has not led to greater equality and abolition of poverty. Although the average per capita income of the Third World has increased by 50 per cent since 1960, this

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7 Anand G. Chandavarkar, "More Growth—More Emplopment ?" *Finance and Development*, June 1972, pp. 29-35.

growth has been very unevenly distributed.[8] The goals of full employment and eradication of poverty are largely complementary. The adoption of fuller employment as a specific target of policy would serve as a means of both more equal distribution of income and a fuller and more widespread participation of the mass of the people in the effort as well as the fruits of economic development.

Morever, the attainment of full employment will accelerate growth of income but the reverse is not necessarily so, as post-war experience shows.[9] Therefore, in a labour surplus economy, the development strategy should strive for fuller employment which will not only accelerate growth but also promote equality of incomes.

India cannot be said to have achieved a high growth rate, compared to other developing countries. But it has, undoubtedly, made progress and the realised growth rates of 3.3 per cent and 1.1 per cent respectively in NNP and per capita NNP between 1951-52 and 1973-74 represent a marked improvement over *half-a-century of absolute stagnation in* per capita income prior to 1947. This growth, limited as it is, has however, not been accompanied by fuller employment or better distribution of income. Unemployment has increased and income inequality deepened, thanks to undue emphasis on industrialisation and comparative neglect of agriculture. Continued reliance on capital-intensive industries whose labour absorption capacity is severly limited, has resulted in unemployment, excessive urbanization, excessive unused capacity, and widening income inequality. The experience of the past 25 years has demonstrated the patent inability of the large-scale modern sector to absorb the surplus rural population. The hope that the socialised industries, which are mostly found in capital-intensive modern sector, would be able to provide capital out of their profits for starting additional industries has not come to a pass either. Apart from the general inefficiency of the public sector undertakings, the employees of such industries have usually succeeded in pushing up wage rates to a level which has substantially reduced the surplus available for capital formation.

Therefore, employment growth possibilities for India largely lie in the progress of agriculture and small-scale industries. Agriculture offers a stronger and more relevant range of possibilities for labour-intensive and capital-saving technology than production in heavy industries. This is because in an overpopulated country like India, it is more important to improve the productivity of land (e.g., by fertilisers, improved seeds, and pesticides) than to save labour (e.g., through tractors and threshing machines). *On the contrary* many of the capital-intensive industries do not permit much variation in techniques. There is considerable scope for labour-intensive techniques in industries producing basic wage goods (food, clothing, and housing) and light consumer goods. Employment and productivity increases are both essential; but in a country like India with large amount of unemployment and under-employment, the time sequence is important, that is, first to emphasize fuller employment and then to empasize

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[8] Hollis Chenery and others, *Redistribution with Growth*, P. XIII.

[9] Harry T. Oshima, "Income inequality and Economic Growth", *Malayan Economic Review*, October 1970.

higher productivity. As full employment is approached, wage rates will tend to rise, promoting the substitution of more and better tools and equipment and organisation of labour, and therefore efficiency. While in the early stages the growth rate of per capita income will rise mainly due to greater volume of work performed per worker, with approach of full employment the tendency to economise on the use of labour will accelerate the rise in per capita income.

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Summary of Discussion

During the discussion of the paper at the Seminar held in the Seminar room of the Institute on Thursday 28th October, 1976, under the chairmanship of Mr. M.N. Rao, Partner, Seshachalam and Co., Madras, the author, presenting the paper, drew attention to the fact that a precise analysis of trends in unemployment was rendered difficult due to the limitations of the important sources of data concerned. The principal sources of information are the census figures, the various rounds of the National Sample Survey, the Employment Market Information and the Employment Exchange data. The census data, though extensive in coverage, is decennial in frequency and the change in the definition of the term 'worker' makes intercensal comparisons difficult and the unemployment figures are very low. The NSS experimented with different concepts and discontinued its rural employment surveys after 1961-62 till 1969-70 and its unemployment computation is also very low. The EMI, while providing regular information, covers only the organised sector, which is a small segment of the national economy and excludes defence services, self-employed people and agriculture except plantations. The Employment Exchange statistics, similarly, has limitations arising from duplication absence of registration etc. The level and pattern of employment in Tamil Nadu, according to 1971 census, are a worker participation rate of 36.67 per cent of the population (14.74 millions) and 65 per cent of the workers engaged in the primary sector, 15 per cent in the secondary and 20 per cent in the tertiary. The current trend in employment in the organised sector which is 10 per cent of the State's economy shows an increase of 1.5 lakhs in the numbers employed. This, however, has to be viewed aginst the 6 lakhs unemployed on the Employment Exchange registers at the end of the IVth Plan. Overall figures show that there has been a decline in the number of jobs in the productive sector and an increase in the services sector. The R.B.I. Bulletin, February, 1975, reports, a long-term, employment growth rate for 1961-73, at 3.8 per cent for all India and 3.9 per cent for Tamil Nadu per year. In respect of employment of women, Tamil Nadu is placed third in the country. In the manufacturing sector, growth in employment of 11.9 per cent is the highest in the capital intensive industries as compared to medium and labour intensive enterprises. A contributory cause for this variation is that the investment in capital intensive industries has risen by seven times, while in medium and labour intensive industries it has been 4 times and 50 per cent respectively. Regarding the dimensions of unemployment in urban and rural areas there is no definitive estimate. According to Dantwalla Committee, accurate estimates were not possible due to certain socio-economic conditions. The Bhagwati Committee estimates of unemployment of 16.1 million in rural and 2.6 million in urban areas as in 1971 has not been utilised in the plan policy decisions. The Employment Exchange statistics show a steep rise in unemployment—rising from 2.7 lakhs in 1968 to 6 lakhs in 1973 and 6.54 lakhs in 1974, of which the educated unemployed has increased threefold. The N.S.S. estimates (1969-70) unemployment at 1.3 per cent of the rural and 2.3 per cent of the urban population or 1.7 per cent of the total population of the State. Open unemployment is mainly an urban phenomenon while in the rural areas there is a high degree of disguised employment. There are considerable variations in the estimates of unemployment and disguised emplyment in the studies carried out by the Agricultural Enquiry Committee (1956-57), Shakuntala Mehra, Madras Institute of Development Studies and the Tamil Nadu Economic Appraisal. An increase in the volume of employment, however, has not made an appreciable difference in the number of persons living below the poverty line. The assumption that high growth rates automatically lead to fuller employment of better distribution of income, the author pointed out, has not proved itself. The examples of Venezuela and Jamaica were cited in this connection. Further increase in per capita income has not resulted in more equitable distribution of the gains of development in developing countries. Reviewing the various employment generation programmes.—the community development programmes, the Khadi and Village Industries programme, the crash programmes, the HYV etc—the author suggested an evaluation of the impact of these schemes and the evolution of an integrated programme, including the proper location of agro-industries and small industries and labour intensive techniques of cultivation as the Japanese method paddy cultivation. Referring to the high incidence of educated unemployment, the view was expressed that admissions to institutes of higher education may be restricted to those with merit and aptitude. Formulation of a strategy for full employment had tacitly relied on the organised sector and capital intensive industries to produce re-investible surplus. But these expectations have been belied in the event as rising wages had made substantial inroads into available funds. A revised strategy should be designed against a frame of definite objectives, combining a minimum growth rate, productivity increase and employment generation.

In the discussion that ensued, the chairman expressed agreement with the view that high growth rate and productivity per se could not lead to full employment and that the country's socio-economic structure and a political system committed to democracy and social justice have a bearing on the strategy to be devised to deal with this crucial problem. Another view was that the basic task of framing a development policy consists of combining a high growth rate and increase in per capita income with full employment. The Indian experience suggests economic growth through full employment. Discussing the apparent relationship between employment and poverty, it was pointed out that employment did not necessarily guarantee an income above the poverty line, in our society. In some occupations, such as bonded and agricultural labour, returns were meagre despite long hours of work. Lack of disaggregated age-wise and sex-wise data on the labour force was a handicap that could not be ignored, as effective policies had to be structured on the aggregation of this information. Moreover, the dimensions of the unemployment problem are massive. There is no simple solution to the problem. While poverty eradication and employment generation programmes and decentralisation of production through encouragement of ancillary's industries may reduce the number of unemployed, a percentage will continue to be overtly or disguisedly unemployed under the present structure. In spite of the different programmes under way, the employment situation in the State is deteriorating as for every 100 persons employed in the organised sector there are 40 on the waiting list, while 12 years ago there were only 18. This seems to be a pointer to the fact that industry that is privately owned, market operated and with a built-in profit motive cannot in itself provide solutions. In the primary sector also the proportion of unemployed agricultural labour has increased. The HYV programmes in agriculture had been able to provide more employment, but in the case of dry farming there is no increase in the demand for labour. In regard to the productivity of labour it was felt that changes in established levels of productivity would be difficult to achieve. In countries registering high growth rates, the incomes should be considered in relation to the incidence of taxation. In considering productivity of labour a quantitative analysis was not sufficient, the qualitative aspect must also be taken into consideration. The impact of rural housing, rural roads, gobar-gas plants programmes in creating employment in rural areas is sizeable. A third source of potential employment is programmes for non-formal education. Selective mechanisation of agriculture is not likely to cause displacement of labour because intensive cropping programmes depend upon timely preparation of fields. With reference to the on-going programmes, recent evaluation showed that impact on unemployment had not been significant. Integrated rural programmes had yet to prove their worth. A possible solution to the persistent unemployment and under-employment is a programme on the Chinese commune model within the existing political order. Supply and demand of educated labour can be regulated by clearly defining the objectives of education in relation to the absorptive capacity of the economy for skilled manpower over a projected time perspective. In the context of the paradox of poverty despite employment, it was observed that low income of unskilled labour was mainly due to low productivity. Wage levels have to be linked to productivity and fixation of minimum wage levels is not the complete solution.

The conclusions arising from the discussion of the paper were (i) the necessity for disaggregated data on employment, under-employment and unemployment, which could be collected by each State Government establishing an annual detailed survey; (ii) development policies could lay greater emphasis on fuller levels of employment instead of the major emphasis being laid on growth rate; (iii) with this change in policy directions the integration of rural development programmes should have a significant impact on levels of unemployment and poverty, both rural and urban.

A MID-YEAR REVIEW OF THE ECONOMY*

Prices and Taxes

The mid-year review of the economy might well start with the 7 per cent rise in prices that has characterised the first three months—April to June—of the year. One obvious factor leading to the price rise was the increase in money supply which for the three months was Rs. 1,175 crores, including currency with the public which had increased by Rs. 690 crores.[1] To understand the impact of this expansion on the economy, it should be recalled that for the 12 month period preceding April 1976, the money supply increase was Rs. 1,130 crores, including the currency expansion of Rs. 350 crores.[2] Thus, the money supply and the currency with the public in the first three months of the current year was well above the equivalent quantities for the whole of the 12 months of the preceding year. The price increase must be traced then in part to the monetary expansion rather than to speculative price rises in cotton, groundnut and a few commodities.

A second not insignificant factor which is exerting an inflationary pressure on the economy is the favourable trade balance since February and the increasing trend of foreign remittances from Indian nationals living and working abroad. As against an anticipated unfavourable trade balance of Rs. 100 crores per month, which between February and July would have had a non-inflationary effect of between 400-600 crores, the favourable trade balance has produced a surplus of Rs. 100 crores during the first quarter April-June of this year. Added to this, is the increasing foreign remittance which amounted to Rs. 1,000 crores during the last 12 months, with the result that the foreign balances held by the Reserve Bank in the banking and issue departments exceeded Rs. 2,000 crores as at August 27, 1976.[3] These increased foreign exchange resources could have been put to two uses to prevent their lying idle and adding to the inflationary operative factors. The first is their investment with the aim of increasing production and generating employment. The second is to expend a part of it in building stockpiles of cotton, non-ferrous metals, spares components and edible oil so that buffers are available to meet internal shortages, and make the country's exports competitive. In this *matter of building material banks, we need* to break out of the tradition of waiting till the crisis is around and hurriedly taking ad-hoc compensatory measures which produce their own distortions. The case of the surplus newsprint stock with STC is illustrative of this unplanned approach.

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[1] Weekly Statistical Supplement to the Reserve Bank of India Bulletin Vol. 27 No. 15 p. 3 & Vol. 30 No. 30 p. 3.

[2] Bulletin, Reserve Bank of India—April 1976 p. 242

[3] Weekly Statistical Supplement to the Reserve Bank Bulletin Vol. 27 No. 35, pp. 1 & 3.

* Extracts from Dr. Malcolm S. Adiseshiah's paper for the workshop on A mid-year Review of the Economy, held on October 14, 1976 in New Delhi.

In August, the stock was 20,000 tonnes, about 15,000 tonnes more than what a normal buffer needs. Because of last year's unsold STC stock of 35,000 tonnes, in November 1975 the Government banned the contracted import of 85,000 tonnes, which has now to be let in, plus 65,000 tonnes from Canada and 45,000 tonnes from the Soviet Union, adding up to a large total of 1.80 lakh tonnes. Last year's newsprint consumption was 1.25 lakh tonnes and for this year 1.40 lakh tonnes will be in use, leaving a surplus of 40,000 tonnes. Now imports will have to be suspended. From this point of view of a buffer policy and to avoid continuing inflationary pressures, a rational and planned enlarged import policy which might involve disappearance of the trade surplus and its replacement, if appropriate, by a designed trade deficit is indicated.*

There is also a further somewhat related issue with regard to relative prices. The fear of setting off an inflationary round is holding up overdue decisions in regard to an upward revision of prices of saleable steel, coal and a few other industrial and non-industrial products, such as irrigation, power and sugarcane. It is not always realised that this approach means increased public subsidy of the public sector unit costs in question, and the private corporate sector units operating at a loss, depressing the capital market and holding back on modernisation which is the first step to sickness. There is need for price revisions which, in the context of the action proposed in the notes, will be inflation-neutral.

As far as the individual firm's cost structure is concerned, the same end purpose can be attained by a reduction in the excise duty. This question is however related to the larger issues of the excise tax structure now under study by the Jha Committee. Also consistent with the objective of increased resource mobilisation, proposal for any further reduction in excise taxes should be approached with some reserve. Three suggestions are made in regard to the excise tax structure in the interest of simplification and streamlining of the structure. First, the value added tax of the French model should replace the existing sales taxes and excise duties at least in regard to some major products like steel, cement, paper, drugs and fine chemicals, coal, etc. Second, the Expenditure Tax tried very briefly in the Sixties should supplement the income tax and in some cases replace the sales tax. Third, consistent with the constitution, the tax collecting authority should be a single one, preferably the Union Bureaux, replacing the plethora of agencies with their differing and confusing interpretations of tax legislation. The revenues however could and should be either shared or turned over to the State or local government in accordance with the constitutional or legislative provisions.

Industry

The index of industrial production averaged 131.4 during January-May 1976 (with the base year at 1970 = 100), recording an increase in the industrial growth rate of 11.8 per cent over the first five months of 1976, compared to the growth

* As this note is being written on September 3, the government announced the release of Rs. 400 crores from its foreign exchange resources for the import of industrial raw materials such as polyester fibre, cotton, plastic resins, etc. But this again is an ad-hoc response to current obvious shortage, not a planned buffer stock policy which is the suggestion.

rate in the corresponding period of 1975. There is a certain air of optimism almost of euphoria—in the forecasts of the industrial growth perspectives for this year. With improved and increasing power availability aimed at a 13 per cent increase, increasing use of capacities, decline in labour unrest, and increased availability of some major inputs (coal and lignite at 102 million tonnes which is a 12.1 per cent increase, saleable steel at 5.8 million tonnes which is a 17.9 per cent increase, and similar increases in copper, aluminium, cement, commercial vehicles, machine tools, scooters, railway wagons and industrial machinery), backed up by the increased Plan outlay at Rs. 7,852 crores, the official industrial growth rate of 7-8 per cent for 1976-77 is being upped to 14-15 per cent for 1976.[4] This picture of the industrial growth perspective is supplemented by the conclusions of census of small-scale industries released in June 1976 and the report of the Development Commissioner for Small-Scale Industries which show that while for medium and large industry, the growth rate was nil in 1974-75 and 4.5 per cent in 1975-76, that for small industry was 10.5 per cent in 1974, 11.5 per cent in 1975 and according to the Development Commissioner 13 per cent for 1975-76 and an estimate of 18 per cent for 1976-77. Ancillaries in this sector supplying components and parts to the medium and large industries have increased from 2,000 to 25,000 between 1970-71 and 1975-76, with the value of goods supplied increasing from Rs. 27.72 crores to 71.58 crores.[5]

There are three cautionary notes that must be sounded in this somewhat satisfying short-term panorama. The first is that the industrial growth of large and medium units in two of our major traditional industrial sub-sectors—textiles and jute—rests on a somewhat uncertain and shaky foundation—that of consuming the invested capital. Given the weightage of these two sub-sectors in the national industrial index, the crisis in these sub-sectors is a national crisis. Modernisation of their equipment, machinery, infrastructure and management is not and cannot be undertaken without a continuous and prolonged Research and Development input. From this point of view, the Jute Development Council's decision to allocate Rs. 50,000 lakhs for Research and Development exercises has not come a day too soon. The excise reduction and the investment allowance provided in this year's Union Budget represents an important contribution from the government side to deal with the problem of technological obsolescence faced by these two and other industrial sub-sectors. Their adequacy and effectiveness will, however, depend on a system of continuous monitoring of the state of equipment and management in each unit, possibly by the financial institutions from which it draws its resources, and by the sub-sector itself for all units composing it.

A second and equally worrying problem is the relative absence todate of investment in the creation of additional capacities and new industrial ventures. The warning bell with regard to future industrial growth in this regard is to be seen in the order books of the public

[4] Annual Plan 1976-77 p. 4. Also Statement of President of Associated Chambers of Commerce and Industry of India made in July 1976.

[5] A Census of Small Industries: Ministry of Industrial Development 1976. Report of the Development Commissioner 1975-76.

sector capital goods industries declining at a rapid rate in most cases, and being empty in a few, leading to their seeking and eagerly meeting export orders. Here again the increased rates of production and profits registered by the public sector units under the Ministry of Industrial Development on a continuing basis over the last 12 months, and the general air of satisfaction that this has rightly engendered hides the potential for slowing up industrial growth that the sector faces in the near future. Another indicator of this problem—that new capacities and new industries are not coming up rapidly enough—is in the quantum and direction of total bank credit. There are two Characteristics of the state of bank credit as at July 1976. First, the amount of bank credit to the government has decreased sharply. As against an increase in the 12 months ending June 1975 of net bank credit to the government of Rs. 1,773 crores (with the Reserve Bank's increased credit being Rs. 1,089 crores), for the 12 months ending June, 1976, there was a small increase of Rs. 323 crores of net bank credit to the government (with an actual decrease of the Reserve Bank's Credit of Rs. 259 crores.[6]) Part of this reduced bank lending to the government (of the order of Rs. 1,500 crores) during the last 12 months is due to the transfer of the financing of food procurement and fertilizer import, which together in June 1974 - June 1975 amounted to Rs. 500 crores, to the commercial sector. Also some part of the then reduced borrowing of the further Rs. 1,000 crores may be due to buoyant tax and capital receipts, including the windfall revenue from the Voluntary Disclosure Scheme. However, with the approved Plan outlay for the current year of Rs. 7,852 crores, if there were new investments to add to capacity or in new industries, there cannot be this kind of steep fall in the net bank credit to government. Parallel to the order books of the public sector units emptying (and as a cause for it) is the fact that the exclusive concentration on fuller utilisation of existing capacities during the last three years and the holiday we gave ourselves in starting new industries have meant that we have no projects—coasted, feasibility studies completed, and at the blueprint stage for using financial assistance from term lending institutions and bank credit. And the commercial sector in its turn does not have bank credit resources for the working capital needs of new industries. The Reserve Bank of India statements show a large increase of Rs. 2,633 crores as bank credit to the commercial sector during the 12 months ending June 1976, but over Rs. 2,230 crores of this was for food procurement and fertilizer import. There is need to catch up on our Plan holiday in developing industrial projects and on this to reverse the anti-inflationary hang-over of the past three years.

Related to the need of expanding capacities and starting new industrial units, as far as the private corporate sector is concerned, is the question of the interest rate charged on corporate loans which in 1976 averaged 14 per cent; in the case of nationalised banks other than State Bank of India it averaged over 16 to 18 per cent. Of the Rs. 390 crores lent by the banks to the corporate sector and the total outstandings of Rs. 2,317 crores and some Rs. 400 crores as financial assistance from term lending institutions,[7] the average

[6] Annual Report of Reserve Bank of India 1974-75 p. 27 and Weekly Statistical Supplement Vols. 27 and 32 p. 3.

[7] Bulletin, Reserve Bank of India—February 1976 p. 120 Bulletin, Reserve Bank of India—April 1976 p. 281.

rate is 14 per cent and about 45 per cent of the loans and assistance is at between 16-18 per cent. (This is apart from the penal rates recommended by the Reserve Bank of India Committee and accepted by the Reserve Bank, involving the levy of a further 1.00 to 2.5 per cent for defaults in repayment of loans and in borrowing covenants, irregularities in cash credit accounts, non-submission of stock statements and other financial data, non-payment/non-acceptance of bills on due dates etc.) This increased cost of credit (for the private corporate sector ranging from an increase of 15 per cent to 28.8 per cent, averaging a 50 per cent increase in 1975 as compared to 1974),[8] has both held back investment in capacity expansion and the starting of new industrial units. To meet this double objective, the question is posed as to whether there should not be an immediate reduction of 1 per cent in the bank rate and 2 per cent in the commercial bank rates, with appropriate adjustments in deposit rates and the government tax on bank profits.

A third problem relates to the relation between the improved industrial growth rates witnessed or expected over 1975-76 and 1976-77 and the growing aggregated or disaggregated estimates of unemployment and under-employment recorded in the 25th and 27th rounds of NSS. The 27th round reports an increase of 2 million rural workers as chronically unemployed. Also, All-India Employment Exchanges report that as at the end of May 1976, 93,35,200 persons were on their live registers, including 50.3 lakh educated job-seekers, compared to 87.36 lakhs and 48 lakhs respectively in August 1975.[9] The large and medium industrial units are generally capital intensive and their growth and development will provide no answer to the mounting problems of unemployment and under-employment. It is therefore necessary for project reports on large or medium industrial units that are being planned, as well as those of the existing units in both the public and private sectors, replace their being self-contained production units and provide for ancillaries and subsidiaries to manufacture the components and spares that they need, as a means of generating employemnt as well as operating themselves at a higher level of productivity.

Agriculture

The agricultural sector at this mid-year point raises four questions. First, while for two years running the major cereals, wheat and rice, are performing very well, there is need to intensify research and plan an integrated national expansion programme in the production of what is euphemistically called coarse grains, jowar and bajra, which also from a long-range point of view must become the staple diet, to start with, of the upper 20 per cent of the community to meet the cereal demands of the doubled population which will become a fact in the next twenty five years. Further, the Reserve Bank points out that the attainment of the Planning Commission's scaled down Fifth Plan target for foodgrains from 140 million tonnes to 124.50 million tonnes calls for increasing the gross cropped area by 4.5 million hectares, the area

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[8] Quarterly Economic Report of the Indian Institute of Public Opinion No. 86 pp. 36-41

[9] Report of the Directorate of Employment & Training—August 1976 p. 2

under minor irrigation by 6 million hectares and major and medium irrigation by 5 million hectares alongside of improved water management and use, the HYV hectorage from 25 million to 40 million, 4 million tonnes of fertilizer consumption and a near trebling of agricultural credit from the present Rs. 689 crores to Rs. 1,700 crores.[10] These demanding imperatives for the next two years must be set alongside of the sense of satisfaction felt with the quantum of wheat and rice production during last year and that expected for the current year.

Second, the cash crop performance is in urgent need of improvement both as the source of income for the farmer and the landless labourer and as the major input in the various agri - and agro - industries. Cotton production has declined from over 7 million bales in 1974-75 to 6.4 million bales in 1975-76, resulting in a steady increase in the wholesale index of cotton prices from 285 in March 1975 to 381 in June 1976 (a rise of 30 per cent in 12 months) and contracts to import 2.25 lakh bales of cotton from Sudan, Egypt, US, Tanzania, Mexico, Afghanistan, Turkey, Iran, Greece and USSR. So too, jute production has fallen from 6.2 million bales in 1973-74 to 4.46 million bales in 1975-76, leading to an increase in the wholesale index of jute prices from 151 in March 1975 to 190 in March 1976 (with a decline to 176 in July 1976) and the closing down of some jute mills. Tea, and to a lesser extent coffee, oilseeds, and sugarcane have a similar stagnant or declining record in terms of production. There is need for more intensive Research and Development efforts in regard to each of our cash crop and sustained programmes for their expansion.

A third problem is related to the heavy annual losses sustained by agriculture and farmers, labourers and cattle from floods. As at August 1, the Union Government reported[11] that floods in 10 States have resulted in the loss of 254 lives and Rs. 42.53 crores in agricultural production. To this should be added the extensive losses suffered by Punjab, Uttar Pradesh and Haryana in the August floods. This annual loss of Rs. 100 crores is suffered for the most part by the poorer sections of the society and is avoidable by the development of a planned and viable flood prevention and production programme. It is now nearly three years since the Sixth Finance Commission called attention to this national need and outlined the means of financing the compensations and relief that flood losses and damage call for. It would be advisable for a specialist Commission with scientists and technologists to be set up to draft a national plan for this purpose.

The fourth issue is related to the foodgrains buffer stock. We will be completing 1975-76 operations with a total stock in the hands of the government of 17 to 18 million tonnes. The effect of this large holding on the country's credit resources and the extent to which it has made for industrial credit scarcity was noted earlier.

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10 Bulletin, Reserve Bank of India—June 1976 p. 390

11 Statement of the Union Ministry of Food and Agriculture in the Lok Sabha—August 20, 1976.

In August, the Food Corporation of India requested an increase in the overdraft limit from the banking sector by 700 crores and has also requested the government to increase its equity. The Government has asked the World Bank for a loan of Rs. 100 crores for buffer cereal stock financing. These ad-hoc financing measures apart, there is need for a planned foodgrains buffer stock policy which should be separated from the annual 10-12 million tonnes government procurement for distribution through the fair price shops. (For the current year, the public distribution is running at half this rate, 5-6 million tonnes because of the foodgrain resources being in the hands of consumers). The buffer stock policy should be a function of the food security system in an economy which faces drought in a large part of the country every seven years and should cover the issues of its financing, storage and renewal.

Foreign Trade

The good performance of exports over the past two years and the favourable trade balance since the past 5 months have been referred to earlier. In this section, a few further problems are dealt with. First, the assessment of the real performance of the different components of the export trade cannot be undertaken except in terms of the quantum exported in each line, rather than, as is done at present, on the basis of the money value and income earned an the goods exported. One of the two sources of the money value of our exports being inflated has been corrected with basing the exchange value of the rupee on a basket of 12 currencies, correcting the hidden devaluation of the rupee which boosted our export earnings in the past. But world inflation is still running at 8 per cent, and the measurement of the health of our export industries demands an analysis of their exports volume and not value. For this purpose, the Ministry of Commerce might publish all foreign trade statistics both in value and volume.

Second, the weak sub-sectors on the basis of the volume of exports as revealed by the mid-year figures are drugs, pharmaceuticals, fine chemicals, man-made textiles and garments. These need particular planning and management assistance. For another group of industries, heavy engineering, heavy electricals, automobiles, cables, machine tools, agricultural tractors, electric motors, switchgear, earth moving equipment, chemical plant, wagons, motorcycles and cranes—existing input constraints need to be quickly lifted for their productian increase and exports expansion.

Third, as hinted at earlier, there is nothing either in international trade theory or on empirical evidence to favour a positive balance of accounts or a favourable trade balance over a deficit one. What is imperative is increased industrial and agricultural growth and it is what promotes this objective which is decisive. At present a liberal import policy of scarce industrial raw materials, machinery and spares including building buffers in them is indicated rather than the piling up of idle foreign exchange resources from the trade surplus and foreign remittances.

Savings

The savings rate of the country at this mid-year point cannot be precisely estimated as the data for 1975-76 are not yet available. Also the re-classifications of the State as well as Union Budgets make estimates as between the years not comparable. This is seen in the Reserve Bank reports wherein the rate of domestic savings to national income for 1972-73 has been revised from 11 per cent to 12.1 per cent of the net national product, and that for 1973-74 from 9.0 per cent to 11.8 per cent.[12] These are also the CSO estimates. There are two broad generalisations however that can be made on such data as is available. First, the rate of domestic savings is declining and there is no more urgent task as to arrest this trend and get as near the Planning Commission target of 15 per cent as is possible. Second, CSO reports that the household sector savings fell to 76 per cent while the public sector savings rose to 14.5 per cent in 1973-74, which the Annual Report of the Reserve Bank confirms for 1974-75. For 1975-76, net savings by the Central Government increased to near Rs. 900 crores and the private corporate sector also increased its share of total savings significantly. This trend is in the right direction for the growth of economy, wherein the relative shares of household and public and corporate sector savings of 80 to 20 is the converse of that in affluent countries where the householders contribute 20 per cent and corporate and public sector 80 per cent of their total savings. If the aggregate investments however have continued to increase in the country, it is because of the increased flow of foreign aid during 1974-75 and 1975-76, which could have been further increased if the increased flow of foreign remittances had also been invested.

Two other issues—the Fifth Plan and the Twenty Point Programme—are dealt with briefly.

Fifth Plan

At this mid-year point as well as the mid-way point of the Fifth Plan, the continuing lack of a plan frame, against which industrial and agricultural performance can be tested, savings, investment and production targets established, and the normal advance plans approved for investments in the Sixth and Seventh Plans is serious. In a sense, however, this is water over the dam, becauss it is not much use to establish such a frame, even if it can be done, for the last two years of the current Plan. In effect there are two alternative approaches that could be considered in meeting this situation. One (and the one that seems to be accepted by the political leaders and their official advisers, the business community and the economists) is to continue working on the Draft Fifth Plan, revise most of its targets downward, while maintaining the so called core sector targets at the original levels, in light of the current demand trends, price and cost escalations and resource constraints and in light of all this to establish the Plan outlays (at marginally higher levels) for the last two years of the Fifth Plan. There is in this approach an unnecessary weightage given to the current options and short term operating factors—for example in computing the demand and needed investment in steel, coal and non-ferrous metals—in addition to the disadvantage of being tied to assumptions and projections which were made under a compeletely different set of political and socio-economic circumstances. To update the Plan, revise its quantities and make the projections more realistic—these exercises in which the Planning Commission is currently engag-

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12 Annual Report and Trends and Progess of Banking in India, 1973-74 RBI pp. 12-14

Annual Report and Trends and progress of Banking in India, 1974-75 RBI p. 33

ed—face all the problems flowing from the attempt to pour old wine into new bottles, (I have here deliberately reversed the simile), in starting from a base which is non-existent, and in not being able to respond to the new imperatives of the future. The alternative is to recognise frankly that the first three years of the Fifth Plan were in effect a Plan holiday, that the last two years represent an effort to overcome the forces of stagnation and recession which had set in the economy and so to treat the plans for the five years—1974-75 to 1978-79 as Five Annual Plans. In effect they will be Annual Plans in the sense that they will hopefully register in each sector the original targets set for the Fourth Plan. The Fifth Plan can then be planned for the period 1979-80 to 1983 on a relatively clean slate. *Whether or not this second approach is* formally followed, it is essential to prevent the next Plan being in effect a spillover of the Fourth and Fifth Plans' *unfulfilled targets, to avoid basing it* either on the forces of stagnation which characterised the first two years of the current Plan or the sense of euphoria that seems to be characterising its last three years. It must rather be based on expanding sizeably the industrial (and agricultural) base of the public and private corporate sectors, opening up new sub-sectors with fresh investments. The next Plan must be freed from the adjustment and readjustment approach which is not the planning approach.

The 20-Point Programme

The government estimates of the outlay on the 20 point programme in 1975-76 amounts to Rs. 1,969.69 crores and the approved outlays for 1976-77 are Rs. 2,337.68 crores.[13] This programme is specifically aimed at meeting the Fifth Plan objective of eradicating poverty, and the progress in execution over the 14 months of its establishment might be briefly reviewed. In terms of actual execution, a good record may be noted in regard to most of the programmes. In two areas—better cloth for more people and increased employment—little progress has been made. The controlled cloth scheme has been moving around between the organised sector (with a target of 800 million sq. metres reduced to 550 million sq. metres) to the decentralised handloom sector (with a target of 300 millon sq. metres) and more recently between the handloom and powerloom sector and back again to the former (with a pilot *experiment of 32 million sq. metres). In* addition to the uncertainty in determining the precise responsibility and the specific quantum for this important programme, *the distribution channels are still in the* exploratory stage. On the employment front, apart from setting up yet another enguiry committee, not only have no implementation schemes as yet been formulated, all evidence points to the worsening of rural and educated unemployment as noted earlier. There are also the usual implementation lags. As at September 3, the Union Government reports that out of 5,300 national transport permits allocated, only 44.5 per cent have been issued, with four States having yet to make a start. There are also some gaps as in the case of population which has been met in the Population Policy formulated, and in the case of massive adult illiteracy which is both a production constraint and an intellectual deprivation

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13 Minister of Finance: Statement in Lok Sabha. June 1976
Bulletin, Reserve Bank of India—April 1976 p. 294.

to those in the poverty sector. In four other programmes which are being well and speedily executed, there are certain spin off effects that need to be watched. The abolition of bonded labour which is progressing rapidly calls for the retraining and re-employment of the workers in alternative gainful occupations which in a sluggish employment situation has not proven to be easy. The law liquidating rural indebtedness of small farmers, landless labourers and rural artisans with incomes below Rs. 2,000 per annum has dried up their major (60 to 80 per cent) source or borrowing and needs to be rapidly replaced by Farmers, Service Societies, Co-operatives and Rural Banks, if there is not to be a decline in production in this large sector and an even further reduction in their family incomes and living standards. Similarly the legislation for socialising of urban land enacted in most States to make available surplus land for housing the urban poor and reducing the gap in housing standards between the different sectors, has in the transitional period brought all construction activity to a standstill, stopped investment in agricultural lands which are within the purview of the legislation of the urban agglomorations and might lead to a certain amount of deforestation. Finally, for the success of the whole programme, there is need for participation of the people, universities and colleges, the private corporate sector units, voluntary organisations, including the farming and business community as well as political party cadres, particularly in regard to enforcing such items as the minimum wages for agricultural labour, housing sites for the rural poor, etc. In this regard, the participation of these groups in the national programme of integrated rural development, involving, the adoption of a village and total village development, would be a step forward.

Undergirding this specific and needed national programme with its emphasis on an improved and a less inequitable distributional profile, is the need to plan for a period of sustained growth and to overcome the in-built forces of stagnation in the economy. It is to that limited if insistent aspect that these notes are addressed.

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