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Decentralising the Provision of Public Services

India's Educational Efforts : Rhetoric and Reality

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EDITORIAL - SOME HIGHLIGHTS

I. General Economic Scene

State

Water

In November 1992, the North East monsoon brought on varying results in the state. First, there has been widespread flooding in the southern districts of Kanyakumari, Tirunelveli - Kattabomman, Kamarajar, Nagapattinam Quaid-e-Milleth, Madurai, Chidambaram with heavy loss of life estimated at over 200 persons, the loss of crops - paddy, cotton, banana, estimated at Rs. 68 crores and leaving 3.25 lakh families homeless. There is reason to believe that the state was not fully prepared to meet this calamity, in spite of early warnings by the meteorological department and this 'Bulletins' advice that the district collector's plan for breaking the bunds of the tanks which had already been filled as a result of the South West monsoon. As a result as many as 1500 unplanned breaches have occurred in irrigation tanks and 1600 channels, destroying 200 medium and small anicuts and

1000 pucca buildings which could have been avoided if there had been identification of where the breaches could be made with the minimum loss of human and animal lives, homes and the crops. We seem never to learn from calamities. In the midst of this heavy rains and cyclonic storm which hit not only Tamil Nadu and Pondicherry, but also Kerala and Karnataka when the chief ministers of the Southern Zone met, the meeting was wasted in discussing at great length the measures needed against growing terrorism with no reference to establishing a programme to safeguard against this kind of cyclonic and monsoon effects which occurs regularly every year. Madras city had heavy cyclonic weather for a week and has received rains which have increased its drinking water in the 3 reservoirs to reach 1839 mc/ft (full capacity 6483 mcft) against 4200 mcft needed till the next North East monsoon to meet the city's water supply needs. The government has asked the Union government for Rs. 530 crores

as relief to meet the damage and has received about Rs. 40 crores so far. On the positive side, Mettur was filled for the fifth time this season on November 20. Tamil Nadu and Kerala governments have agreed to set up a joint committee to work out details for renewing the inter-state Parambikulam-Aliyar agreement and the Andhra chief minister assures that the Telugu Ganga water will reach Madras by June 1995 at the present rate of construction of the project. The funds made available for repairing the flood damage in Madras city could also be used with a small supplement to implement the United Nations Centre for Human Settlement's plan to clear Madras city to develop once more its treelined areas, wide roads, clean water ways, hygienic slums, thickly wooded forests and open spaces.

1993-1994 Plan

During November, the overall allocation for the 1993-94 Annual Plan has been fixed by the Deputy Chairman of the Planning Commission and the Chairman of the State Commission, at Rs. 2101 crores, representing an increase of Rs. 350 crores over the 1992-93 plan, which will be some 10 per cent less in real terms because of the inflation factor. The positive aspects in the Plan is the priority given to agriculture and rural development (in which literacy is embedded) with Rs. 459.70 crores. This is moving the state government's development effort in the right direction. As has been repeatedly emphasised in the Bulletin (See Vol XXII pp23, 82, 140, 254) the government should not be in the industrial production business but should develop infrastructure and act as catalyst for industrial development. Also the opening of the power sector to the private

sector is a move in the right direction as it will assure both industry and agriculture the needed power. Despite the large externally funded projects—the cauvery pollution control project, the Tamil Nadu School Education project and the Tamil Nadu Water Supply project amounting to over Rs. 500 crores, the state faces a serious resource position. For 1993-94 its additional resources are estimated at Rs. 600 crores against the Rs. 834 crores for the current year due to the estimated drop in the public sector contribution. The loss of nearly Rs. 300 crores is serious and calls for some pruning of the public sector enterprises and some belt tightening of the government. In addition there is now the demand for relief and rehabilitation because of the monsoon and the cyclone, which will further eat into the states plan resources. The state government needs to observe the utmost economy on its administrative costs side and as well as discipline itself on populist outgoes.

Power

India's power situation is dismal, its shortfall averaging 9 per cent rising to 22 per cent during peak hours and is worsening. Despite the rail transport being 6 times more efficient than road transport, rail's share of freight has fallen from 88 per cent in 1950 to 46 per cent in 1989 and to that extent is increasing the call on scarce foreign exchange. Moreover the World Watch Institute States that out nuclear programmes operating record is among the world's worst. Its 7 operating reactors at the beginning of 1992 had run just at 42 per cent, providing only 2 per cent of the electricity despite heavy investments running into several crores of Rupees. A second

negative element is the reported record dues of Rs. 3714 crores by the State Electricity Boards for 1991-92. This is despite the states efforts to raise their revenue by increase of tariffs and the Planning Commission's requirement that the state wipe out these losses by the end of the Eighth Plan—1997-98. Meanwhile with the World Bank's uncertain attitude towards the \$1.2 billion loan to the National Thermal Power Corporation, (see Vol. XXII pp. 457, 273), an alternative plan which puts together 6 major central power stations, together with a generating capacity of 3230 MW—Rihand II, Vindh-yachal II, Yamunesnaya (with 1000 MW capacity each), the 2 southern projects at Mangalore and Kanyakumari—has been developed which will be looking for alternative finances from bilateral sources, commercial credit from Russia, ADB and by the transfer of some project to state governments. This is a good move to get out of the growing dependence on the World Bank as the sole source of funding the power projects. A good example of such independence is the decision of the Kerala government to join with the four southern neighbours to contribute Rs. 102 crores in 5 years as its share of the 1000 MW Koodankulam nuclear power plant. Only, it is a pity that this cooperative project is around a nuclear power plant which raises other questions, apart from its joining in a poor execution area. The Kalpakkam units were closed longer during November than operating. The hydel stations could be further developed to reach their normal optimal target of 50 percent of the power needed in this connection, with the good south west monsoon, followed for the state and Kerala and Karnataka by the North East monsoon, as a result of which all hydel reservoirs are full. The

autonomy of this sector—autonomy from both the uncertainties of thermal generation and dependence on foreign financing—should be assured. Another important source of power and the only positive point emerging from the Southern Zonal Council meeting in November referred to earlier was the united demand for the southern gas grid. This was reiterated again at the southern conference of Power ministers in Hyderabad on November 27 in strong terms. In this connection, Tamil Nadu has made good move in offering financial participation for the development of the grid. This will save the wasteful flaring of the Bombay High gas and its 1000 Km long pipeline from Bombay High can be constructed speedily on the basis of the alignment developed by the Konkan railway. Another source for meeting the country's power needs that opened up at the micro level is the development of small biomass based power units located in every village which has an unending supply of biomass. Today Village power stations have become competitive, so these small units could become a really effective means of meeting the country's vast rural power needs. Infact it has been estimated that 15,000 to 20,000 MW of sustainable power could be generated from this source and for this an integrated power policy for the country is needed.

National

1993-94 Annual Plan

The exercise of reviewing and deciding on the annual plans of the state and UTs is underway, with first fixing the overall Plan outlay for each state and UT, on the basis of which detailed

discussions are held by working parties and specialist advisers to break down the outlay between projects. Also the commission has worked out a formula, called the Pranab Mukherjee formula for distribution of the 7.5 per cent on the assistance to 'non special' category states. The formula provides 2.5 per cent for tax effort, 2 per cent for fiscal management, 1 per cent for population control, 1 per cent for female literacy, 0.5 per cent for on time completion of externally assisted projects and 0.5 per cent for land reforms. The formula was approved by December, 1991 meeting of the NDC. All this is good and needed but there is still no movement on decentralized planning — the plans at the district and block level for which the first 2.5 per cent should have been allocated and the next 2 per cent for tax effort and fiscal management. This kind of incentive may be needed to get decentralized planning from rhetoric to reality.

Prices

Against the 9.2 per cent inflation rate with which September ended (on the 26th), the October inflation which had shot up to a disturbing 10.03 per cent on October 24, settled at 9.75 per cent on October 31, the official whole sale index on that being 231.8. This provisional index is likely to go up when the final index is in. The rise is ascribed to the sharp increase in the price of sun flower seed, soft drinks, power looms cloth, ordinary castings and automobile spare parts. There was a 3 per cent rise in the price of rice, bajra, and barely. There is one limitation to this exercise which is undertaken every month and reported in the Bulletin. There are short term effects which change from week to week,

from month to month. Hence they are not able to reflect and take account of longer term factors as in the case of the rise in the price of automobile spare parts, which are in part due to the fall in its price due to the recession and its regaining part of this loss and no more. TN government also explains the rise as being due to the cost push impact of the increase in petroleum product prices announced last month, though that does not explain why this effect is so delayed. There is also the continued liquidity of the economy, with money supply hovering at 18.9 per cent. Even if this is countered in the coming weeks, the phenomenal 129 per cent expansion in foreign exchange reserves will have its effect on liquidity together with the reduction in SLR. To counter this, SLR may have to be increased but the real remedy is on the demand side—with the produce not automatically passing on to the consumer all cost increases; they should also absorb some part of the increases.

Stock Exchange

November saw two very welcome developments in the stock exchange front. First, much against the wishes of the brokers, SEBI laid down very essential and much awaited by the investing public, capital adequacy norms. These norms cover: minimum capital to be deposited by brokers to cover 6 months business and not allowed to exceed their gross outstanding limit; to inform the SE when 80 per cent of their limit is reached; minimum deposits of Rs. 5 lakhs in Bombay and Calcutta, Rs. 3.5 lakhs in Delhi and Ahmedabad and Rs. 2 lakhs elsewhere to be maintained by brokers; SEs to

change their margin rules so that working capital is not locked up: deposit with SE to be 50 per cent cash and 50 per cent in securities; SEBI to monitor for misreporting. These are to come into effect in all SEs by December end. Thus capital adequacy norms require a base minimum capital and additional capital related to volume of business. These norms will give SEs some stability and prevent several malpractices. The other welcome proposal by SEBI is to double the number of stock brokers to 5500 and increase the number of sub brokers to 10,000. This and the above norms will give SEs some depth and atleast meet the demands of small investors who tend to be overlooked by the brokers who go in for institutional players, particularly since banks were allowed to become the dominant players from 1989.

Economy

Both the internal mid year reviews of the economy and external review by the ADB and World Bank forecast a 3 per cent growth for 1992-93 (ADB places it at higher 3.6 per cent) and at 4 per cent in 1993-94 (ADB places it at higher 4.8 per cent). The lower rates forecast for this year and next year is not only a cautious approach but is based on the economy being in the grip of a recession due to lack of telecommunication, inadequacy of power, which have also caused a set back to the economic reforms programme. Not only has the retarded affect of the rise in petroleum product prices but also world recession had an effect on the Indian economy. As governments capital expenditure has been reduced in real terms, the recession is likely to deepen further and be expressed in diminished demand conditions in engi-

neering, automobiles, plastics, synthetics, textiles and steel which are as a result building up large inventories according to AIMU. This is in contradiction to the government report that there had been an 80 per cent increase in its tax collection. As far as the Union government is concerned its switching over to the 364 days treasury bills has helped in a substantial reduction in the net RBI credit to the government and in addition as a consequence, the World Bank / IMF ceilings can be kept. In this context, of reducing expenditure to keep down the fiscal deficit, the FAO warning is well taken that any sudden cut in food subsidies will hit the earnings and nutrition of the poorest. The government announcement that it is likely to reduce capital goods tax for foreign investments and may be related to the fact that in November, government announced receiving Rs. 200 crores of foreign investment. The All India public financial institutions in their turn have cut their term lending rate by 1 per cent as from November 19. It is not clear whether there is an across the board cut or whether it will be selectively applied on the FIs. The government in early November imposing a ceiling of \$ 2.5 billion on its external commercial borrowing, and \$ 1 billion for foreign loans seems like bolting the stable door after the horse has bolted, but even so, is needed as the foreign reserve has fallen steeply for the second time in 6 weeks, falling from \$ 6.3 billion in August end to \$ 5.8 billion in September end and again from \$ 6 billion to which it had risen in October to \$ 5.4 billion in October end and \$ 4.9 billion in early November. It is difficult to estimate how far the build up in September from \$ 5.8 billion to \$ 6.3 billion was due to export earnings because of the continuing receipt of World Bank and IMF loans. It may be that this ceiling of \$ 2.5 billion on com-

mercial credits (bonds and export credit) is on the high side, given the decline in international confidence in the Indian economy which led to commercial borrowing falling from \$ 2.9 billion in 1989-90 to \$ 2 billion in 1990-91 to further \$ 1.6 billion in 1991-92. On top, the government has now decided that the dependence on NRI deposits which had been used as short term borrowings, would no longer be open ended, replacing funds coming in to take advantage of the high interest rate, for only genuine NRI deposits. This again is a rather late action but is a necessary one. The visit to India of the World Bank President in November has led to negotiations on: a) \$ 500 million financial structural adjustment loan (in addition to a loan of \$ 300 million from ADB) so that the reform in that sector may be implemented and not be held up as at present. In this connection, the productive and non productive assets of the Banks are estimated at huge Rs. 20,000 crores. For this the Narasimhan Committee had suggested the creation of Asset Reconstruction Fund to takeover these debts, but this has been a non starter. To help India, IBRD is reported to have devised a new sectoral adjustment programme through which it can disburse fast disbursing loans to the country. The World Bank President also during his stay expressed concern at the reduction in education and social spending, without realising that this is a direct result of the steep reduction in the fiscal deficit both for last year (from 8.5 per cent to 6.5 per cent of GDP and this year to 5 per cent) imposed by the Bank/IMF. It is good that he now realises the key importance of education and health in the development programme and it is to be hoped that this will lead to his reducing the steep cut imposed on the fiscal deficit this year and next year as part of the Bank's conditionalities.

Industry

Despite the slowdown in industrial activity as a result of the recession both in the country and abroad as reported by AIMO survey was earlier referred to, the stock market reports that on November 16, 36 companies came out with new or rights issue. This is one indication of investors preference for equity investment (in preferences to bank deposits) on the basis of which it is estimated that investments of upto Rs. 20,000 crores a year is likely for a number of years. Equally Indian companies now prefer to raise equity rather than borrow at high rates from banks as a means of raising the needed funds. Does the investor also see the share market as a good hedge against inflation? This means that as the government faces resource shortage, the capital market is providing the industry the needed funds. That is a positive development. In early November, the government announced the easing of restrictions on location of industries and issued new guidelines for industrial license applications for industries which are outside the licensing purview but which face locational constraints. In the sombre industrial scene, the sugar industry reports a record production of 134 lakh tonnes in 1991-92, for the third year in succession. It is important that this continuing high production should not only be used to strengthen the country's exports but also to open up some important and employment intensive downstream industries. Two important reports on the oil sector are by the P K Kaul committee which recommends that ONGC be converted into a public limited company under the Companies Act and the other by the Satish Chandran Committee which recommends phasing out LPG subsidies, continuing it on Kerosene, while reducing

the price differential between kerosene and diesel to reduce its adulteration.

Public Sector Enterprises

The government announcement of privatising HCL raises some important issues. One is that it is based on the assumption that the 75,000 tonnes annual short fall of copper in the country which is at present being met by imports could be reduced and replaced by private companies both investing heavily in copper mines to increase the copper output and make available foreign exchange for any shortage that is faced. These are a large, unproved assumptions which privatising Hindustan Copper may or may not confirm. It that case, there is some question about the wisdom of the privatisation decision. The other issue in the public sector is the policy and programme of disinvestment in the shares of the public sector enterprise undertaken primarily as a resource raising instrument. What is surprising that even though the 1991-92 disinvestment raised less than 50 per cent of what could have been raised, the lessons of this poor performance have not been learnt and applied for the disinvestment programme of 1992-93, when also there is a shortfall over what could have been received. The main lessons for this continuing gap in resources raised and what could have been raised are: the programme is launched without creating proper conditions for its take off like listing the PE shares in the stock market, which would have provided PE capital market linkages, the loss of opportunities to sell PE shares at favourable moments in the market, and above all the method to be used—whether the auction system or negotiated sales system need to be

determined. It is hoped that for the balance of the sales for this year and the next year these omissions will be repaired.

National Production Front

Steel

The steel plants present a mixed picture, with the private sector plant, Tata Steel's profit dropping sharply in the first 6 months of 1992-93 leading to a fall in the Tata Steel shares and in addition the company reports that it has had to pay an additional Rs. 30 crores for its coking coal imports, which the SAIL plants show as the highest project of Rs. 367 crores in 1991-92, due to its producing higher value items. Saleable steel increased by 5 per cent, whereas hot metal rose to 3 per cent and crude steel by 4 per cent. This higher production of value added steel items such as special steel and hot rolled coils contributed to the improvement in the product mix and techno economic works. In an open market economy, it is not always that private sector does better than the public sector units—both face several unforeseen factors.

Crude

In the case of crude, the country faces the same situation year after year, with the oil import bill rising steadily. This year 1992-93, it rises by \$600 million to \$5700 million from last years \$5100 million. It is of little use for the government to trot the same excuse, that the bill has gone up because the global oil market has hardened, and that the government has indicated that IOC will be allocated only \$ 5,100 million.

This is of little solace, because the rest of the \$600 million will have to be paid by the public at the higher (free market) exchange rate. There is still no record of economising on public consumption as well as adopting the various methods advocated by the conservation association for reducing private consumption. This is no way to meet the future demands which would simply be increasing year after year.

Coal

In contrast, CIL reports following a strict fiscal belt tightening programme, as a result of which, it states, that its accumulated loss of Rs. 2500 crores has been wiped out and Rs. 167 crores earned as profit for the first time in years. The austerity was imposed on it by a self denying ordinance in view of the complete withdrawal of budgetary support. This case needs to be studied by all public sector enterprises to see how its ban on mass travel, institutional advertisement campaigns, reduction of additional or replacement staff, rationalising of tax and telex and cutting back on its investing of shares and stock yards. On top, and equally important, it had taken measures to improve production in underground mines, use of captive power plants with its output of steady supply of power to the mines and the application of long wall technology as well as learning from Australian mines and their experts.

Non ferrous

In contrast to the negative story of copper reported earlier, in Zinc the country not only achieved self sufficiency but exported for the first time 1155 tonnes against the year's target of

10,000 tonnes. HZLs 4 mines produce zinc in sufficient quantity but is deficient in lead which is being imported. It is to this that HZL needs to turn its attention.

Agricultural Production

Will the good monsoon in 1992-93, despite the 3 million tonnes shortfall forecast, make possible the breaking of the stagnancy of foodgrain production at 170-171 million tonnes to an yield of 185 - 190 million tonnes? Will this uptrend continue for the balance of the VIII Plan so that the goal of 225 million tonnes is attained in 1996-97, which will not only feed the growing population but also ensure that no one goes to bed hungry at night, as it happens now. That is the meaning of self sufficiency - not that we produce enough foodgrains which enables us not to import them, as we did last year at 5 million tonnes of wheat and rice but also to ensure that all have access to the foodgrain they need. This also applies to the other crops like oil seeds and cotton which are doing well this year and which should be used to meet fully domestic demand before planning their export. The other major event in November in the agricultural field is that, at long last, the ministry states that it has finalised the agricultural policy resolution and has released its highlights for public discussions. The problem here is not only formulating the policy and resolution but ensuring that agriculture figures in the new economic (liberalisation) policy, which is completely silent on this basic, priority industry. Till that is rectified, all else will be merely pious hopes. The resolution itself is the result of the discussion and negotiations with the farmers, particularly the large farmers. Hence the absence of any provision for agrarian reform is not surpri-

sing, because it is not in the interest of the large and middle farmers. Till that omission is rectified, all else will not meet real national needs. The draft policy declares agriculture to be an industry and entitled to all the benefits of manufacturing industry without being subjected to the regulatory tax collection machinery that industry faces. Why this exception is made is not clear except that it has been insisted upon by the farmer lobby. Why should not the large farmer who earns above the taxable exemption limit not pay tax like all others? The resolution emphasises farm exports which are to be pushed without making sure that all domestic needs and demands are met, that agro based industries are developed; that the cooperative sector is democratised, what does this mean when it is run by the rural elite and no election have been held for several years, if democratisation means correction of these ills, it should be welcomed but not otherwise; that remunerative agriculture prices should be ensured (also serves the needs of the large farmers who have the marketable surplus); and launching a redesigned crop insurance scheme which should effectively cover the small farmer; and use of new materials like plastics in agriculture. Agriculture is a state subject and the state governments should be called in and the policy examined and approved by them. The temptation of using the policy as another step in the centre infiltration of this state responsibility should be avoided through the device of centrally sponsored schemes.

Foreign Trade

In November, the first 5 months negative trade balance amounted to \$2300 million (compared to \$3919 million

in April-August 1991, a 150.3 per cent increase) was the centre of discussion. The major question is whether the government is right in attributing this large deficit to the 22.2 per cent surge in imports during this period, as it did in its statements to Parliament on November 26. It attributes this surge in imports as a compensation to the 1991-92 severe import compression and states that its short term execution plan to meet this deficit involves the hackneyed course of revival of exports, for which 34 companies have been identified as extreme locus sector which will bring a value increase of 30 per cent each year in exports. But the situation is more complex than the government statement portrays. It is pointed out that non oil imports during the period rose only by 14.6 per cent, achieved by the current and fiscal and monetary squeeze which is held to be a better means of improving the trade balance. Further as earlier pointed out, oil imports have shot up during this period by 45.8 per cent, which together with collapse of the Soviet Unions export market account for the large trade deficit. There is an import boom and both crude oil and non crude imports have to be compressed to bring the trade balance to a sustainable level. The Plan for expanding export earnings of large industrial houses is necessary which the liberalisation and expansion of investment plan and the new Ex-Im policy 1992-93 (see Vol. XXII p 493) should make possible. What is disheartening is this trade imbalance is recorded despite the sharp export increase by 50 per cent of gems, the 10 fold increase in garment exports between 1981-82 and 1991-92; the 300 per cent expansion in colour television exports and the 34 per cent increase in leather exports between April and August. This means

that the export base needs to be widened and this large and small houses should be involved in.

Aid / loans

In November India contracted 7 loans from IBRD, including the Promise of two \$500 million each from its President for financial sector reforms and external trade adjustment, the mega loan request of \$7 billion. \$117 million from IDA for the Bihar Plateau development project, \$606 million for agriculture development in Rajasthan, \$350 million for power project in Maharashtra, \$40 million for SSP, 5 loans from ADB of \$6,00,000 for NTPC, \$285 million for coal ports project in South India plus 2 \$1.27 million for technical assistance, requested Rs. 350 crore for TIDCO, grant of Rs. 18 crores from Germany for the Himachal Pradesh project, \$19 million French credit for Ex-Im Bank, food assistance of \$17.8 million from the World Food Bank programme a total 15 loans and grants. These raise several questions. According to OECD India's external debt stands at \$71.5 billion, according to the World Bank estimates it is over 25 per cent of the country's GNP and according to the Government of India it is \$57, 125 billion— in its Lok Sabha statement on November 27. The governments base excludes all short term loans. How is the resulting debt servicing to be met? What will be the required order of export growth to service this debt and how soon will it be attained? When foreign commercial lenders refused to follow old lending to India with new ones, we turned to the IMF and this latest series of loans and loan request show how fast these are building up. But soon IMF/WB will refuse further loans for crisis management. By then we will have generated a flood of foreign investment, with

portfolio investment in shares of the private sector and public sector. The World Bank President commends this development during his latest visit to India and infact wants India to accelerate the pace of reforms in sectors like oil, power and finance, to put the exit policy in place and to start restructuring the public sector. The objective is to get foreign investment at all cost. Is this in the country's interest? There is also the question of the country not being able to absorb all these loans under their conditionalities. The country is falling behind in Bank financial projects, and already IBRD has cancelled over 20 billion loans. Germany has pointed out that though German loans are declining because of the domestic pressure following the country's reunification, German funds allocated have not been utilised because projects for their use are still unidentified. And this story applies to most large foreign loans received over the past 5 years. Is it not time to call a halt to these loans and tighten up our procedures and ensure their effective use?

International

IMF

An IMF study entitled - Issues and Development - in International Trade Policy notes that developing countries are more liberal in their trade policies than most industrial countries. It refers to the inward looking trade and industrial policies of Latin America, Eastern Europe and the dynamic Asian economy which have moved towards more outward looking policies and improved participation in world markets. Quantitative restrictions including allocation of foreign exchange have been eliminated in many developing countries.

In contrast, with few exceptions, most industrial countries did not reduce their trade barriers in the 1980s, during which voluntary export restraints and anti-dumping and countervailing actions were used and trade tensions were high particularly over subsidies of agriculture and industry. The liberalisation and market focus in industrial countries did not carry over to trade in goods and industrial policies and to the agricultural sector. An anti free trade movement has been the development of regional trade blocks—the single European Market, the US Canada free trade apart, the European currency and US North American Free Trade agreement, and European currency and US North American Free Trade Area. This is a timely statement of facts of what the industrial world is doing and has done, which makes a mockery of the Uruguay round of negotiations and the WB/IMF policy prescriptions to developing countries.

World Poverty

The UN International Fund for Agricul-

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II. Agricultural Development in Tamil Nadu

Paddy and other crops

The samba and kuruvai crops this year have been plentiful, a record so that after a long time the farmers were able to meet the kuruvai target of 6 lakh tonnes well before the target date of December 15 and the samba target of 12.5 lakh tonnes. Farmers in what is called the monopoly procurement area of Thanjavur Quaid-e Millet districts and parts of Tiruchi, South Arcot and Pudukottai districts were able to meet these targets.

tural Development states in its reports, that of the 4 billion people living in the developing world, one billion are living below the substantial flow of assistance and says that this poverty process is centred on a) sustained and sustainable rural development and not on poverty alleviation, is an investment and c) the poor are themselves the primary force that can produce the needed change. It says that development is not something that happens inspite of the poor. It happens because of them because of their intensive productive potential. The report sets forth the means for effectively utilising this production potential. Against this analysis, the South Asian Commission on poverty alleviation warns of "horriduous violence" if the teeming millions of the developing world are ignored in the name of economic liberalisation and structural adjustment which is happening in all developing countries. Hence the truth is inescapable that economic reforms, all liberalisation programmes must focus on social welfare, so that their end purpose is the development of men, women and children.

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The North east monsoon and the damage that it caused referred to at the start came after the harvest. The state has now an adequate buffer to cover both the normal shortfall of 6 lakh tonnes and the unusual critical shortfall of 15 lakh tonnes. In addition the PDS is now well supplied by the farms with food-grains. Now the farmers, especially in the delta area, are afraid that they may have to pay a price for plenty in the form of declining paddy prices. But this will not lead to fall in issue prices

because even at the present level the state government subsidy is Rs. 820 crores per annum over and above the share of the union government's subsidy. This burden may further increase when the union raises the issue prices so that its subsidy is not further enhanced. In addition to these problems of glut, there is the stocking of paddy bags by the farmers in the open in the absence of godown space. Further the farmers and the government face the problem of not having the capacity to hull the harvested paddy and turn into rice because the hulling capacity in the state never experienced such plentiful paddy harvest and supply. So paddy is being moved by both the government and the farmers to other districts wherever there is hulling capacity. Similar bumper conditions are being experienced in cotton, ground nut and the plantation crops which will be examined later. It is difficult to plan for a bumper harvest every year — in terms of storage, hulling and price maintenance. There is probably no solution to meet the farmers' needs in this regard, given the volatility of the agricultural output.

Research Reports

In November, 30 research reports are recorded which is satisfactory both in quantity and specialised diversification. There were 7 research reports on cereals, 7 on vegetables, 5 on fruits, 6 on animal husbandry and 5 in other miscellaneous fields. This is satisfactory. The results are tested at the laboratory and farm level and are still limited in their applications. Until they are spread to cover the various groups and types of farmers and the results known, it is not possible to assess the use of this important effort by the state's agricultural scientists. There is

one research lack which may be noted. In the agricultural world the development of bio technology research is spreading fast but this is somewhat held back in the state. Also not enough attention is being paid to the agro chemical used by the farmer and the means of educating him about their limitations and potential dangers. This is another area where research at the ground level needs to be developed. At present only one report pertains to this area and that is classed under the generic title 'other'. It is to be hoped that bio technological research will be developed adequately to merit a separate classification.

Fisheries Development

Not much is heard about the development of fisheries in the state — as much as the development of cattle, poultry and other animal husbandry elements. The reason for this neglect of a resource which can be developed in rather spectacular fashion, given the long 1000 km coast lines and the uncharted Bay of Bengal needs attention. Some movement seems to be taking place at last, with a 5 year programme to develop fisheries in select villages in Chinglepattu — MGR, Nagapattinam — Quaid-e-Millet, Ramanathapuram, Chidambaram and Kamarajar. This pretty well covers the coastal area of the state. Can the programme provide viable infrastructure to the fisherman, who are now by and large left to themselves to develop their own infrastructure. Can they be provided with boats, along with inboard and outboard motors? Can they be provided with nylon nets and the necessary fishing gears? All this will involve finance which the poor individual fishermen cannot afford. Can they therefore be formed into cooperatives, and through the cooperatives be provided with subsidised soft loans with a period

of a two year moratorium until they are able to stand in the main on their feet and pave their way. There are other non fishery items they need, like protected drinking water, service centres for maintenance and repairs of motors in the villages. This also should be part of the development programme for them.

Plantation crops

For 1992-93, the coffee board forecasts a modest total of 1,75,000 tonnes of coffee production of which 55,000 tonnes are to be released for domestic consumption. Overall the future of coffee the world over depends on a new International Coffee Agreement which faces a number of constraints, notably the distribution of quotas and the basis for them. What are the chances of an agreement among coffee producers — large and small and coffee consumers on the quotas and the need to stand by any agreement arrived at? At the movement, it looks somewhat doubtful if the quotas will satisfy all producers or atleast a majority of them and most consumers. For the present without any restriction on exports to the world market, Indian coffee export this year is targeted at 1,20,000 tonnes. Will this be possible without the Russian market

which absorbed about 30-50 per cent of the country's exports without a lowering of prices? The indications of attaining the year's target are good as between April and October 60,629 tonnes valued at Rs. 18,784 crores were exported. It is probably too early to assess the working of the 30 per cent of direct sales by the large states to the market. There are problems in its implementation and the manner in which the Coffee Board is meeting them need to be reviewed. Similarly how is the safety net of pooling for small growers working? And the question of revising the minimum price of coffee by the government is still on the anvil. On *Spices*, the new changes in the industry and trade had given a fillip to exports which need to be reviewed. India's share of the world trade in spices is 28 per cent and it is felt that if the productivity and quality of India's spices were improved, not only would exports increase, but India may emerge as a price setter and not remain content as a price follower as at present. *Cardamom* is in increasing world demand, but why are Indian growers reluctant to expand its production and open up new growing areas as they are doing with the tissue culture in *vanilla* which also has an expanding prospective market.

III. Industrial Development in Tamil Nadu

The month, November's balance sheet, of industrial development in the state is on the positive side.

An important industrial survey of the state of 450 industries by the Confedera-

tion of Indian Industry (CII) reports: i) an expectation of improvement in the state's industrial status, ii) 65 per cent are going in for expansion and diversification and increased capital investment, iii) the obstacles faced are shortage of

power, and the delay in government clearances, iv) for improving the scenario the state should follow the centre's policy guidelines, improve infrastructure and promote less power intensive, or raw materials using but high value added production; and v) on the negative side, 18 per cent of respondents speak of setting up industrial units in other states which is a mark of the flight of capital.

First, after prolonged delays, the state government in November cleared proposals with an investment of Rs. 1000 crores. The proposals include a Rs. 650 crores nitro phosphate complex in South Arcot promoted by Apollo tyres in collaboration with TIDCO, Rs. 12 crores Navbharat Felloy group in collaboration with TIDCO for manufacturing polythene, and Rs. 28 crores for manufacture of video cassettes. *Second*, ELCOT has firmed up plan for 3 projects involving an investment of Rs. 80 crores. One project in the corporation is in collaboration with a Bombay firm for export of switch made power supply, another in collaboration with a Tamil Nadu Industrialist for manufacture of electronic quality control instrumentation for the textile industry, and a third with a local technocrat a project for the manufacture of electronic weighing systems. ELCOT also announced that the proposed electronic city near Madras is to be converted into a Rs. 40 crores electronic hardware technology park. *Third*, the KG Group of Companies in Coimbatore are launching a Rs. 51.25 crores denim project and Rs. 46.40 crores terry towel food project as an export oriented unit. *Fourth*, the state has identified three agriculture sector projects for external funding—a Rs. 150 crores project on soil reclamation, a Rs. 75 crores project for agricultural development of hilly areas and a spices development programme to help the

coconut farmers. The problem with these four sets of projects is that they have all been approved in a rush and so how far they are going to be implemented is doubtful and needs careful monitoring. *Fifth*, the National Dairy Development Board (NDDDB) is setting up a Rs. 45 crores fruits, vegetable and flowers programme to market fruits, flowers, vegetable and spices in 10 large and 150 retail outlets in Madras city. *Sixth*, the Automotive components manufactures Association (ACMA) is floating Rs. 3 crores group marketing company in association with ICICI to ensure better marketing access through creation of facilities, like warehousing closer to the beneficiary and to counter the effects of the recession in this part of the industry. *Seventh*, Kothari Sugars and Chemicals is launching a Rs. 10 crore investment programme for expansion and diversification of some of its operation. One project of a Rs. 12 crores distillery will use the 25,000 tonnes of its captive molasses. Another project for Rs. 3.5 crores capacity will expand polybutene plant from 5000 tonnes to 7500 tonnes. *Eighth*, the Madanpalle spinning mills is setting up a Rs. 49 crores export oriented cotton yarn project and a Rs. 21.4 crores project, promoting itself as a major tourist centre as a result of which 199 star type hotels are being built, and improved air, rail and road travel are being developed. *Tenth*, the state cooperative sector is setting up a Rs. 1 crore modern ginning plant at Velampetti. *Eleven*, a thermally coated sensitive (TCS) paper is to be manufactured at a cost of Rs. 1990 crores in cooperation with IDBI. This is the first TCS paper project in the country being set up by Denmur Fax Role in collaboration with an Australian firm. *Twelfth*, Rs. 40 crores software project to be the single largest upfront of the industry is

being set up by squara 'D' software Ltd in collaboration IBM, Singapore. *Thirteenth*, Shrijit shoes Ltd (SSL) is setting up a project in the state to manufacture 9,00,000 pairs of footwear per annum with a capital outlay of Rs. 9.50 crores and marketing collaboration with several firms in Germany, Italy and Czechoslovakia which will take 75 per cent of its production. *Fourteenth*, the project which has been reviewed almost every month, the National Aromatics and Petrochemicals Corporation Ltd (Arochem) reports that it has tied up for technology transfer with universal oil products (UOP) of the US and Mitsui petro of Japan. UOP will support the aromatics division and Mitsui the processing of PTA. *Fifteenth*, TANSI in a tie up with IOC is diversifying its activities and is to manufacture fuel efficient gas stoves, starting this year with 80,000. *Sixteenth*, SITRA reports that one of the cotton mills in the state has achieved the production of yarn from pine apple leaf fibre on a mass scale. India has over 87,200 hectares growing pineapple from which an annual 6 lakh tonnes of fibre could be produced.

On the negative side, *first* the rather sudden discontinuance of the manufacture of denatured spirit by TANSI and the ban on importing it from neighbouring states has paralysed the foundry units in the state. *Second*, BHEL reports that the fall in demand for transformers from the power sector together with the accumulated dues from the State Electricity Boards has forced to diversify its production activities and enter the field of producing diesel locomotives and electric locomotives. While this may be a matter of strength in the long run, a disturbing

report in the Economic Times says that GEC of the US has expressed its wish to buy up BHEL. This should be firmly rejected and should not be part of the liberalisation policy. *Third*, Cauvery Sugars has declared a lock out from end October. This was the response of the management to the strike by the workers from October 23. *Fourth*, the Union government has once more communicated with the state to review its policy on granites. There is a possibility of granite being declared a major mineral in which case, it will no longer be in the states' competence to regulate the conditions of production of its granite quarries. *Fifth*, the cane availability for cooperative sugar mills in North Arcot Ambedkar district is sharply declining due to the cultivable land around the factories being polluted by tannery effluents. Further all crop lands as well as drinking water in the wells in the area are becoming unfit for human use. This can be corrected by setting up jointly by all the mills the depollution machinery to save the area's sugar cane and other crops and drinking water from further deterioration. *Sixth*, the High Court had to intervene to stay the TANSI order closing its Machine Tools unit at Ranipet. This order is being resisted by the workers who point out that TANSI has not followed the procedure laid down under section 25 (O) of the Industrial Disputes Act which requires the employer to apply for permission from the government for closure atleast 90 days in advance, stating the reasons.

As stated at the start of this sub section in November the positive features of the state's industrial development are overwhelming. Each of the negative features can be corrected and set right.

IV. Education, Science and Health

Educational Reforms

The educational reform needed in the country and the state has been pointed out repeatedly by commissions and committees as: i) allocating 6 per cent of GNP to education, instead at present it is just over 3 per cent; ii) giving priority to primary education. Whereas in the 40 years of independence primary education's share has fallen from 56 per cent of the education budget to 29 per cent while for higher education it has shot up from 18 to 44 per cent; iii) improving the holding power of the school which has 12 per cent of survivors of the second level (compared to 40 per cent for Korea-Malaysia): will the latest decision in this state to have a 3 tier, primary, secondary and higher education in place of the present 4 tier-primary, middle, secondary and higher secondary improve the holding power of the school system? That is only test that should be applied for any equipment; iv) the latest All India NCERT survey shows 57 per cent of primary schools lack roofs and 8 per cent function in open spaces; v) vocationalising second level education, but only 0.5 per cent of second level entrants enrol in the vocational stream; vi) updating the curricula and replace the examination system by various objective tests of learning - neither of which is being done, and vii) limiting higher education to those who are qualified, and except for those from the poor families, the rest should pay for higher education its costs. Instead the well to do who form the majority of higher education enrollees being subsidised by the state. It is good that the UGC is in the process of identifying and weeding out fake

universities which are funded by the well to do, usually black marketeers. One urgent reform which also addresses this problem is to break the link between university degree and employment. Under the recently formed (Tamil Nadu) State Council for Higher Education these urgent tasks can be addressed. Two developments at the international level have raised these questions once more in India. One was the visit of the World Bank President to which reference was made earlier. He seemed shocked at the low financial allocation to the social sector, without realising that he and the Bank through one of the conditionalities for its loan (reducing the fiscal deficit steeply, without specifying that the priority social sectors should not be touched) has contributed to the low financial allocation to education. The other event is the programme which India and 8 other countries (China, Pakistan, Bangladesh, Egypt, Indonesia, Nigeria, Mexico and Brazil) are planning to assess their education status and how they can attain full literacy by the turn of century. This should not be another planning experience only but should help the countries put into action the precise programme of reform which they have drawn up both nationally and internationally at Jomtien.

Literacy

Literacy programmes are giving full tilt with over 56 districts being declared fully literate. There is need to monitor their literacy status to see how many have attained and retained literacy and to plan their continuing post literacy programme. Now a problem has arisen

for the programme. In Andhra Pradesh the anti arrack movement sparked and promoted by the BGVS which has closed liquor shops in Nellore and 2 other districts has aroused the concern of the chief minister that if the movement spreads, the government will lose the liquor revenue which is around Rs. 800 crores. Hence the literacy materials and texts have been scrutinised and all references to arrack and liquor deleted as they are against the government policy. The collectors and the volunteers have been warned by the chief minister that any contravention will be punished. This is serious because the purpose of the literacy campaign is to teach people to read and write and to make them conscious of their problems and how they could be solved by themselves. If this is prevented, there is no point to literacy.

Technical Education

In a revealing upto date survey of the finances of engineering and medical education in this state, it is found that there are a total of 39 engineering colleges, where Rs. 15,000 per annum is spent on a student and the college collects Rs. 360 from each student as fees. In the Regional Engineering College, Tiruchirappalli, Rs. 20,000 is spent per student and in IIT Madras Rs. 40,000 is spent per annum per student. In polytechnics of which there are 132 in the state, Rs. 9000 is spent per student per year and Rs. 180

per student is collected as fees. In government medical colleges, Rs. 60,000 per student is spent and Rs. 500 collected as fee. There are self financing colleges among engineering and medical colleges and polytechnics where the fees charged under various heads are high, with no limitation on what are called capitation fees. The only way to ensure a modicum of order in this panorama of technical education is, grant free scholarships to SC and ST students (except those whose parents earn more than Rs. 2000 a month) and charge the fee cost of the education for all others. This is a difficult course of action but there is no alternative to it.

Health

The school health programme in this state is developing slowly. In Madras a team of doctors visits schools 3 days a week and diagnose the health status of the school students and provide them with nutritional supplements. The programme has so far covered 16,000 students in Madras where the student population is over 50 lakhs. A universal school health programme needs to be worked out. Its cost estimate can be quickly established and it should be implemented as the priority to the students from the poor families and for students in the primary schools. This is an attainable target towards which there should be a movement.

* * * * *

V. Employment and Labour Relations

A good exercise by the Planning Commission on reorienting unemployment policy during the VIII Plan has been undertaken to generate employment problem is resolved by the end of the Plan — March 1977. This involves, according to the Plan, creating 109 million jobs annually, maintaining an average of 3 per cent growth in the rate of employment. This takes into account both the unemployment backlog and new entrants to the labour force. As a plan, it is exceptional and cannot be improved. The question is, will it be executed, have we the resources behind which there is need for the political will to execute the plan. At a more practical level, information technologies are emerging as a major source for the generation of employment opportunities. By its direct impact as well as by value added, electronics and computers will create substantial employment opportunities in the tertiary sector. This is where immediate attention should be paid to employ an increasing army of skilled workers.

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VI. Other Items

Mid year Review of the Economy

At a seminar in the India International Centre in November, the Mid Year Review of the Economy 1992-93 by Dr. Krishnamurthy of the Institute of Economic Growth and Dr. S. L. Rao of the National Council of Applied Economic Research was presented and discussed. The review started with a summary of the major economic reforms

A voluntary agency Centre of Concern for Child Labour reports that India has the largest number-20 million of working children below the age of 15. They form 6 per cent of India's labour force and contribute 23 per cent of household economy. Any plan for dealing with child labour in the country must take into account this data. A recent study on India's industrial relations points out that the system has resorted to law too often and extravagantly, creating the workers-union-management dependence syndrome. Every party restores to conciliation and adjudication as a first resort. Continuous government intervention gives the impression that management and unions are not capable of resolving their problems. And our industrial relations which is top heavy, restrictive and absolute encourages this trend. The reform of the industrial relation now under consideration should take this into account.

lasting and non lasting, machine goods, basic goods and found that they were moving forward in a satisfactory direction. The rate of inflation, the capital market, the accumulation of foreign exchange reserves and the BOP status and terms of trade were reviewed. At the micro economic level it was forecast that the economy would record a growth of 3.5 to 4 per cent, with agriculture at 3 per cent and industry at 4 per cent, the rate of inflation will be 10 per cent, and the foreign trade deficit at Rs. 10-1200 crores or about 4.5 billion, due to the increase in imports M 3 will record growth of 15 to 16 per cent. The net RBI credit to government will be above the years target as promised to IMF of Rs. 6200 crores. The reduction in fixed deficit is well within reach. In the discussion, there was general agreement with the broad parameters set forth in the review. Some omissions were noted with regret, particularly the data on employment and poverty. There were also different views on WB/IMF conditionalities, under which the economy is working. The seminar expressed thanks to the 2 authors for the painstaking work that had been put in on developing the review.

Other IIC Events

There was a meeting of the planning Committee of the Economic Affairs Group of the India International Centre at which the current years programme of panel discussions, seminars and publication were reviewed and general satisfaction expressed at the performance. The Group then went on to examine the programme that could be developed for 1993 and agreed that panel discussion should concentrate on the various sector policies and the Economic Reforms. The seminar programme suggested,

in addition to the Mid Year Review of the Economy 1993-1994, will cover an appraisal of the economic changes, there should be a seminar on Planning methodology and on some aspects of SAARC. A meeting of the Standing Finance Committee of the centre also met in November and reviewed the income and expenditure and audited accounts for 1991-92 and recommended their approval by the Board. The revised budget estimates for the current year were also reviewed and approved. The draft budget for 1993-94 was examined and forwarded to the Board of Trustees.

Centre for Social Development

The Annual meeting of the Council of Social Development was held in early November. It welcomed Mr Muchkund Dubey as honorary director of the Council. It reviewed the report on the programme of activities for 1992 and noted the increasing concentration of the programme around the thrust areas established by the Council. It also noted with satisfaction the economical manner in which the Council is being run and the participation in its running of all the senior members. The finances are being so regulated that the deficit has disappeared and a surplus has now prepared which enabled the council to approve the Durgabai Deshmukh auditorium, to use part of the surplus as seed money to develop a core programme of the council. The council discussed and approved the revised budget estimate for 1992 and the budget and programme for 1993.

SRC-TNBCE

A meeting of the Governing Board of the State Resource Centre held at mid

November, when the programme of activities of the centre, notably the recommendations of the annual meeting of the voluntary agencies were reviewed. They would come up again to be examined, the proposed follow up at the next and further meetings. The programme of work of the cadres and the centre's staff were also subjected to review and suggestion made for some additional activities. The Executive Committee of the Tamil Nadu Board of Continuing Education (TNBCE) which met next reviewed the work of the Annual General conference. While expressing satisfaction at the successful completion, it was suggested that at the meeting the lacks should be presented so that they may be corrected for future conferences.

Institute of Financial Management and Research (IFMR)

The IFMR ran a two days seminar on the Economic Reforms and sectoral imbalances. The conference after the inaugural at which the main problems faced by the breakdown of the economy, the emergency action taken with loans from the WB and IMF and the pitfalls facing the economy in the future and the means of overcoming them, were noted, met in four sessions to discuss; a) the economic disequilibrium faced at the end of the VII plan, b) the Balance of Payment problems, c) the problem of foreign exchange reserves and d) the future of the economy on the basis as a very good monograph prepared by the

Institute on these issues. It throws up some suggestions and guidelines to be taken into account when revising and finalising the monograph.

December Seminar Paper

The Paper for the December Seminar "Decentralising the Provision of Public Services" appears as the first article.

Second article

"India's Educational Efforts: Rhetoric and Reality", paper presented at the Twenty Second Inter-Disciplinary Research Methodology Workshop, held at the Institute of Development Studies University of Mysore from June 5-6, 1992 appears as the second article. Two other papers presented at this workshop were published in the December 1992 issue of the Bulletin

Third article

"The Fast Track: International Economy or Global Capitalism" a note on the Economy by C T Kurien appears as the third article.

Book Review

The review of C. T. Kurien's book the Economy: An Interpretative Introduction appears in this section.

MIDS News

Dr. C. T. Kurien sent a paper on "Strategies of Development and Modernization in China and India" for presentation in a seminar in connection with the Festival of China held at New Delhi from December 16 to 18, 1992. He could not attend the seminar because of flight disruptions.

Dr. A. Vaidyanathan spent six weeks from November 9 to December 22 as Visiting Scholar at the Harvard Centre for Population and Development Studies, Cambridge, Massachusetts, and wrote a paper on problems of measuring morbidity; gave seminars on irrigation research at MIDS and on Economic Reforms at IFPRI, Branders University, and University of Chicago.

Dr. Nirmal Sengupta chaired a session and was discussant for another session in a symposium on "Common Property Resources", IRMA, Anand on December 8 and 9, 1992.

Mr. S. Subramanian presented a paper on "A Paretian Liberal Dilemma Without Collective Rationality" at the IGIDR conference of the regional chapter of the

Econometric Society held at Bombay from December 19 to 21, 1992.

Mr. S. Guhan attended a Workshop on "Federalism" in the Centre for Policy Research, New Delhi on January 5 and 6, 1993; also attended the Union Finance Minister's pre-Budget consultation with economists on January 6, 1993.

Dr. S. Neelakantan delivered two lectures for the Refresher Course for college teachers sponsored by the Academic Staff College and the Department of Political Science of the University of Madras, the first on December 15, 1992 on "Utilitarianism", and the second on December 18, 1992 on "Capitalism".

Dr. Paul Appasamy participated in a seminar on "Forests for Economic Development and Recreation" organised by Max Mueller Bhavan, Madras from December 4 to 6, 1992, and served as a member of the panel on the final day. He also gave the Keynote address at a seminar on "Environmental Priorities for Madras" organised by Economics Department, Loyola College on January 7, 1993.

**DECENTRALISING THE PROVISION OF PUBLIC SERVICES :
Exnora's Efforts at Garbage Collection in Madras**

Ajit Menon
Research Scholar, MIDS

Introduction

Madras, like other major urban centres in India, has witnessed rapid population growth over the last few decades. From a population of 6 lakhs in 1921, it had grown to 40 lakhs by 1990. Madras

Metropolitan Development Authority has projected that between 1981 and 2011, four million people will be added to Madras Metropolitan Area out of which nearly 2 million will be in Madras city proper (see Table I).

Table 1 : Population projection (in millions)

Spatial Unit	1981	1991	2001	2011
Madras city	3.27	4.29	5.52	7.00
Urban Agglomeration (Excluding city)	1.01	1.33	1.70	2.13
Rural	0.28	0.36	0.46	0.57
Total	4.56	5.98	7.68	9.70

Source: MMDA (1991), Madras-2011: Policy Imperatives - An Agenda for Action Vol. 3, Madras, pp. 158

This rapid population growth has posed serious challenges to Madras Corporation and other local bodies. The provisions of shelter, water supply and sanitation are no longer keeping pace with demand. Public services which are necessities are becoming luxuries. Moreover, the quality of the urban environment is deteriorating. The city's water supply is highly contaminated, the sewerage system has saturated, and the garbage menace is ever increasing. Social services such as health, child care and education have also taken a battering. Invariably the problems are most acute in lower income communities.

Without a well thought out direction to the city's economic growth, a planned approach as opposed to an organic one, these problems will only multiply. Madras Corporation alone cannot cope with these problems. There are a number of reasons for this:

1 Financial Constraints : Figures presented by Madras Metropolitan Development Authority illustrate that the Corporation's budget of Rs. 60 crores in 1990-91 has been stagnant in real terms for over 10 years. With over 60 per cent of the available budget spent on personnel costs, the actual investment for services in 1990-91 was approximately 25 crores. Moreover, as of March 31, 1992, there was an accumulated deficit of Rs. 40 crores (Menezes, 1991).

Undoubtedly, there is need for the Corporation to be more financially prudent. Municipal resources such as collection of taxes, loan and debt servicing and grants need to be more carefully obtained and used. The revenue management system has to become more effective and financial planning has to be improved. But

even with a beefed up system for managing finance, the Corporation will still feel the resources crunch.

2 No Systematic Approach : The Corporation has not tackled questions of urban management in a systematic way. Important operations such as garbage clearance, storm water drains and health have shifted from department to department. As a result, efforts at maintaining a clean city have been haphazard at best with various departments unsure about their responsibilities. Though efforts have been made to more clearly delineate and decentralize activities to various departments over the last few years, the task has been too great for the Corporation alone.

3 No Holistic Approach : The inter-connection between various environmental problems has been ignored. Each department oversees its own responsibilities but interaction with other departments is limited. As a result, when a problem such as polluted water in slum arises, only the Slum Clearance Board will deal with it.

4 Lack of Accountability : The present system does not make the Corporation accountable for its activities. The main reason for this is that no elections have been held to the Council and therefore there is no system of checks and balances which ensures duties and responsibilities are carried out.

5 No Participatory Mechanisms for Public : The Corporation has not made available any mechanism for the public at large to take an active role in providing and maintaining urban

services. Without active people's participation, it will be all the more difficult to meet the demand for providing efficient services. Also if people are not made to feel responsible, they feel they can dirty the city because the Corporation will be there to clean the garbage. Thus far, public awareness has been sidelined.

NGOs and Private Sector

With the Corporation's hands tied both financially and administratively, there is need for NGOs and the private sector to take a more active role. To many the private sector might conjure up images of greed and exploitation. Yet there is potentially another side, the provision of public services by the private sector. If NGOs and the private sector are to get involved in the provision of Urban Services, a number of improvements will be possible:

- 1 By involving the private sector, some of the costs can be borne by the companies involved, the financial constraints on the Corporation can be relieved. Even if the Corporation is to involve the private sector by contracting the work (i.e., subsidizing the private sector), it is likely that the money will be more efficiently spent than at present.
- 2 By involving NGOs and the private sector, it will be possible to effectively decentralise the provision of urban services such as sanitation, water supply and solid waste management. At present, decentralisation has only been emphasised within the Corporation

itself. Decentralisation of services to non-government bodies can make the system more accountable by having the public and private sectors act as a system of checks and balances vis-a-vis one another.

- 3 Decentralisation of services to the private sector and NGOs will make it possible to stimulate more active people's participation. People's participation is crucial in order to create a sense of civic responsibility amongst urban communities so that self-help mechanisms are developed. Unless and until civic pride and civic responsibility are instilled in people's minds, the provision of urban services will continue to be seen exclusively as a right and not also a responsibility. Thus far, the efforts of decentralisation within the Corporation have in no way involved the public at large.

This paper will look at the efforts of an NGO in the area of solid waste management and more specifically garbage collection and transport. NGOs, unlike private sector firms are not involved primarily for profit motive. Therefore, in low income communities they are a more economically viable option. Exnora International, a Madras based, NGO, has attempted to clean up the garbage in the city and to search for ideas as to how best to handle solid waste without making it an environmental hazard. This study attempts to illustrate that decentralising municipal services by involving NGOs in private sector can be rewarding. What lessons can be learned for solid waste management, where do we go from here and what are the implications for other urban sectors in Madras and India as a whole?

Solid Waste Management

Conservancy has been the single largest operation of Madras Corporation. Approximately 20 to 26 per cent of the Corporation's funds have been spent on this service.

To date, efforts of Solid Waste Management have been exclusively aimed at

garbage collection and transport. The latest estimate at the beginning of 1991, indicates that Madras city generated roughly 2500 metric tonnes of garbage everyday. Garbage is collected from 8983 streets with a total length of 1600 km by a workforce of 6296 sweepers. Table 2 gives a projection of the amount of garbage that will be generated over the next 10 years (PHE, 1985).

Table 2 : Projection of generation of garbage

Collection Zone	1981	1991	1993	1995
A	173.1	183.0	185.0	187.0
B	174.5	195.2	199.7	204.3
C	168.9	181.4	184.0	186.6
D	142.4	171.5	178.0	184.7
F	211.9	263.7	275.5	277.8
G	133.7	194.2	207.7	222.2
H	160.0	210.6	222.5	235.0
I	122.2	208.0	231.4	257.5
K	112.2	180.4	198.3	218.1
S	109.5	179.2	197.8	218.3
T	73.1	100.2	106.8	113.7
V	52.2	67.2	70.7	74.5
Total	1633.7	2134.6	2257.4	2379.7

Note : Data based on 12 Collection Zones. Garbage in Tonnes per day.

Source : PHE, 1985 : 215.

Most of Madras' garbage is organic (65%). Table 3 and 4 give a sample of the physical and chemical characteristics of Madras solid waste. At present, however, the collection of garbage

is not handled qualitatively. It is simply collected by the Corporation and dumped in one of the two dumping grounds.

Table 3 : Physical characteristics of refuse samples in representative divisions, 1984.

Physical Parameters	> Division No. <					Average
	53	75	108	51	146	
Paper	3.58	8.75	5.82	8.34	35.06	12.31
Vegetation	37.75	38.56	48.24	25.07	17.12	33.35
Hay and Straw	1.80	—	—	—	9.22	5.51
Fruits	14.58	14.12	3.80	11.26	8.01	10.35
Wooden Pieces	1.80	4.54	5.82	6.76	3.70	4.52
Coal	—	0.32	0.78	2.37	0.40	0.97
Coconut	19.70	9.27	0.84	1.70	1.80	6.66
Rags	2.51	0.58	4.14	2.65	2.87	2.55
Leather	—	—	—	—	—	—
Hair	—	—	—	—	0.55	0.55
Bones	—	1.42	—	0.56	2.21	1.40
Rubber	—	—	—	—	—	—
Plastics	0.10	0.65	1.12	0.68	0.66	0.64
Glass	—	—	—	—	—	—
Ferrous and Iron Metal	—	1.55	—	1.24	1.21	1.33
Soil	12.60	10.52	18.36	31.65	14.88	17.60
Earthenware	—	—	—	6.48	—	6.48
Stones and Brick	1.23	9.72	5.48	—	1.10	4.38
Others (Biomass)	4.35	—	5.60	1.24	1.21	3.10

Note : Figures in Percentage by Weight. Dash Indicates Nil.

Source : PHE, 1985 : 217.

Table 4 : Chemical characteristics of refuse samples in representative divisions, 1984.

Physical Parameters	> Division No. <					Average
	53	75	108	51	146	
Carbon	27.47	22.48	29.22	21.13	18.80	23.28
Hydrogen	2.34	2.48	3.26	2.43	1.29	2.36
Nitrogen	1.33	1.28	1.24	0.71	1.41	1.19
Sulphur	0.17	0.12	0.15	0.12	0.24	0.16
Oxygen	8.94	13.38	16.57	11.34	14.36	12.92
Phosphorus (P205)	0.51	0.68	0.87	0.58	1.15	0.76
Potash (K2O)	0.50	0.74	0.81	0.47	0.53	0.61
Mineral Water	59.47	60.26	49.56	64.27	63.90	59.49
pH (10% solution)	7.00	6.80	6.00	7.00	6.90	6.92
Moisture	17.40	17.6	15.40	20.60	21.40	18.48
C/N Ratio	20.10	17.10	25.10	33.10	13.30	19.10
Gross Cal. Val						
(K. cal/kg)	2067	1952	2754	1800	1774	2069

Note : Figures in percentage by weight except for the last two rows.

Source : PHE, 1985 : 221.

The process of collection and transport of garbage by the Corporation is as follows:

- 1 Sweepers collect garbage from the Municipal pits and heap it on street margins.
- 2 Garbage is removed later in the morning either by bullock carts or motorised vehicles. In some cases the garbage is removed to transfer stations by bullock carts and smaller vehicles.
- 3 Finally, the garbage is removed to one of the two major dumping grounds in the city and disposed of through

sanitary land fills. In practice, most of the garbage is simply dumped and whenever convenient bulldozed. Apart from the two main dumping grounds, there are a few smaller temporary dumping grounds in the city.

According to Corporation officials, an all out effort has been launched to make this system efficient. High ranking officials are taking a keener interest to make sure the job is being done diligently. However, this system of garbage collection and transport has serious drawbacks both in terms of implementation and in its approach.

- 1 First of all, the Corporation has not been able to meet the requirements for garbage collection and transport. By its own admission, at present only about 2000 metric tonnes of garbage are being taken to the dumping grounds everyday¹. This problem is one of resources. The Corporation's manpower has not been adequate to meet the demands of a growing city and the consequent accumulation of garbage.
- 2 The second problem with the Corporation's efforts is its own management system. Often garbage is not collected as frequently as it should be. Sweepers do not come when they should or garbage collection vehicles do not collect the garbage (both at primary station and transfer point) on a daily basis. As a result, garbage accumulates and is strewn across road sides by rag-pickers.
- 3 The present system of collection and transport of garbage does not have special provisions to pick up garbage from institutions such as hotels, hospitals and *kalyana mandapams*. As a result, these institutions which generate huge amounts of garbage, saturate the system.
- 4 No clear system of differential types of garbage exists. Though this treatment of different is not directly linked to the collection and transport of garbage, it is related if such a system exists, it can not only reduce the amount of garbage generated by households but also minimise the extra burden created by rag-pickers running through bins.
- 5 The Corporation's efforts have not in anyway involved the public them-

selves. Therefore, garbage is still seen as the Corporation problem as opposed to our own.

Despite the fact that the Corporation has made strides forward over the last few years, a lot remains to be done. Imported ideas for managing solid waste are not necessary; but there is need to strive towards an indigenous model of effective solid waste management. Such a system in aiming to overcome the problems, the Corporation has faced must be more holistic in its approach. And most importantly, it must involve local communities in a more responsible way.

Exnora - Background

Exnora International started off as a club of concerned citizens who were worried about the deteriorating cleanliness of Madras. Some of its founding members had seen clean streets abroad and were determined to try and make the streets of Madras clean. The primary or golden objective of Exnora was to generate ideas. As the acronym suggests these ideas were to be EXcellent, NOvel and RADical (Exnora). The second objective was to create civic awareness amongst the citizens. And finally Exnora wanted to provide service to the public which would turn these excellent, novel and radical ideas into practice.

It is Exnora's last objective, the practical dimension, which offers insight into the prospects of decentralising the provision of civic services to NGOs/Private sector. When the Corporation chose to experiment with hydro-containers, on Kamaraj Avenue, Adyar, Exnora became involved in the collection of garbage. For the Corporation's experiment to be successful garbage would have to be placed directly into the hydrocons so that Corporation workers

could later mount them directly on trucks. Exnora took on the responsibility of making sure that the garbage was not dumped all over the street, but in these hydrocons.

In order to collect the garbage and place it in the hydrocons, directly, Exnora took a two-pronged approach.

First, it sought the cooperation of the local residents. Instead of households dumping garbage in the Corporation pit, garbage would be directly handed over to a garbage Collector.

- 2 Second, Exnora decided to involve the local rag-picker. It decided to do so for two reasons. The rag-picker was responsible for much of the mess on the road. So getting his cooperation would eliminate that problem. Collecting garbage directly from households would mean less recyclable material for the rag-picker. Therefore, an alternative source of livelihood had to be provided. Instead of rummaging Corporation pits, the rag-picker was officially designated the "street beautifier". Exnora took a loan from a bank to buy a tricycle cart and also paid him a salary of 650 rupees per month. The "street beautifier" would come and collect the garbage each morning at 8.00, sweep and water the street. The residents of Kamaraj Avenue in return contributed 10 rupees per month. The Civic Exnora movement was, born from this experiment. After successfully working hand in hand with the Corporation in Kamaraj Avenue, Exnora has used this model to promote this idea of community involvement in the collection and transport of garbage. The success of Kamaraj Avenue illustrated two

important points. That the cooperation of the public is desirable and that it is possible to work hand in hand with the rag-picker.

The principle of community involvement has spread through the Civic Exnora movement. In Madras city, between 400 and 450 Civic Exnoras,² are functioning today. On an average each Civic Exnora comprises between 70 to 75 families, though the actual number varies from area to area and street to street. Each Civic Exnora has its own committees of president, vice-president, secretary, joint secretary and treasurer, which manages its own finances as well as administration. Household contributions vary from one rupee to twenty rupees.

The collection and transport of garbage by Exnora has not been confined to the middle/upper classes either. Garbage is a classless problem. In fact in slums, facilities for garbage disposal are almost non-existent. The logical response by slum dwellers has been to take their garbage and dump it elsewhere. Now, Exnoras are working in slum areas in order to alleviate the chronic garbage problem. By charging a nominal fee, slum dwellers have involved the local youth. In exchange, slums have been provided with tricycle carts for garbage collection.

Exnora's efforts have been primarily aimed at motivating people to keep their city clean. Apart from civic and community Exnoras, there are also Exnora clubs. These clubs and the parent body Exnora International have launched various campaigns aimed at generating public awareness about civic services and public hygiene. Leading by example, Exnora has undertaken to clean up public areas such as Anna flyover where posters were removed by volun-

- 2 Civic Exnoras of small size" (50 to 80) households) produce better results than larger ones.
- 3 Better results are produced when there is keener interest taken by "all" residents as opposed to just a handful.
- 4 Civic Exnoras have been most successful in slum and middle class areas.

In order to make Civic and community Exnoras more effective, a number of steps can be taken. The most important suggestions pertain to the management system.

- 1 The collection and transport of garbage from residential areas should be decentralised and commercialised to relieve the load of the Corporation. One possible way to do that is for the Corporation to contract a company to undertake this work. These companies would be in complete charge of garbage collection and transport so that the Corporation could use its workforce in other areas.
- 2 With regard to the collection of garbage from residential areas, information should be given to the public about collection time. This can be done either through NGOs / private firms responsible for collection or by advertising in daily newspapers.
- 3 Coordination between dumping of garbage at transfer points and pick up from these transfer points for removal to dumping grounds. Handling of garbage from the transfer points can also be undertaken by the private sector.
- 4 Appoint civic wardens to oversee garbage collection. The Corporation should supplement efforts by NGOs /

private sector by acting as a watchdog body. In other words, it is necessary for the Corporation to work hand in hand with NGO's.

- 5 Incentive schemes for Corporation employees should be introduced. These should be awarded to those who successfully motivate others to work towards a clean city.
- 6 Establishments such as hospitals, hotels and *Kalyana mandapams* should be responsible and accountable for their waste and its disposal. The garbage should be kept on their premises until it is collected either by the Corporation or a private firm which should be on a fixed day. In the case of hospitals, incinerators should be mandatory.⁴

All these recommendations are aimed at decentralising the collection and transport of garbage further. On one level the emphasis is on bringing NGOs and private outfits into this sector. On another level, these recommendations are aimed at all — around community involvement. Along with these management options certain technical innovations will make Exnora's model a great success. For example, garbage pits and transport vehicles should be designed better to avoid unnecessary spillage.

Conclusion

The success / failure of Exnora's work should be judged by a few factors. First, is it an efficient system, i.e. is Exnora providing a cost-effective service to meet the needs of the community. Second, is Exnora's effort sustainable, i.e. is the system self-sufficient in the long-run. In other words, are communities taking an active interest and are local institutions being built up (Appasamy and Sundaram, 1987). If so, does this example

of a municipal service being carried out by an NGO offer positive feedback about the potential to involve NGOs / private companies in other urban services.

Efficiency

The efficiency of Exnora's efforts can be assessed by looking at both the demand for garbage collection and transport services and the supply of these services. On the demand side, the important factors according to conventional economic theory are income, price and personal preferences. The case studies indicate the following:

- 1 Though income is a constraining factor, in the case of slum dwellers in Mylapore, garbage collection is still a felt need. Therefore, families are still willing to contribute a small fee as well as contribute their labour. In the case of middle and upper class households, the constraint is not there.
- 2 The price for this service is also important. Even though the service provided by Exnora should actually be provided by the Corporation, households are still willing to pay a monthly fee. This belies any assertion that the cost needs to be reduced to zero (full subsidy). In the case of the slum dwellers, the price being paid is less but labour is being provided instead.
- 3 Tastes and preferences are important in choosing a particular system of garbage collection and transport. The case studies indicate that the main preference is that the service provided guarantees that overflowing municipal pits and hydrocons will no longer be a menace. The collection of garbage therefore should be regu-

lar and if possible directly from households. In the case of Chetpet, some house owners were disgruntled because this was not happening.

In each of the areas sampled, the general feeling amongst most people was that Exnora was supplying an useful service. But certain supply side factors would greatly increase the efficiency of their efforts. One major problem is that the municipal authorities are still not fulfilling their duties adequately. Thus, even though the collection of garbage from households and residential garbage pits is being done much more thoroughly, often the garbage is waiting to be collected at a transfer point. To avoid this it is necessary for Corporation to work closer with Exnora.

Another factor which decreases the efficiency of the system is the dumping of concrete rubble and garden waste together with regular household waste. If the Municipal Corporation can handle the concrete rubble for a fee and individual households their own garden waste, the collection of household waste will be easier. Essentially, the community along with the Corporation need to be more responsible in carrying out their duties.

Sustainability

The sustainability of Exnora's work, however, depends not only on whether supply meets demand in the short-run and how efficiently it does so. Are long-term mechanisms created to sustain Exnora's efforts? From the case studies, some immediate observations can be made:

- 1 The advent of Civic and Community Exnoras has led to a more effective system of garbage collection. Garbage is being collected and disposed

off in a more organised manner by households.

- 2 Greater awareness has been generated amongst the communities about the need for maintaining a systematic method for garbage clearance and removal. As a result, households in general are taking a more active role in keeping their backyards clean.
- 3 People's participation in garbage clearance and removal has also resulted to some extent in the Corporation taking a more active role in fulfilling their responsibilities.

The importance of these points is that in the long run, the sustainability of EXNORA's efforts depends on the effectiveness of institutional mechanisms and organizational structures. Garbage collection is not only a technical issue, it also depends on the management systems. If they are strong, the potential for success is much greater.

Though the case studies indicate that civic and community Exnoras have responded well to local community needs, there is still room for improvement. At present, civic and community Exnoras depend greatly on their leader. Creating civic awareness must go beyond individual leaders. Everyone needs to get involved. Everyone's interests have to be determined so that the community based Exnoras can strive to meet them.

The other factor which must be kept in mind is that in order for local institutions to be effective in a municipal set up such as Madras, they must provide a good interface between citizens and the Corporation. It is important that Exnora provides its services. But for its efforts to bring about meaningful social

change, it is necessary that these efforts are officially recognised. The provision of urban services such as garbage collection and disposal by NGOs should become part of any strategy aimed at delivering services to the citizens of Madras and especially the urban poor. Groups such as Exnora should be more directly involved in the Corporation's efforts.

What Next?

Solid waste management is a complex issue. It goes beyond the mere collection and transportation of garbage. Issues of solid waste recycling and disposal are also essential in any holistic strategy to tackle the problems of solid waste. Sorting out waste at source, recycling, compacting waste and producing compost are all ways in which the nuisance and hazards of solid waste can be tackled. An active look into this issue is beyond the purview of this paper, but in so far as they shed light on improving the management of garbage disposal and transportation, they must be examined. Exnora's efforts and the Corporation's for that matter have been primarily aimed at handling the existing garbage. But efforts are also needed to reduce the daily tonnage of garbage. If the average household reduces its garbage given directly to the Corporation by using organic waste as manure, this will already reduce the pressure on the Corporation (65% of Madras' waste is organic). If households do not have the space to do this others should consider taking interest in it.

The role of the rag-picker in recycling must be emphasised. Exnora's efforts have aimed at involving rag-pickers in the collection and transport. But there is an important role for the rag-picker

in the disposal of solid waste especially paper. One possible way to involve rag-pickers is at the separation point. If and when garbage is sorted out at source, paper can be given directly to rag-pickers. Not only will it provide them with an income but it will facilitate the efficiency of recycling.

Once again, the need for NGOs and the private sector is great in the disposal and recycling of waste. Of NGOs and the private sector (especially private sector) can become involved in the 'the recycling and handing of garbage' a step in the right direction would have been taken. How NGOs and private sector companies should get involved, however needs careful evaluation.

Public Services/ Private Provision

The provision of public services is imperative in any society. In a developing country such as India where few options exist for most of the population, it is that much more imperative. But more and more as is the case with garbage collection and transportation in Madras, the public sector is falling short in its efforts. The resource crunch has become telling and the ineffectiveness of government bodies evident. This is not an indictment of the public sector, but of the increased lack of accountability of government institutions and an aimlessness of government institutions. Exnora International, with little financial support is trying to fill the void of the Corporation in one service, garbage collection. It has produced results where the Corporation has not.

There is no reason why these efforts cannot extend beyond garbage collection and solid waste management. In fact, the provision of public goods by NGOs and the private sector in develop-

ing countries can and has already been extended to other urban services. In India, the one that comes to mind immediately is local construction. But why not sewerage, drinking water or health care?

There should in fact be a concerted effort by the government to tap the available resources in the NGO and the private sector. Why not use public money to support independent initiatives instead of wasting public money without providing the needed results. A number of ways exist in which NGOs/ private sector can get involved.

- 1 Contracts from public agencies—when a government agency or department in charge of a particular sector contracts certain duties to private firms or NGOs.
- 2 Consumer cooperatives are designed to serve the interests of the members. They are self governing voluntary organisations which normally distribute surplus to their members proportionally to investment.
- 3 Monopoly franchises or economics of scale is a case when a single organisation supplies a particular service because it is economically efficient. In such a case, a public sector organisation can appoint a private sector company to provide that service.

Other possible ways in which to involve the private sector is through management contracts where only the management of the service is provided by the private sector or a voucher system where consumers

can obtain services at a reduced cost (subsidized) but still have the option of choosing between alternatives (Roth, 1987).

Privatization, however, cannot be justified simply by saying that the public sector is short of capital. This paper has attempted to illustrate that what is needed is a more decentralised model where people's participation is at its maximum. Therefore, private companies which get involved in the provision of public services must do so with the following in mind:

- 1 The involvement of the private sector outfits must guarantee that it improves services for the urban poor.
- 2 In the case of natural monopolies, private firms must be regulated

so that prices do not go too high or quality too low.

- 3 Privatisation must occur within a framework that aims in the long-run to develop competent and representative local government (UNCHS, 1984).

What is most important is that the urban poor have access to the necessary services and at affordable prices. Also, they should be involved in maintaining and even providing the services so that in the long run self help mechanisms are firmly established. Opening up of public services to NGOs and the private sector must aim at a more decentralised, participatory and accountable system.

Notes

[This paper was prepared as part of a project on Urban Environmental Management for the Ministry of Environment and Forests, Government of India. Its focus is on the problems of garbage clearance and transport in Madras and the role of an NGO, Exnora International, in tackling these problems.]

- 1 Presented by Thiru S. Poornalingam, Special Officer, Corporation of Madras, at Symposium on Solid Waste Management by Exnora International, 19 September, 1992.
- 2 Exnoras working in slums are referred to as Community Exnoras.
- 3 Discussion with T. K. Ramkumar, General Secretary, Exnora International, 16 September, 1992.
- 4 Symposium on Solid Waste Management by Exnora International, 19 September, 1992.

References

- Appasamy, Paul and Sundaram, D. (1987). *Appraisal of Waste Management Service for the Urban Poor — A Study of Five Slums in Madras City*, Paper presented at a National Seminar on Management of Urban Solid Waste, Madras, September 26-27, 1987.
- Menezes, L. M. (1991). *The New Context for Metropolitan Management, Madras 2011 : Policy Imperatives—An Agenda for Action, Vol. IVA, Madras*, Madras Metropolitan Development Authority.
- PHE Consultancy Pvt. Ltd, (1985). *Final Report on Solid Waste Management*, Bombay.
- Roth, G. (1987). *The Provision of Public Services in Developing Countries*, Oxford, Oxford University Press.
- UNCHS, (1984). *Urbanization and Sustainable Development in the Third World : An Unrecognized Global Issue*, Nairobi.

INDIA'S EDUCATIONAL EFFORTS : RHETORIC AND REALITY

P Radhakrishnan
R Akila

The powers of education have been exaggerated just as much as the powers of heredity. Dr. John B. Watson apparently believes that any child, by a suitable education, can be turned into a Mozart or a Newton; unfortunately, however, he has not yet told us what sort of education this should be.

Russell 1932: 31

The Roman Catholic church holds that a priest can turn a piece of bread into the Body and Blood of Christ by talking Latin to it; the British State holds that the Empire is a boon to subject nations. In order to cause young people to believe such propositions, it is necessary to keep them stupid, and to teach them not to use their powers of reasoning in certain directions.

Russell 1932: 47

WHILE Russell's views are still valid especially in the context of the Third World countries, it needs to be emphasised that, if not for the omnipotence of education, and despite the persistence of Church (read religion) and State as "implacable enemies of both intelligence and virtue", as he characterised them (*op. cit.*, 47), of late right to education has been recognised as one of the most important human rights.

Implicit in this recognition is an increasing concern for a better world order, for a just and humane society, and an increasing awareness of the importance of education in accelerating the related processes. The importance is both social and economic.

On the social side is what, a recent report of the UNICEF has termed, "an intangible human dimension" to the developmental benefits of investing in education "in a world where, increasingly, to be illiterate is to be excluded":

If the enhancement of people's capacity to improve their own lives is the main aim and measure of development, then nothing could contribute more directly to its achievement than education and literacy (Grant 1989: 51-52).

A more eloquent testimony of this human dimension is the declaration of the International Community Education Association's last world Conference in Nairobi:

We stand firm in the belief that education is not only learning how to read, write, add or subtract, though these are important elements of the educational process. More importantly, education must

support the task of making people-children, youth, adults-aware of their identity; of their problems; needs and aspirations and their resources; and of the various forces and structures that hinder the resolution of their communities. At the same time, education must also be a catalyst and a channel for the initiative, creativity and resolve of the people to solve their problems and dismantle the apparatus and structures that hinder progress (Blackhurst 1989: 30).

On the economic side, though inseparable from the social, is an increase in both real and perceived developmental benefits from investment in education; or, to quote the UNICEF report, "the growing realization that education enhances the investments made in almost every other aspect of the development effort" (*op. cit.*; 51). The World Bank's *World Development Report* for 1991 has emphasised these "high returns" on investment in education with a number of illustrations from its own and other studies. These include greater productivity of the domestic economy by speeding up the adoption of new technology; the complex relations of education (along with technology and openness) to development; the importance of the link between knowledge (which is diffused and applied in practice) and growth; and the fact that countries with a long-standing commitment to educating their population have the most advanced economies today (see especially Pp. 6, 35, 43, 57-58). The following statement in the Report succinctly sums up both the social and economic benefits of educating people:

By improving people's ability to acquire and use information, education deepens their understanding of themselves and the world, enriches their minds by broadening their experiences and improves the choices they make as consumers, producers, and citizens. Education strengthens their ability to meet their wants and those of their

family by increasing their productivity, and their potential to achieve a higher standard of living. By improving people's confidence and their ability to create and innovate, it multiplies their opportunities for personal and social achievement (Pp. 55-56).

On the importance of educating women as a key to development the Report is more eloquent and emphatic:

When schools open their doors wider to girls and women, the benefits from education multiply. . . Countries which achieved near universal primary education for boys in 1965 but in which enrollment rates for girls lag far behind have about twice the infant mortality and fertility rates in 1985 of countries with a smaller gender gap (Pp. 55).

This illustrates a point confirmed by other studies: failing to raise women's level of education closer to men's detracts from the social benefits of raising men's. If the cost of increasing enrollment rates rises as a country approaches universal enrollment, then it may be more cost-effective to spend the additional resources on girls who have lower enrollment rates than on boys (Pp. 55).

The Indian Scene

If education has such an intimate and intrinsic nexus with socio-economic development, one might ask again the oft-repeated question: Why India has been lackadaisical in its educational efforts, and, despite forty years of planning and the continuing rhetoric in the successive planning documents on the importance of education, free and compulsory education of all children upto the age of 14, which the Constitution had expected the State to ensure within ten years from its commencement, is a far cry even three decades after this deadline.

Literacy

This failure is only too obvious from the data presented in the *Literacy Digest*

based on the 1991 Census. Going by this Digest, India's overall literacy rates (percentages) for population aged seven years and above were only 19.7 in 1951, 30.1 in 1961, 36.5 in 1971, 43.6 in 1981, and 52.1 in 1991, with 29/2.8, 43/6.13, 49/23, 56.4/29.7 and 63.9/39.4 as corresponding figures for males/females.

The magnitude of this snail-pace of literacy growth, with overall rates of 10.4, 6.4, 7.4, and 8.6 for the decades 1951-61, 1961-71, 1971-81, and 1981-91 respectively, will be evident only from the absolute numbers of total illiterates which, despite marginal improvements in the literacy rates over the years, have been on the increase, especially because of the increase over time in the backlog of illiterate population.

As against 241.64 million in 1951, 240.37 million in 1961, 274.87 million in 1971, and 314.15 million in 1981, India

now has about 335.83 million illiterates. Of them, women as a category account for nearly two-thirds (Table 1). Going by other available indicators, especially the 1981 Census data, the Scheduled Castes (SCs) and Scheduled Tribes (STs) account for about one-third of the total illiterates.

While this itself is dismal enough, a close look at Table 2 brings out more clearly the relative magnitude of illiteracy among the four principal social categories, namely, the general population, SCs, STs, and women within each category.

As the Census department has belatedly realized that literacy or ability to read and write with understanding is not ordinarily achieved till the age of seven, in keeping with the exclusion in the 1991 *Literacy Digest* of population below seven, for working out the literacy rates in the Table only population aged seven years and above are taken into account.

Table 1 : Literates and illiterates aged seven years and above.

Year	(in million and %)						
	Literates		Illiterates		Total population		
	Male	Female	Male	Female	Male	Female	Total
1951	43.00	3.96	105.28	136.36	148.28	140.32	288.60
	29.00	2.82	71.00	97.18	51.38	48.62	100.00
1961	76.05	27.19	100.97	139.40	177.02	166.59	343.61
	42.96	16.32	57.04	83.68	51.52	48.48	100.00
1971	109.61	47.92	114.45	160.42	224.06	208.34	432.40
	48.92	23.00	51.08	77.00	51.82	48.18	100.00
1981	162.17	79.88	125.52	188.63	287.69	268.51	556.20
	56.37	29.75	43.63	70.25	51.72	48.28	100.00
1991	232.12	133.05	131.36	204.47	363.48	337.52	701.00
	63.86	39.42	36.14	60.58	51.85	48.15	100.00

Source : Tabulated from Government of India, Directorate of Adult Education, *Literacy Digest*, 1991.

Table 2 : Percentage of literates to estimated population aged 7 years and above, 1981.

Sl. no.	State/UT	Literacy rate						Population aged 7 years and above (in million)					
		General		SCs		STs		General		SCs		STs	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Andhra Pradesh	52.4	27.8	29.5	12.0	14.5	4.1	17.607	17.154	3.293	3.100	1.206	1.222
2	Bihar	52.6	19.9	22.3	3.0	31.5	9.2	22.235	20.616	4.062	3.900	2.361	2.335
3	Gujarat	70.1	43.6	64.5	30.6	36.0	14.0	11.401	10.668	1.013	0.959	1.984	1.919
4	Haryana	63.0	31.1	39.1	0.0	0.0	0.0	4.542	3.924	0.895	0.000	0.000	0.000
5	Himachal Pradesh	67.9	43.5	51.5	24.9	47.0	15.3	1.247	1.221	0.435	0.415	0.081	0.079
6	Jammu & Kashmir	44.5	20.0	40.2	14.6	0.0	0.0	2.371	2.068	0.207	0.189	0.000	0.000
7	Karnataka	64.2	38.0	35.9	13.9	36.7	12.1	12.442	11.930	2.274	2.189	0.743	0.718
8	Kerala	89.9	78.2	72.5	57.2	44.8	30.9	9.367	9.795	1.058	1.089	0.107	0.106
9	Madhya Pradesh	60.1	27.0	37.4	8.2	21.9	4.4	13.784	12.566	3.035	2.815	4.799	4.763
10	Maharashtra	73.8	45.2	58.5	25.5	39.3	14.4	22.500	20.959	1.881	1.777	2.364	2.287
11	Manipur	66.0	34.3	50.9	30.5	58.0	35.7	0.415	0.400	0.007	0.007	0.163	0.159
12	Meghalaya	60.4	44.2	40.1	9.6	42.8	36.0	0.120	0.086	0.002	0.004	0.420	0.422
13	Nagaland	68.6	51.5	0.0	0.0	56.0	39.1	0.072	0.031	0.000	0.000	0.276	0.261
14	Orissa	69.0	35.6	42.2	11.1	27.7	5.5	6.922	6.685	1.598	1.575	2.416	2.438
15	Punjab	62.0	46.9	37.6	19.0	0.0	0.0	5.471	4.001	1.948	1.672	0.000	0.000
16	Rajasthan	51.7	18.7	30.5	3.3	23.6	1.5	10.143	9.189	2.404	2.187	1.687	1.578
17	Sikkim	53.8	27.7	43.9	24.4	52.5	27.2	0.102	0.078	0.000	0.007	0.031	0.028
18	Tamil Nadu	72.3	44.2	47.1	21.0	26.7	12.6	17.273	16.929	3.101	3.014	0.193	0.185
19	Tripura	73.8	52.2	52.9	27.9	40.6	14.7	0.501	0.468	0.130	0.122	0.242	0.232
20	Uttar Pradesh	52.0	20.6	30.6	4.7	38.3	10.8	37.178	32.362	9.887	8.699	0.097	0.086
21	West Bengal	67.8	44.3	41.6	16.6	25.3	5.9	17.430	15.458	5.060	4.626	1.280	1.236
22	AN Islands	73.0	57.2	0.0	0.0	47.0	28.0	0.078	0.054	0.000	0.000	0.009	0.009
23	Arunachal Pradesh	52.2	31.5	54.7	29.6	25.5	8.9	0.097	0.051	0.002	0.001	0.175	0.176
24	Chandigarh	82.6	75.2	55.2	30.0	0.0	0.0	0.186	0.139	0.029	0.021	0.000	0.000
25	DN Haveli	86.9	64.0	74.7	33.0	31.5	9.9	0.009	0.007	0.001	0.001	0.032	0.032
26	Delhi	83.1	69.1	60.9	31.4	0.0	0.0	2.387	1.871	0.493	0.391	0.000	0.000
27	Goa, Daman, Diu	76.6	55.3	58.4	32.7	41.5	22.3	0.450	0.443	0.010	0.010	0.004	0.004
28	Lakshadweep	98.1	94.8	0.0	0.0	79.7	53.3	0.001	0.001	0.000	0.000	0.015	0.015
29	Mizoram	72.1	60.8	92.2	75.0	80.3	68.8	0.024	0.004	0.000	0.000	0.182	0.182
30	Pondicherry	82.2	58.3	50.6	24.4	0.0	0.0	0.213	0.211	0.041	0.039	0.000	0.000
	Total	62.7	35.2	37.7	13.0	29.8	9.6	216.650	200.168	43.025	39.785	20.946	20.473

Note : General population excludes SCs and STs.

Source : Tabulated from Census of India, 1981, Parts IVA, IVA(i), and IVA(iv).

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Table 3: Percentage of literates to estimated population aged 7 years and above, 1981-91.

Sl. no.	State/UT	Literacy rate				Growth rate		7+ Population (in million)			
		1981		1991		1981-91		1981		1991	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Andhra Pradesh	46.8	24.2	56.2	33.7	9.4	9.6	22.185	21.556	27.872	27.189
2	Arunachal Pradesh	35.1	14.0	51.1	29.4	16.0	15.4	0.274	0.228	0.373	0.311
3	Assam	NA	NA	62.3	43.7	NA	NA	NA	NA	9.403	8.626
4	Bihar	46.6	16.5	52.6	23.1	6.1	6.6	28.658	26.850	36.436	33.238
5	Goa	76.0	55.2	85.5	68.2	9.5	13.0	NA	NA	0.515	0.501
6	Gujarat	65.1	38.5	72.5	48.5	7.4	10.0	14.398	13.546	18.018	16.897
7	Haryana	58.5	26.9	67.9	40.9	9.4	14.0	5.586	4.819	7.182	6.250
8	Himachal Pradesh	64.3	37.7	74.6	52.5	10.3	14.7	1.763	1.716	2.149	2.139
9	Jammu & Kashmir	44.2	19.6	NA	NA	NA	NA	2.578	2.257	NA	NA
10	Karnataka	58.7	33.2	67.3	44.3	8.5	11.2	15.459	14.837	19.135	18.507
11	Kerala	87.7	75.7	94.5	86.9	6.7	11.3	10.533	10.990	12.184	12.826
12	Madhya Pradesh	48.4	19.0	57.4	28.4	9.0	9.4	21.618	20.145	28.036	26.033
13	Maharashtra	69.7	41.0	74.8	50.5	5.2	9.5	26.824	25.022	34.999	32.880
14	Manipur	64.1	34.6	73.0	48.6	8.9	14.0	0.585	0.566	0.743	0.725
15	Meghalaya	46.6	37.2	51.6	44.8	5.0	7.6	0.543	0.512	0.732	0.697
16	Mizoram	79.4	68.6	84.1	78.1	4.7	9.5	0.206	0.186	0.299	0.271
17	Nagaland	58.5	40.3	66.1	55.7	7.6	15.4	0.348	0.292	0.546	0.468
18	Orissa	56.5	25.1	62.4	34.4	5.9	9.3	10.936	10.699	13.456	13.138
19	Punjab	55.5	39.6	63.7	49.7	8.2	10.1	7.419	6.473	9.261	8.156
20	Rajasthan	44.8	14.0	55.1	20.0	10.3	8.9	14.234	12.954	18.418	16.675
21	Sikkim	53.5	27.4	64.3	47.2	11.4	19.9	0.141	0.113	0.180	0.151
22	Tamil Nadu	68.1	40.4	74.9	52.3	6.0	11.9	20.568	20.128	24.127	23.556
23	Tripura	61.5	38.0	70.1	50.0	8.6	12.0	0.873	0.822	1.172	1.094
24	Uttar Pradesh	47.4	17.2	55.4	26.0	7.9	8.8	47.162	41.147	60.106	52.277
25	West Bengal	59.9	36.1	67.2	47.2	7.3	11.1	23.771	21.320	29.824	26.863
26	AN Islands	70.3	53.2	79.7	66.2	9.4	13.1	0.088	0.062	0.129	0.102
27	Chandigarh	78.9	69.3	82.7	37.6	3.8	4.3	0.215	0.160	0.306	0.235
28	DN Haveli	44.7	20.4	52.1	26.1	7.4	5.7	0.042	0.040	0.059	0.056
29	Daman & Diu	74.5	46.5	85.7	61.4	11.2	14.9	NA	NA	0.042	0.042
30	Delhi	79.3	62.6	82.6	68.0	3.3	5.4	2.880	2.262	4.322	3.497
31	Lakshadweep	81.2	55.3	87.1	70.9	5.8	15.6	0.016	0.016	0.022	0.020
32	Pondicherry	77.1	53.0	83.9	65.8	6.8	12.8	0.254	0.250	0.343	0.338
Total		56.4	29.8	63.9	39.4	7.5	9.7	280.621	260.427	360.398	333.747

Note: NA = Not available. Population figures are for the SCs, STs, and the general population combined.
Source: Tabulated from Census of India, 1991, Series 1, Paper 1 of 1991, Provisional Population Totals.

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As SCs and STs are the most backward in literacy, their inclusion in the general population by the Census department and other agencies has had the effect of playing down the actual literacy rates of the general population, thereby diluting, albeit unwittingly, the relatively greater magnitude of the problem of the SCs and STs. At the national level the reduction in the literacy rate of the general population in 1981 as a result of the inclusion of the SCs and STs was by 6.3 per cent in the case of males and 5.5 per cent in the case of females (see totals in Tables 2 and 3). To avoid this anomaly, throughout this paper figures for general population exclude those for SCs and STs.

The relatively high national average of male literacy (62.7 per cent) in the general population in 1981 may evoke mixed response: the optimism of nearly two-thirds of the largest category of Indian population being literate; and the pessimism of more than one-third of the same category being illiterate, more so, when one looks at the enormity of the absolute numbers of illiterates. That is, about 81 million population aged seven years and above among the males in the general population, 233 million among other categories, and a total of 127 million children below seven years of age who, by mere exclusion from calculating literacy would not automatically get excluded from the category of illiterates as well.

In any case, as both the percentages and the corresponding absolute numbers are in Table 2 for the kind of interpretation one may like to have, suffice it to look at the main features of the data presented in the Table:

The male literacy rate in the general population was lower than the national average of 62.7 per cent by 10 to 12

per cent in Andhra Pradesh, Bihar, Rajasthan, Uttar Pradesh, and Arunachal Pradesh, and by 18 per cent in Jammu and Kashmir. In contrast, it was higher by 10 to 13 per cent in Maharashtra, Tamil Nadu, Tripura, Andaman and Nicobar Islands, and Goa, Daman, Diu, and by 20 to 27 per cent in Kerala, Chandigarh, Dadra and Nagar Haveli, Delhi, and Pondicherry (Lakshadweep's general population is too small). In fact, the States/Union Territories in the latter category can now boast of being fully literate (if not educated), as some of them are already doing.

When one turns to the literacy scene of the remaining sections, the sectional disparities among them and in relation to the male literacy in the general population strike as most glaring, reflecting as they do, the persistence of the age-old social inequalities.

The average male literacy among the SCs/STs was so low as 38/30 per cent that both these sections need to be treated as illiterate. The rate was even lower than the low average by 7 to 15 per cent among the SCs in Andhra Pradesh, Bihar, Rajasthan, and Uttar Pradesh, and by 6 to 15 per cent among the STs in Andhra Pradesh, Madhya Pradesh, and Rajasthan. Some significant exceptions were Gujarat, Kerala, Maharashtra, Delhi and Goa, Daman, Diu in the case of the SCs, with 21 to 37 per cent higher rate (Mizoram's SC population is too small); and Manipur, Nagaland, Sikkim, Lakshadweep, and Mizoram in the case of the STs, with 23 to 50 per cent higher rate.

The average female literacy rate of 35.2 per cent in the general population was 27.5 per cent less than that of the males in the same category. No doubt, in Kerala, Tripura, Andaman and Nico-

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bar Islands, Chandigarh, Dadra and Nagar Haveli, Delhi, and Mizoram, the rate was higher than the average by 20 to 43 per cent. However, in Bihar, Jammu and Kashmir, Rajasthan, and Uttar Pradesh it was lower, by at least 15 to 16 per cent. As these states together also have a larger concentration of the nation's female population, their lower rates significantly alter the national scene of female illiteracy.

As the average female literacy among the SCs/STs was too insignificant (13/9.6 per cent), and only Kerala, Dadra and Nagar Haveli in the case of the SCs, and, Lakshadweep and Mizoram in the case of the STs had a significantly higher rate (44/40 per cent and 48/50 per cent respectively), further discussion of female literacy among the SCs/STs seems superficial. It is, however, important to point out that the rates were as low as 3 to 5 per cent among the SCs in Bihar, Rajasthan, and Uttar Pradesh, and 1.5 to 6 per cent among the STs in Andhra Pradesh, Madhya Pradesh, Orissa, Rajasthan, and West Bengal.

In this context, it needs to be emphasised that the failure of the SCs/STs to get even a reasonable measure of literacy as a first step to their proper education is reason enough to conclude that throughout the last four decades the nation has reneged on its constitutional commitment to draw these sections into its mainstream (read general population) by its failure to effectively implement the special Constitutional provisions for their social and educational advancement.

While on literacy, it needs to be noted that though the basic literacy data for 1991 are now available (Table 3) as the growth rate over the preceding

decade is only about 8.6 per cent, whereas the population growth for the same decade is by 23.5 per cent, it is not likely to alter much the literacy scene discussed above. If anything, as a disaggregated analysis may show, the SCs, STs, and women as a category still lag far behind the males in the general population. A further disaggregated analysis based on socio-economic and geographic conditions may reveal disparities even among the males in the general category.

As India is thus still far behind its goal of attaining universal literacy, literacy continues to assume great importance, especially in the light of Government of India's much publicised 1985 policy perspective — "Challenge of Education", and its follow up, the 1986 National Policy on Education.

However, in its preoccupation with eradication of illiteracy, and emphasis on universalisation of elementary education through non-formal education, the government should not lose sight of its greater responsibility of transforming the nation from being merely literate to fully educated. It is all the more so when, "non-formal education currently popular among international aidgiving agencies holds the possibility of further institutionalising the dual education structure by fostering inexpensive practical manual training for the many and more conventional class room education for the few" (Bandyopadhyay 1991 : 360).

For, when all is said, non-formal education is only a short-cut compensatory measure to make good the nation's loss in a smaller way of its failure to give masses full education at the right time. As such, it is a poor surrogate, and at best a supplement to full

formal education, especially of the more than 45 million out of school children most of whom are now compelled to work for a living, and should not be prolonged by default like the Constitutional provisions of special dispensation for the weaker sections.

No doubt, even as a temporary measure non-formal education is beneficial so long as it helps its learners absorb their learning in a useful way such as for minimising their exploitation and oppression, increasing their bargaining power in the labour market, improving their economic opportunities, and instilling in them the real value of education for their kith and kin in a society where the better educated are usually from the well entrenched upper castes having better access to the opportunity structure. Beyond this limited objective the nation's concern should be to ensure that the disabled sections have adequate freedom and facilities for full education, and to compensate for the socio-economic compulsions which keep them out of the educational system. In this sense, it is relevant to recall the observation in the UNICEF report that "if high literacy rates are to be maintained, then there is ultimately no substitute for universal formal education" (Pp.54).

That apart, elementary education, whether through formal or non-formal channels, is only the first step, a precondition to full education which should be encouraged right upto the highest attainable level. For, as a DPI of the Madras Presidency observed in his public instruction report for 1888-89, endorsing Huxley's views, "a national system of education should provide a ladder from the gutter to the university, so that the poorest child in the country should have the means and the opportunity of receiving the best education

he is capable of benefiting by". Though more than a century has passed since this observation, what we now have for the poorest of the poor, are plenty of gutters with very few ladders. Table 4 on the educational attainments of the literate population should give a general idea of this hiatus between expectation and reality.

Education

At the all-India level, of the male literates in the general category, 75 per cent were at the lower levels of education, 19.6 per cent at secondary and related (including a few non-graduate diplomas) levels, and 4.9 per cent at the degree levels. Of the first category 27.5 per cent were literate without schooling, and 48 per cent had not reached beyond the middle school level, with 61 per cent of them concentrated at the primary level.

Of the male literates among the SCs / STs about 87/91 per cent were at the lower levels, 11/8 at the secondary and related levels and 2/1 per cent at the degree levels. At the lower levels, about 39/48 per cent were literate without schooling, and 48/43 per cent had not reached beyond the middle level, with 67/66 per cent of them concentrated at the primary level.

Of the female literates in the general category about 83 per cent were at the lower levels, 14 per cent at the secondary and related levels, and 3 per cent at the degree levels. At the lower levels 31.5 per cent were literate without schooling, and 51 per cent had not reached beyond the middle level, with 66 per cent of them not going beyond the primary level.

Of female literates among the SCs/STs, about 93 per cent in each were at the

lower levels, 7/6 at the secondary and related levels, and 0.6/0.7 at the degree levels. At the lower levels, about 45/52 were literate without schooling, and 48/41 had not reached beyond the middle level, with about 71/67 of them concentrated at the primary level.

Despite variations in their literacy rates and in the proportions at the primary/middle levels, most of the States/Union Territories broadly conformed to this pattern of extreme concentration of literates at the lower levels. The only significant exceptions were Chandigarh, Dadra and Nagar Haveli, and Delhi, where the concentration at the lower levels was lower by 13 to 31 per cent, and the representation at the higher levels was higher by 11 to 13 per cent.

If the educational attainments of the relatively more literate section itself were low, it is only to be expected that they were more so among the remaining sections. While what the Table thus reveals is a very low state of education of the literate population as a whole, it is important to know the state of education of the younger population, in particular of those under instruction.

Going by the UNICEF and World Development Reports, India's Male/female adult literacy rate, that is, percentage, of persons aged 15 and above who can read and write, was 57/29 in 1985, with about 51 females per 100 males; gross enrollment ratio, that is, the total number of children enrolled in a school level, whether or not they belong in the relevant age group for that level, expressed as percentage of the total number of children in the relevant age group for that level, was 99/41 at the primary/secondary levels in 1988, with 83/22 as the corresponding figures for females.

Going by the 1985 "policy perspective", though 11 crores of children constituting 76 per cent of the population of the relevant age group were then in the elementary stage, with about 93 per cent as the gross enrollment at the primary level, of 100 enrolled in class I only 23 reached class VIII, with the rest making do with a smattering of literacy or adding to the mass of illiterates in the country (pp.36; only 22 per cent of the students in the age group corresponding to classes IX-X were in secondary schools, a ratio nowhere near that of developed countries (PP.43); and only 5 per cent of the students of the relevant age group were enrolled for higher education, the proportion being even adverse in some regions, particularly for women, SCs and STs (PP. 47).

Going by the 1990 report of the Review Committee on the 1989 National Policy on Education, in 1989 there were in all 95.7 million students (about 16/8 per cent from SCs/STs) at the primary level (classes I-V), 30.9 million (about 12/5 per cent from SCs/STs) at the middle level (classes VI-VIII), and 18.5 million (about 11/4 per cent from SCs/STs) at the high/post basic (classes IX and above). But, going by its data for 1986-87, the drop out rates at the primary level were about 51, 66, and 49 among the SCs, STs and general population respectively; with 69, 80, and 61 as the corresponding figures at the middle level, and about 80, 87 and 74 at the high/post basic level (PP. 68-69).

Analysis of the more detailed data for 1989 as presented in Table 5 gives a better idea of the latest enrollment scene.

Assuming that in 1989 the relative proportions in the age group roughly

Table 4: Percentage distribution of literates by educational levels, 1981.

State/UT	Population Category	Literate WS		Primary		Middle		Secondary*		Degree*		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Andhra Pradesh	(SCs)	31.36	36.28	38.12	36.5	17.22	17.41	11.72	8.97	1.58	0.75	100.0	100.0
	(STs)	39.56	49.53	39.75	36.54	13.40	9.68	6.64	3.96	0.66	0.29	100.0	100.0
	(Others)	19.86	23.88	36.68	43.26	19.13	18.62	19.46	12.09	4.86	2.16	100.0	100.0
Bihar	(SCs)	41.24	56.36	21.68	20.64	19.92	16.72	15.96	6.00	1.20	0.28	100.0	100.0
	(STs)	33.52	36.62	25.71	24.62	23.36	23.58	16.09	13.62	1.32	1.57	100.0	100.0
	(Others)	29.10	40.62	18.66	22.85	23.12	23.11	25.06	11.72	4.05	1.71	100.0	100.0
Gujarat	(SCs)	47.17	56.19	25.25	26.01	10.03	8.11	14.46	9.08	2.28	0.61	100.0	100.0
	(STs)	57.56	62.83	25.29	22.36	7.85	7.12	8.55	7.16	0.74	0.53	100.0	100.0
	(Others)	38.13	43.74	27.28	29.56	10.62	8.52	19.47	15.39	4.50	3.00	100.0	100.0
Haryana	(SCs)	40.72	58.94	32.41	31.00	15.49	6.48	10.26	3.29	1.12	0.29	100.0	100.0
	(Others)	28.25	33.28	27.66	33.09	18.82	13.95	20.89	15.58	4.39	4.10	100.0	100.0
Himachal Pradesh	(SCs)	41.43	49.6	31.00	40.07	12.68	6.12	11.00	3.91	0.89	0.23	100.0	100.0
	(STs)	44.46	58.24	32.34	28.80	11.31	6.81	9.94	5.40	1.96	0.75	100.0	100.0
	(Others)	30.14	35.10	30.51	40.29	16.23	11.29	18.79	11.05	4.33	2.27	100.0	100.0
Jammu & Kashmir	(SCs)	33.05	46.82	30.56	34.31	23.46	12.14	10.05	6.39	1.29	0.33	100.0	100.0
	(Others)	23.16	27.36	25.00	28.01	23.91	19.85	21.36	19.64	5.76	5.12	100.0	100.0
Karnataka	(SCs)	32.04	39.19	32.76	30.92	19.00	19.18	13.51	9.71	1.88	0.68	100.0	100.0
	(STs)	34.42	43.44	36.3	34.32	16.49	14.92	11.03	6.73	1.68	0.58	100.0	100.0
	(Others)	22.60	26.92	31.65	33.84	21.17	21.71	19.85	15.09	4.74	2.44	100.0	100.0
Kerala	(SCs)	32.00	31.71	35.5	36.22	24.31	25.07	7.29	6.57	0.75	0.43	100.0	100.0
	(STs)	39.00	38.76	35.85	34.66	19.51	20.99	5.15	5.26	0.43	0.33	100.0	100.0
	(Others)	25.71	26.19	32.90	34.15	25.34	24.99	13.56	12.64	2.50	1.73	100.0	100.0
Madhya Pradesh	(SCs)	50.78	57.58	25.40	28.93	11.85	8.73	7.45	4.07	1.54	0.68	100.0	100.0
	(STs)	56.1	61.75	27.37	26.83	9.60	7.23	5.51	3.69	0.81	0.51	100.0	100.0
	(Others)	38.4	42.48	27.50	29.06	14.38	13.17	14.16	10.98	5.23	4.30	100.0	100.0
Maharashtra	(SCs)	32.44	40.10	30.92	32.31	21.00	19.05	13.59	7.84	2.05	0.70	100.0	100.0
	(STs)	41.93	40.46	32.84	31.73	15.9	14.68	8.35	4.78	0.91	0.35	100.0	100.0
	(Others)	23.65	28.78	28.70	31.84	22.18	21.49	20.63	14.67	4.83	3.22	100.0	100.0
Manipur	(SCs)	39.40	42.66	25.22	26.94	19.30	19.93	12.98	9.23	3.09	1.23	100.0	100.0
	(STs)	33.9	47.18	25.68	26.15	21.86	15.63	15.39	10.08	3.09	0.97	100.0	100.0
	(Others)	27.62	34.30	22.88	24.72	22.62	19.77	20.35	16.52	6.52	4.69	100.0	100.0
Meghalaya	(SCs)	22.97	30.97	29.89	29.66	29.79	26.77	14.14	9.45	3.21	3.15	100.0	100.0
	(STs)	33.97	47.18	30.52	31.73	23.87	21.55	9.96	7.84	2.16	1.78	100.0	100.0
	(Others)	17.32	20.72	23.08	25.97	28.57	23.57	21.59	19.31	9.43	7.43	100.0	100.0

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Table 4: Percentage distribution of literates by educational levels, 1981.

State/UT	Population Category	Literates WS		Primary		Middle		Secondary*		Degree*		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Nagaland	(STs)	42.87	52.11	28.98	28.72	14.41	11.61	11.95	6.98	1.79	0.58	100.0	100.0
	(Others)	28.05	39.45	28.30	25.69	16.58	13.15	21.44	17.72	5.63	3.99	100.0	100.0
Orissa	(SCs)	60.06	66.92	19.97	20.68	15.77	11.01	3.71	1.27	0.48	0.12	100.0	100.0
	(STs)	59.48	62.51	19.34	19.57	17.16	15.23	3.60	2.47	0.41	0.22	100.0	100.0
Punjab	(Others)	33.79	40.72	29.05	33.12	20.92	18.70	12.86	6.27	3.37	1.19	100.0	100.0
	(SCs)	34.81	44.61	34.59	39.85	16.48	9.14	12.54	5.96	1.58	0.45	100.0	100.0
Rajasthan	(Others)	21.58	24.12	28.03	36.39	19.49	15.63	25.58	19.63	5.32	4.23	100.0	100.0
	(SCs)	46.82	57.83	30.59	30.21	13.25	8.08	7.99	3.46	1.36	0.42	100.0	100.0
Sikkim	(STs)	48.61	62.50	29.91	25.71	13.12	7.78	7.705	3.56	1.31	0.45	100.0	100.0
	(Others)	33.38	36.84	27.51	31.51	16.96	14.99	16.82	12.43	5.33	4.22	100.0	100.0
Tamil Nadu	(SCs)	45.92	49.19	37.41	33.05	8.07	9.84	7.36	6.84	1.25	1.08	100.0	100.0
	(STs)	43.09	42.67	34.79	34.36	9.34	10.86	10.12	10.20	2.67	1.91	100.0	100.0
Tripura	(Others)	37.66	43.71	36.25	34.01	10.50	9.91	12.32	9.95	3.28	2.43	100.0	100.0
	(SCs)	35.83	43.34	36.90	34.44	14.05	12.49	12.36	9.36	0.86	0.38	100.0	100.0
Uttar Pradesh	(STs)	39.64	45.10	35.38	34.96	11.40	10.89	12.20	8.45	1.38	0.60	100.0	100.0
	(Others)	26.06	30.37	34.85	36.84	14.69	14.78	20.9	16.05	3.61	1.96	100.0	100.0
West Bengal	(SCs)	55.68	65.38	24.72	23.34	10.83	7.14	7.81	3.82	0.95	0.32	100.0	100.0
	(STs)	62.01	66.98	23.45	21.73	9.28	7.72	4.92	3.31	0.34	0.26	100.0	100.0
AN Islands	(Others)	37.17	45.27	25.86	28.06	16.18	13.26	16.77	11.23	4.03	2.17	100.0	100.0
	(SCs)	37.72	49.90	30.26	32.58	16.15	9.67	13.18	6.61	2.69	1.24	100.0	100.0
Arunachal Pradesh	(STs)	42.77	51.02	33.24	32.24	12.48	7.60	9.73	7.29	1.79	1.85	100.0	100.0
	(Others)	30.12	35.56	26.88	32.89	17.63	13.12	19.73	13.51	5.65	4.92	100.0	100.0
Chandigarh	(SCs)	35.87	42.24	40.85	41.90	12.96	10.31	8.57	4.80	1.76	0.74	100.0	100.0
	(STs)	41.84	50.02	38.42	34.45	12.1	9.94	6.40	5.05	0.63	0.55	100.0	100.0
DN Haveli	(Others)	22.10	28.92	35.48	41.68	16.78	15.19	19.24	12.29	6.40	3.92	100.0	100.0
	(SCs)	45.29	56.60	36.32	33.04	12.80	8.41	5.31	1.83	0.28	0.04	100.0	100.0
Chandigarh	(STs)	32.55	40.49	32.01	29.34	15.16	13.10	17.10	14.40	3.19	2.67	100.0	100.0
	(Others)	40.02	49.58	30.66	24.58	9.98	12.71	15.09	12.1	4.26	0.42	100.0	100.0
Chandigarh	(STs)	58.83	69.50	24.16	20.77	8.88	6.21	6.93	3.28	1.20	0.25	100.0	100.0
	(Others)	29.92	36.94	24.21	22.98	14.65	13.97	23.40	19.72	7.82	6.40	100.0	100.0
Chandigarh	(SCs)	27.86	39.40	29.45	33.73	17.57	11.85	19.41	12.85	6.10	2.17	100.0	100.0
	(STs)	14.31	16.04	16.08	19.18	13.63	14.36	33.15	31.00	22.83	19.42	100.0	100.0
Chandigarh	(Others)	45.35	54.98	25.28	36.36	8.36	4.55	19.89	4.11	1.12	0.00	100.0	100.0
	(STs)	66.78	78.86	22.82	15.56	4.45	2.89	5.53	2.32	0.41	0.38	100.0	100.0
Chandigarh	(Others)	29.75	34.45	22.81	27.76	9.84	10.05	31.61	24.07	5.99	3.67	100.0	100.0
	(SCs)												

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Table 4: Percentage distribution of literates by educational levels, 1981.

State/UT	Population Category	Literates WS		Primary		Middle		Secondary*		Degree*		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Delhi	(SCs)	33.19	47.83	30.86	33.88	17.02	10.22	15.40	6.77	3.53	1.30	100.0	100.0
	(Others)	17.14	20.60	18.9	22.63	16.09	15.41	31.32	26.25	16.66	15.11	100.0	100.0
Goa, Daman, Diu	(SCs)	39.23	48.17	31.81	30.37	17.27	13.64	10.54	7.38	1.15	0.45	100.0	100.0
	(STs)	45.96	77.44	21.8	16.05	6.79	4.45	4.77	1.95	0.62	0.11	100.0	100.0
Lakshadweep	(Others)	25.66	29.03	29.27	31.27	19.26	19.34	20.87	17.30	4.95	3.07	100.0	100.0
	(SCs)	43.59	50.87	31.38	33.89	15.92	11.98	8.00	3.14	1.11	0.12	100.0	100.0
Mizoram	(Others)	15.5	22.22	19.41	18.88	22.80	24.50	32.88	30.79	9.86	3.61	100.0	100.0
	(SCs)	33.02	77.78	34.91	11.11	14.15	0.00	14.15	11.11	3.7	0.00	100.0	100.0
Pondicherry	(STs)	57.19	66.56	23.68	19.92	9.16	8.29	8.33	4.89	1.64	0.35	100.0	100.0
	(Others)	26.55	48.44	27.86	20.61	22.29	9.23	19.92	15.88	3.38	5.84	100.0	100.0
Total	(SCs)	34.16	45.83	34.14	32.88	15.60	12.05	15.30	8.9	0.81	0.2	100.0	100.0
	(STs)	24.50	30.73	31.08	35.61	16.17	15.5	24.02	16.12	4.24	1.80	100.0	100.0
Total	(Others)	38.81	44.62	32.20	34.12	16.04	13.86	11.24	6.78	1.72	0.62	100.0	100.0
	(STs)	47.62	52.36	28.54	27.33	14.42	13.23	8.39	6.40	1.02	0.89	100.0	100.0
Total	(Others)	27.48	31.53	29.29	33.79	18.68	17.57	19.61	13.89	4.93	3.23	100.0	100.0
	(SCs)												

Note: WS = Without schooling. Others refer to general population excluding SCs and STs.
Source: Tabulated from Census of India, 1981, Series 1, Part IVA, IVA(i), and IVA(iv), Social and Cultural Tables.

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Table 5: Enrollment by stages and States/Union Territories, 1989-90.

State/UT	Population category	(Enrollment in million)									
		Primary		Middle		Secondary*		Higher education		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Andhra Pradesh	(SCs)	0.819	0.609	0.153	0.086	0.184	0.084	0.023	0.00	1.179	0.787
	(STs)	0.298	0.184	0.042	0.019	0.040	0.014	0.003	0.001	0.383	0.218
	(Others)	3.098	2.322	1.109	0.624	0.655	0.321	0.162	0.069	5.014	3.336
Arunachal Pradesh	(SCs)	0.000	0.000	0.000	0.000	0.000	0.000	NA	NA	0.000	0.000
	(STs)	0.046	0.033	0.010	0.006	0.007	0.003	0.001	0.000	0.065	0.042
	(Others)	0.016	0.012	0.005	0.003	0.003	0.002	NA	NA	0.024	0.017
Assam	(SCs)	0.170	0.155	0.065	0.049	0.031	0.018	0.005	0.002	0.271	0.224
	(STs)	0.306	0.248	0.073	0.053	0.035	0.021	0.006	0.002	0.420	0.324
	(Others)	1.826	0.763	0.654	0.350	0.305	0.198	0.060	0.029	2.845	1.339
Bihar	(SCs)	0.745	0.272	0.150	0.036	0.056	0.008	NA	NA	0.951	3.317
	(STs)	0.467	0.232	0.098	0.037	0.041	NA	NA	0.606	0.283	
	(Others)	4.369	2.215	1.189	0.426	0.894	0.201	NA	NA	6.452	2.842
Goa	(SCs)	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.003	0.002	
	(STs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(Others)	0.071	0.064	0.043	0.037	0.030	0.025	0.006	0.005	0.150	0.132
Gujarat	(SCs)	0.278	0.208	0.109	0.063	0.072	0.031	0.012	0.004	0.471	0.307
	(STs)	0.470	0.337	0.112	0.059	0.060	0.030	0.010	0.005	0.651	0.430
	(Others)	2.405	1.812	0.801	0.522	0.550	0.341	0.119	0.083	3.876	2.757
Haryana	(SCs)	0.212	0.167	0.070	0.032	0.034	0.008	0.004	0.001	0.319	0.207
	(Others)	0.743	0.568	0.370	0.220	0.250	0.118	0.041	0.029	1.404	0.935
Himachal Pradesh	(SCs)	0.092	0.075	0.039	0.025	0.023	0.010	0.001	0.000	0.156	0.110
	(STs)	0.016	0.012	0.007	0.003	0.004	0.002	0.000	0.000	0.027	0.017
	(Others)	0.263	0.232	0.142	0.118	0.144	0.094	0.006	0.003	0.556	0.447
Jammu & Kashmir	(SCs)	0.036	0.024	0.016	0.008	0.006	0.002	NA	NA	0.058	0.035
	(Others)	0.414	0.265	0.175	0.092	0.116	0.056	NA	NA	0.706	0.413
Karnataka	(SCs)	0.480	0.391	0.142	0.091	0.096	0.040	0.019	0.005	0.737	0.526
	(STs)	0.120	0.099	0.35	0.023	0.019	0.010	0.004	0.001	0.178	0.133
	(Others)	2.370	2.034	0.862	0.606	0.618	0.321	0.155	0.071	4.005	3.032
Kerala	(SCs)	0.191	0.180	0.103	0.097	0.056	0.060	0.005	0.005	0.355	0.343
	(STs)	0.021	0.020	0.008	0.007	0.004	0.003	0.000	0.000	0.033	0.030
	(Others)	1.437	1.365	0.825	0.783	0.499	0.509	0.071	0.081	2.832	2.738
Madhya Pradesh	(SCs)	0.765	0.357	0.211	0.060	0.089	0.018	0.015	0.003	1.080	0.438
	(STs)	1.033	0.443	0.205	0.059	0.095	0.043	0.010	0.002	1.343	0.547
	(Others)	2.990	2.156	1.343	0.645	0.574	0.187	0.138	0.065	5.045	3.053
Maharashtra	(SCs)	0.791	0.646	0.319	0.192	0.229	0.096	0.043	0.009	1.382	0.943
	(STs)	0.529	0.384	0.138	0.071	0.071	0.026	0.008	0.002	0.747	0.484
	(Others)	4.018	3.524	1.812	1.267	1.592	0.836	0.332	0.223	7.755	5.850

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Table 5: Enrollment by stages and States/Union Territories, 1989-90.

(Enrollment in million)

State/UT	Population category	Primary		Middle		Secondary*		Higher education		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Manipur	(SCs)	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.003	0.003
	(STs)	0.050	0.043	0.008	0.007	0.007	0.005	0.002	0.001	0.067	0.056
	(Others)	0.087	0.076	0.031	0.025	0.032	0.021	0.010	0.008	0.160	0.130
Meghalaya	(SCs)	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.003	0.002
	(STs)	0.104	0.099	0.030	0.028	0.025	0.022	0.003	0.002	0.162	0.151
	(Others)	0.018	0.018	0.008	0.004	0.005	0.004	0.002	0.001	0.031	0.027
Mizoram	(STs)	0.060	0.053	0.018	0.018	0.009	0.008	0.001	0.001	0.089	0.080
	(Others)	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
Nagaland	(STs)	0.077	0.071	0.021	0.018	0.008	0.006	0.001	0.001	0.107	0.096
	(Others)	0.002	0.004	0.005	0.004	0.005	0.003	0.000	0.000	0.012	0.011
Orissa	(SCs)	0.415	0.265	0.105	0.041	0.055	0.017	0.004	0.001	0.579	0.324
	(STs)	0.516	0.243	0.093	0.038	0.034	0.013	0.003	0.001	0.646	0.295
	(Others)	1.219	0.931	0.350	0.348	0.589	0.186	0.044	0.018	2.001	1.481
Punjab	(SCs)	0.390	0.302	0.109	0.068	0.056	0.029	0.007	0.003	0.562	0.402
	(Others)	0.741	0.659	0.354	0.279	0.264	0.189	0.068	0.035	1.428	1.162
Rajasthan	(SCs)	0.526	0.171	0.155	0.020	0.085	0.006	NA	NA	0.765	0.197
	(STs)	0.373	0.112	0.095	0.010	0.053	0.003	NA	NA	0.522	0.125
	(Others)	2.254	1.085	0.774	0.256	0.498	0.140	NA	NA	3.525	1.481
Sikkim	(SCs)	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002
	(STs)	0.008	0.007	0.002	0.002	0.001	0.001	0.000	0.000	0.011	0.009
	(Others)	0.028	0.024	0.006	0.005	0.004	0.002	0.000	0.000	0.038	0.031
Tamil Nadu	(SCs)	0.845	0.684	0.330	0.223	0.154	0.085	0.023	0.010	1.352	1.003
	(STs)	0.034	0.028	0.010	0.007	0.004	0.003	0.000	0.000	0.049	0.036
	(Others)	3.281	2.828	1.417	1.048	0.788	0.523	0.129	0.078	5.595	4.474
Tripura	(SCs)	0.037	0.050	0.011	0.007	0.005	0.003	0.001	0.000	0.054	0.040
	(STs)	0.066	0.044	0.015	0.009	0.006	0.002	0.000	0.000	0.087	0.058
	(Others)	0.109	0.096	0.040	0.033	0.028	0.020	0.006	0.003	0.183	0.151
Uttar Pradesh	(SCs)	1.713	0.644	0.315	0.075	0.312	0.046	0.052	0.004	2.392	0.789
	(STs)	0.021	0.012	0.002	0.002	0.001	0.000	0.033	0.016	0.033	0.016
	(Others)	6.953	4.153	2.709	1.043	1.898	0.622	0.296	0.108	11.856	5.925
West Bengal	(SCs)	0.876	0.583	0.165	0.084	0.120	0.051	0.017	0.008	1.179	0.726
	(STs)	0.317	0.135	0.043	0.015	0.020	0.011	0.001	0.000	0.381	0.161
	(Others)	4.121	3.243	1.370	1.065	0.918	0.479	0.178	0.127	6.587	4.913
Andaman Islands	(STs)	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.003	0.003
	(Others)	0.019	0.017	0.009	0.007	0.006	0.005	0.001	0.001	0.035	0.030
Chandigarh	(SCs)	0.006	0.005	0.003	0.002	0.001	0.001	0.000	0.000	0.011	0.008
	(Others)	0.018	0.015	0.010	0.009	0.014	0.011	0.007	0.006	0.049	0.041

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Table 5: Enrollment by stages and States/Union Territories, 1989-90.

(Enrollment in million)

State/UT	Population category	Primary		Middle		Secondary*		Higher education		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
DN Haveli	(SCs)	0.000	0.000	0.000	0.000	0.000	0.000	NA	NA	0.000	0.000
	(STs)	0.000	0.005	0.002	0.001	0.001	0.000	NA	NA	0.011	0.007
	(Others)	0.001	0.001	0.001	0.001	0.001	0.000	NA	NA	0.002	0.002
Daman & Diu	(SCs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
	(STs)	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.002	0.001
	(Others)	0.004	0.004	0.003	0.003	0.003	0.002	0.000	0.000	0.011	0.009
Delhi	(SCs)	0.119	0.091	0.047	0.031	0.032	0.014	0.005	0.003	0.204	0.138
	(STs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	(Others)	0.370	0.339	0.230	0.190	0.174	0.146	0.060	0.049	0.835	0.723
Lakshadweep	(STs)	0.004	0.004	0.002	0.001	0.001	0.001	NA	NA	0.007	0.006
	(Others)	0.000	0.000	0.000	0.000	0.000	0.000	NA	NA	0.000	0.000
Pondicherry	(SCs)	0.010	0.010	0.005	0.004	0.001	0.001	0.000	0.000	0.016	0.016
	(Others)	0.044	0.039	0.025	0.019	0.013	0.010	0.002	0.002	0.085	0.070
Total	(SCs)	9.523	5.878	2.623	1.298	1.800	0.644	0.238	0.065	14.184	7.884
	(STs)	4.948	2.850	1.075	0.494	0.552	0.244	0.057	0.019	6.631	3.607
	(Others)	43.261	30.859	16.670	10.028	11.171	5.560	2.444	1.234	73.547	47.681

Note: NA = Not available. Others refer to the general population excluding SCs and STs.

Source: Tabulated from Government of India, Ministry of Human Resource Development, Annual Report, 1990-91 Part-1.

corresponding to the different stages of instruction were the same as in 1981, based on the 1991 census the net enrollments should have been as in Table 6.

However, the male/female gross enrollment aggregates for all stages combined were only 42.3/52.2 million, that is, just about 22/30 per cent of the expected numbers. The gross male/female enrollment ratios for the SCs, STs, and Others were, respectively, 97/66, 105/62, and 98/75 at the primary level; 29.5/17.5, 26/13, and 40/26.5 at the middle level; 29/12, 19/9, and 35/20 at the secondary level; and 5/1.2, 2.4/7 and 9/5 at the higher level.

Adjusting for under/over - age children, the enrollment ratios for all the three categories were still well below the requirement even at the primary level; more so among the females, with a gender gap of 31.3/43, 2 per cent in the case of the SCs/STs, and 23.4 per cent in the case of Others.

While inter-state variations in the male/female enrollment ratios at the different stages in all the three categories of the populations are only to be expected, understanding these variations calls for a similar juxtaposition of the gross enrollment figures with the population estimates of the corresponding categories. That is not attempted here.

Table 6: Net expected enrollments, 1989.

(enrollment in million)

Population category	Stage of instruction				
	Primary	Middle	Secondary	Higher	Total
SCHEDULED CASTES					
Male	9.81	8.82	6.26	5.07	29.96
Female	8.95	7.42	5.29	5.23	26.89
SCHEDULED TRIBES					
Male	4.72	4.18	2.91	2.34	14.15
Female	4.62	3.84	2.79	2.63	13.88
OTHERS					
Male	43.97	41.74	32.18	27.72	145.61
Female	41.11	37.86	28.10	26.32	133.39
TOTAL					
Male	58.50	54.74	41.35	35.13	189.72
Female	54.68	49.12	36.18	34.18	174.16

Note: Figures in the Table are projected on the basis of the male/female population distribution by age groups in the 1981 Census and the growth rate estimated in the 1991 Census.

Conclusion

Of the two main concerns of studies on education, namely, access and quality, this write-up has been concerned with the first. While it gives a general idea of the slow growth of literacy and education, and the wide inequalities in the access of the principal social categories, there is no dearth of explanations for both.

These include : a) the continuing dominance of the traditionally well entrenched upper castes for whom one sure way of ensuring their dominance is by keeping the disprivileged in perpetual ignorance; b) the structural problems of the educational system such as the duality of a mixed private cum state education which reinforces the existing caste and social inequalities and through which the elite dominate the education system through one type of education while the masses get quite another, and the poor paying for the education of the rich by bearing the brunt of indirect central and state taxes (for more on the structural issues, see Sethi 1985); and c) the overly preoccupation of the plans so far, as the approach paper to the Eighth Five Year Plan has admitted, with raising production and productivity, without giving enough attention or resources to essential education and other social services.

If education is seen as "a unique in-

vestment in the present and the future", as the National Educational Policy has done, such importance is not reflected in the investment in it in real terms. While paucity of funds has been the administrative refrain for this, such paucity is not reflected in any kind of financial discipline on the part of the government and politicians in power both at the centre and in the states, and a lot of funds (unaccounted and unaudited?) are wasted on costly aberrations and extravaganzas.

To conclude, since the education system per se is not independent, but is dependent on other aspects of the society so long as these aspects are not directly linked to it for making it central to all development strategies, it is doubtful if it can be any better with whatever fine tuning one may attempt; more so, when the society is still characterised by extreme forms of social inequalities under which for the really deprived education cannot be a priority, so long as they are in dire poverty, helplessness, and social insecurity. All the same, it needs to be emphasised that it is time education figured prominently as a priority item of social policy of the central and state governments. Within education if any government has to choose between literacy for all and education for a few, so long as the nation remains overwhelmingly illiterate its main concern should be with the former and not the latter.

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References

- Bandyopadhyay, R. 1991. "Education for an Enlightened Society : A Review", *EPW* XXVI (7). February 16.
- Blackhurst, Alan 1989. "The Promotion of Literacy from the perspective of Community Education", in Yvonne Heslop (ed.) *Literacy: Focus on Asia and the*

- Pacific. Special Issue to Commemorate International Literacy year 1990.* Canberra, Asia South Pacific Bureau of Adult Education Courier no. 47.
- Government of India. 1985. *Challenge of Education : A Policy Perspective*, 1985, Ministry of Education.
- 1986. *National Policy on Education*, 1986, Ministry of Human Resources Development.
- 1991. *Towards an Enlightened and Humane Society*, Report of the Committee for the Review of National Policy on Education, 1986.
- 1991. *Literacy Digest*, Ministry of Human Resources Development.
- Grant, James P. 1989. *The State of the World's Children*, Oxford University Press.
- Russell, Bertrand. 1932. *Education and the Social Order*, London, George Allen and Unwin.
- Sethi, JD. 1985. "To Sir with Love : Education", *The Illustrated Weekly of India*, December 15.
- World Bank. *World Development Report, 1991 : The Challenge of Development*.

THE FAST TRACK : INTERNATIONAL ECONOMY OR GLOBAL CAPITALISM?*

C. T. Kurien

THROUGH what has become a celebrated example in the literature of economics, David Ricardo, the English classical economist, put forward in the early 19th century his theorem of comparative advantage which became the theoretical rationale for trade between nations. He took two countries, England and Portugal, and two goods, cloth and wine. If the costs of production of the two goods were different in the two countries, say, that of wine were less in Portugal and that of cloth less in England, then it would be to the advantage of both the countries if each produced what it had cost advantage in and imported the other.

But Ricardo went a step further. Suppose, he said, in Portugal the costs of production of both the goods were lower, as it was able to produce a certain quantity of wine by the labour of 80 men and a certain quantity of cloth by the labour of 90 men, whereas in England the same quantities of wine and cloth would take, respectively the labour of 120 and 100 men—would trade be still beneficial to both the countries? Yes said Ricardo, it would

be beneficial to Portugal to specialise in the production of wine where it had *comparative* advantage over England and leave it to England to produce cloth where it had comparative advantage, and then to enter into trade which would still confer cost advantage to both the countries.

This theorem underlies even the contemporary arguments in favour of "outward-orientation," "opening-up," "liberalisation" and the like which are put forward throughout the world, including in India by those who are behind the new economic policy. The simplicity of the argument makes it very convincing: why produce at home something that can be purchased in the international market at a cheaper price? Why not specialise in goods for the production of which one has natural advantages and then compete in the global market, thus improving efficiency and reducing costs all around?

But there must be other factors to be taken into account. For, in spite of Ricardo's convincing theoretical proof, tariff walls protecting domestic pro-

duction, especially industrial production, were the order of the day in the first half of the 19th century. Countries must have found their own national interests more compelling than the tenets of economic theory.

The situation is not very different even today. Tariffs and other measures of protecting domestic economic activities are prevalent throughout the world, including in those countries that specialise in producing and exporting arguments in favour of free trade, outward orientation and so on! What some of the leading countries like the United States and the West European nations do now is to become outward-oriented in terms of those things in which they have global advantage, but to protect domestic activities—agriculture being the clearest case—where they would be at a great disadvantage by international standards: theoretically sound and worldly-wise at the same time.

Which raises the question of how national interests are to be preserved and promoted in the global context. There is no doubt that the global context is a major factor to be taken into account even in the case of large and populous countries such as India and China. To insulate the domestic economy from all international influences is no longer a possibility; neither can it be considered as advantageous in the national interest. But then, how does a country decide in what spheres and to what extent its economy should be exposed to global influence?

The answer to this question depends to a large extent on how the global influences are interpreted. What is the nature of the global economy today? Can it be taken as a collection of national economies groping for their re-

spective spheres of comparative advantage in the Ricardian tradition, or is it something else? As Ricardo, along with Adam Smith, is considered to be one of the early theorists of capitalist development, and since the global economy now—particularly after the collapse of socialism in Eastern Europe and the former Soviet Union—is claimed to be global capitalism, it is frequently assumed and asserted that the Ricardian theorem can be the basis of international economic relationship even today. But this contention needs to be carefully scrutinised.

The countries that Ricardo took as the units of analysis, it may be recalled, were primarily concerned with the use values of two goods, wine and cloth. The question they were considering was whether these goods should be produced domestically or should be obtained through trade. This is not a specifically capitalist question. Two feudal economies or socialist economies can also be thought to confront the same question, and on considerations similar to what Ricardo brought out, they may also decide to enter into trade with one another for the goods they find useful.

The capitalist calculation enters where trade is viewed not as a means to obtain the use value of the goods concerned, but as the source of the exchange value it gives rise to. That, certainly, is not a user's concern, but can be that of an intermediary, a trader, for instance, who, realising Portugal's and England's needs for wine and cloth arranges to purchase them from some other source and sells them to the two users. Of course, there will be a difference between the trader's purchase price and selling price which accrues to him as his profit. Unlike the users who

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are primarily concerned with use values, the trader must be thought of not only as a specialist in trade, but as one whose main concern is the exchange value (or simply "value") of the goods that enter into trade which is the source of his profit.

The intermediary need not be an individual; it can be corporate body. The intermediation need not be confined to trade (though it must include it); it may be related to production. Whether production or trade, or production *and* sale, the intermediary is concerned with the value that these activities yield and the profit it gives rise to. To understand capitalism is to come to grips with this process of intermediation (which does not enter into the Ricardian theorem).

The intermediation is done with the use of capital. In trade, for instance, the merchant advances his capital to purchase goods, sells them and converts them again to capital and the process of conversion of capital into goods and goods into capital continues indefinitely in the quest for profits and more profits. In production the process is elongated with the capitalist first purchasing goods (means of production and raw materials) as well as labour power converting them into new goods and selling them to realise value which augments the capital. The goods themselves (whether means of production or raw materials) are inert material which cannot *generate* additional value. In production accounting, the costs of the purchase of all material inputs is netted out to arrive at "value added" which, then, is the contribution of labour power—physical and mental—in the process of production and which the producer, the intermediary capitalist, pays off partly as wages (actually, already paid as the

purchase price of labour power) and retains the rest as profits.

Capitalist production is, thus, the intermediation process in quest of value and results in the interaction between the owners of capital and the owners of labour power. This is the essential feature of capitalism and hence will be seen in nascent capitalism as well as advanced capitalism, national capitalism as well as global capitalism. Trade is a part of this capitalist process because although value is *generated* in the production stage, it is *realised* only through sales. Partly because trade, thus, is the final stage of the capitalist process and partly because individual owners of capital have the prospect of realising value through purchase and sales, trade becomes a very pronounced aspect of capitalist development. Whether such trade is similar to what Ricardo dealt with in his example must be examined, but after gaining some understanding of what "global capitalism" is.

In the early stages capitalism and the nation-state were closely related, both emerging in Europe from the ruins of the earlier socio-economic order, feudalism. The affinity between the two was so close that it was reasonable to talk about British capitalism, French capitalism, German capitalism, American capitalism, Japanese capitalism, and so on. Indeed, the two "World Wars" were the result of the rivalries between nationalist capitalist powers.

In many spheres the nationalist connections and affinities still continue. But capitalism as an economic order is no respecter of geographical boundaries. This aspect of capitalism found expression initially through colonialism with practically every capitalist national state (in

Europe) claiming other territories (in Asia, Latin America and Africa) as its domain, for the operation of its capital, that is.

The political dimensions of the colonial order started disappearing rapidly after the end of the Second World War, but in the economic realm capitalism's innate transnational proclivity continued and intensified. The intensification was mainly the result of a regrouping of the ownership pattern of capitalism. What had, during the first half of the present century, emerged as the national corporate structure of the ownership and operation of capital began to change *de facto* as well as *de jure* into a transnational corporate structure with owners of capital from different nationalities coming together to form corporations beyond national boundaries, locating operations in different parts of the globe.

It has been shown, for instance, that the manufacture of Ford Escort which is assembled as a car in the U.K. and Germany is done effectively in 15 different countries, besides U.K. and Germany, in France, Canada, the U.S., Spain, Italy, Switzerland, Japan, Austria, Denmark, Norway, Belgium, the Netherlands and Sweden, each one of which supplies some component or the other of the final product. (The World Bank, "World Development Report, 1987," Chapter 3). A more recent account says: "When an American buys a Pontiac Le Mans from General Motors, for example, he or she engages in an international transaction. Of the \$ 20,000 paid to GM about \$ 6,000 goes to South Korea for routine labour and assembly operations, \$ 3,500 to Japan for advanced components (engines, transaxles and electronics, \$ 1,500 to West Germany for styling and design engineering, \$ 800 to Taiwan, Singapore and Japan for small

components, \$ 500 to Britain for advertising and marketing services, and about \$ 100 to Ireland and Barbados for data processing. The rest—less than \$ 8,000—goes to the strategists in Detroit, lawyers and bankers in New York, lobbyists in Washington, insurance and health-care workers all over the country, and General Motors shareholders—most of whom live in the United States, but an increasing number of whom are foreign nationals" (Robert B., Reich, "The Work of Nations," 1991, Chapter 10).

These are no longer exceptional cases. But however elaborate they may appear, they result from the attempt of capital to reach out to labour at the most advantageous terms, and is, therefore, very much the essential feature of capitalism, "hopping and skipping and jumping to everywhere we can find a competitive labour market" as the president of a transnational corporation put it.

While this basic feature of capitalism continues, the new phase, which is rightly referred to as transnational capitalism or global capitalism, has distinctive characteristics of its own. With production being located in different parts of the world, there has been a phenomenal increase in the movement of goods across national boundaries giving the appearance of a rapid growth of international trade. But this trade is not the movement of goods from one country to another based on principles of comparative advantage as envisaged by Ricardo. In fact it is doubtful whether these movements of goods can be considered as trade at all. Basically, they are transfers of components or a final product from one workshop of a giant manufacturing concern to another. Though located in

different parts of the world and coming under the jurisdiction of different nation states, they are, for all practical purposes, different points of an assembly line and hence the movements are very much "internal." Even when these goods are priced, they are more in the nature of the accounting prices of a firm than prices arrived at through the play of market forces.

That the production units located in different parts of the world are "departments" of a single transnational corporation requires some modification. Many of them may be, from a legal point of view, independent units, but contracted to the global corporation in terms of their operations with clearly stated specifications. They would generally expect their finished products to move at "prices" already determined to the next unit to which they are delivered, rather than sold. This is further reason why such movement of goods even when it is from one "independent" unit to another in a different country cannot be treated as international trade.

The location of these units is determined taking into account a wide range of considerations such as labour costs, transportation costs, government subsidies and taxes, exchange rates and political climate, but it can be seen that such calculations are far from objective, and there is nothing to suggest that what is advantageous to a distant intermediary is the most appropriate to the host countries or their economies. In any case some of the conditions mentioned above can change or the parent unit's assessment of them can change and then there will be a hop, skip and jump to another location, most likely in some other country in some other part of the world.

Global capitalism that has been emerging in the past few decades and has become more global with the collapse of the socialist regimes during the past couple of years has already demonstrated itself to be exceptionally footloose, here today and gone tomorrow. That is why transnational corporations attach great significance to legally-guaranteed "exit policies"; the freedom to quit is absolutely crucial for them. Indeed, from this perspective the global "freedom" that is being heavily canvassed is not so much the freedom for trade or for the free movement of goods, but the freedom for the unfettered movement of capital, a far cry from the case Ricardo built up for the free flow of wine across national boundaries.

Global Transactions

Surprising though it may appear, the transnational corporations do not have any basic interest in production as such or even trade as such for that matter. In both these spheres they are, after all, intermediaries, their basic interest being "value." True, value is generated only in production and realised through sales, but that is a statement for the system as a whole. For a single intermediary, individual or corporate, production is not necessary for the acquisition of value; trade is more than enough. In the modern context not even trade is necessary thanks to the development of finance as the specialised sphere for the transaction of values. Shrewd financial transactions are becoming the best avenues for the acquisition of "value" — purchase or take-over of another concern, for instance. "Paper entrepreneurship" is thus emerging as the most lucrative business, with lawyers and high-profile accountants as the most highly paid

professionals. And these transactions are becoming global too facilitated by the hi-tech communication systems.

Another variant of quick value acquisition is emerging too—speculation in exchange rates. Transnational corporations may not be directly involved in it, and some forms of speculative activity may have been an old business practice. But speculation assumes a new role in the context of global capitalism. A quick look at history will show that though capitalism went beyond national boundaries from its very early days, there was, so far, an acknowledged leading capitalist nation. Britain played that role from the infant stage of capitalism till the First World War. Consequently, during that period the pound sterling was capitalism's lead currency. The U. S. emerged as the leading capitalist country and hence the dollar became the lead currency after the Second World War, a position that was maintained almost till recently.

But the growth of transnational capitalism and the balance of payments problems of the U. S. have considerably weakened the dollar. At the same time the German mark and the Japanese yen have emerged as strong international currencies. Exchange rate fluctuations, in this context, have assumed a new significance. They have become more frequent and in some respects more unpredictable. Purchase and sale of currencies therefore, can become a source of acquiring 'value', though something of a risky business. But, then, risk-taking is said to be one of capitalism's special features.

While some may gain—and others lose—value in this manner, uncertainties of the value of currencies cause

some problems for national economies. The three main currencies directly involved in speculative dealings may not be the only ones that get caught up in the new whirlpool, other currencies will get drawn in too as is currently happening to the British pound sterling and many other European currencies. In fact, currencies that are fully convertible, but in the view of speculators of lower order compared to the "big three," may turn out to bear the brunt of the currency volatility as the tendency will be to dump them in favour of the major ones.

What of the global economy itself? Where there is no lead currency and where currency values are frequently fluctuating, *all* global transactions will be affected. Prices of commodities will become unstable, designating of debts will become problematic; doubts will arise about the manner of holding surpluses. The pursuit of value paves the way for chaos and international economic disorder.

These are the features of "the rapidly changing global economy," and it is in this context that national governments have to make decisions about international economic relationships. If, as noted already, isolationism is no longer a possibility, outward orientation by itself is no virtue either. This is because the opening up may not lead to trade as such, but to the play of globe-trotting, transcient and speculative capital. Careful examination is necessary to see how and where it can be beneficial and how it can be dovetailed into and made subservient to long-term national developmental policies. Where this is not consciously done the chances are that national economies, particularly the weaker ones will be sucked into the rapidly

moving and volatile global economy of transnational capitalism. Many countries, including India, seem to be getting drawn into that fast and dangerous track assuming that what they are

doing is only more active participation in a beneficent international economy. That is not only a mistaken notion, but can turn out to be costly error.

Book Review

The Economy : An Interpretative Introduction, by C.T. Kurien.
Sage Publications, New Delhi, 1992, pp. 436, Rs. 295.

R. N. Poduval

This is a scholarly and thought-provoking book which analyses types of economies to elucidate how they have functioned and/are functioning and to draw lessons from them. It is essential to grasp at the outset what is meant by an economy. The author defines an economy as a "structure of relationships among a group of people in terms of the manner in which they exercise control over resources, use of resources and labour in production of goods and services and define and settle the claim of the members over what is produced". It is thus different from the concept of economics which according to Prof. Lionel Robbins is "the science which deals with human behaviour as a relationship between ends and scarce means which have alternate uses". It is not the nature of resources as such that the author is concerned with but the structure of relationships with groups of people, which manifest itself in the ownership and control over resources and in production and distribution of what is produced. Understanding the economy in this sense would necessitate

going beyond economics to take into account the contribution of other disciplines. It is this approach which is the distinctive feature of the book.

Part I deals with functioning of types of economies, the analysis moving from the simple to the complex, from the rudimentary economy to the village economy, the capitalist economy and the post-capitalist economy. They are not strictly stages in the evolution of economies since the components of one may interact with components of the other. Barring the rudimentary economy and the post-capitalist economy, the crucial factor is the control over resources which determines production and distribution. In the village economy, it is control over land; when exchange through the intermediation of money and markets emerge, it is purchasing of capital. In the functioning of exchange and markets, the author underlines the need to view them as instruments to achieve social purpose.

The analysis of the economies is not abstract; it is characterised by a

healthy historical and empirical approach. The analysis is also balanced as is evident in the analysis of the capitalist economy. While outlining the features of the capitalist economy such as the separation of the means of production from the workers, the appropriation of surplus produced by labour power by owners of capital and the tendency to render labour redundant, the author also points out the unprecedented increase in production and the economic progress of workers in the capitalist economy. The view that a capitalist economy will function best when all interventions are removed is disproved by stressing the role of the state, not by way of holding the ring, but by influencing the social relations of production, utilisation of resources and activities and by direct participation in economic activity.

The post-capitalist economy represents a radical departure from the capitalist system in terms of ownership and use of nonhuman resources. A post-capitalist economy is conceived of as an inclusive one; it must give the actual producers, the workers, the decisive say in matters relating to production and the settlement of claims; it must not have the exploitation of worker as one of its features. The post capitalist economy, further should assure to each member the basic needs of life, give higher importance to education, health and housing, bring about substantial increase in production and productive capacity and eliminate private property incomes thus establishing a greater degree of equality among the members.

The post-capitalist economy is approximated to socialist economies and the specific experience of the USSR and Yugoslavia (historical experience) and

that of the Peoples Republic of China has been critically assessed. What a post-capitalist economy can achieve is demonstrated by China, which by adopting "socialism with Chinese characteristics" has succeeded in providing the "five guarantees" food, clothing, fuel, education and health care to all.

In spite of the favourable features of the socialist economies, why the socialist economies of Soviet Russia and Eastern Europe should collapse in recent years is a legitimate question. The author hits the nail on its head by stressing over-centralisation, emergence of a command economy and absence or lack of participatory system.

A blueprint, as it were, of a post-capitalist economy is outlined by the author. The basic conditions necessary are; abolition of private property, socialisation of means of production, provision of basic needs to the members, worker oriented production and along the household and co-operative enterprises. Distribution will be according to the principle of "to each according to his work". It is acknowledged that such a post-capitalist economic order is yet to come but it is regarded as feasible of establishment.

It is within the theoretical framework elaborated in Part I that the analysis of the Indian economy has been undertaken in Part II. The major concern has been the two interrelated aspects (1) the distribution of resources and (2) co-existence of poverty and affluence. As regards the first, the perceptive analysis of the data thrown up by the Report on All-India Debt and Investment Survey 1981-82 (RBI) and the NSS Report on Land holding (1986) reveal the glaring disparities in the distribution

of assets and land holdings. The change in the occupational structure of the labour force manifested in the decline in the percentage of cultivators and increase in the percentage of labourers along with marginalisation of holdings has induced a shift of labour out of agriculture. Although a part of the labour force has been absorbed in non-agricultural activities, and in various developmental activities of the government the shift from self-employment to wage employment has resulted in casualisation of labour. Again, although the share of agricultural sector in GDP has come down, it has not been accompanied by a perceptible decline in labour force engaged in agriculture, indicating a decline in productivity. The above developments have contributed to the unequal distribution of resources of income and wealth in the rural areas.

Since the post-independence policies have followed the capitalist growth, achieving a high rate of growth through planned development became the objective of policy. However, the kind of development deemed feasible by planning has been characterised as "growth without radical institutional change". Although there has been a shift in emphasis from growth per se to improvement of the economic position of target groups and a shift from target groups to increasing the resour-

ces and income position of vulnerable groups through integrated rural development, poverty has persisted and a sizeable proportion of the population about 30 percent or 238 millions are still below the poverty line. This stems from the fact that there has been no change in the basic structure of the Indian economy as emphasised by the author. The most important asset has been land and in spite of land reforms, the unequal distribution of its ownership has conferred resource power on a few. The growth of industry, and markets have created a new class, "the nouveau riche" who imitate the consumption habits of the highly affluent. Production is oriented to meeting the demand of these two classes.

The South East Asian Countries have followed a different path of development. Their approach has been a radical land reform that sharply raised the incomes in the rural areas and laid the basis for development to take place on an equitable distribution of incomes. The Indian economy, on the other hand, followed the capitalist pattern of development without bringing about a structural change in the economy.

Dr. Kurien's work is an original contribution to the interpretation of types of economies. His perceptive and discerning analysis of developments in the Indian economy deserves careful study.

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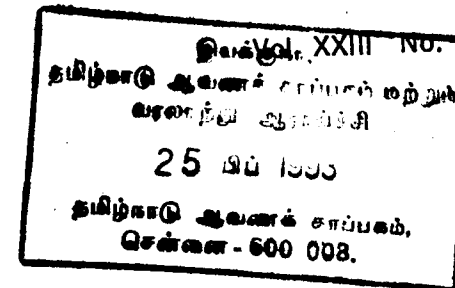
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BULLETIN

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Fiscal Policy and Privatization

Some Comments on Advances in Agro-chemicals

made about the power sector being opened to the private sector — both national and from other countries, it looks as if the private sector is actually entering the area. What has been holding up the entry of the private sector is first the question of distribution of the power that it will generate—particularly the price and given the record of TNEB and other State Boards of building up appears and not collecting their dues, and how the private sector will get their sale price, when permitted. The second cause of the delay is the interminable procedures involving in getting government clearance for a project. It is one thing to declare that the power sector is open to the private sector, it is another matter to actually get the clearance. The Tamil Nadu Power Planning Corporation (TICAPCO) formed by 96 Tamil Nadu based private corporate enterprises first drew up the project in 1984 and its actual clearance involved getting the funds from 96 companies (which was 30 per cent of the Rs. 800 crores), getting approval of the department in the state in 1988, from CEA in 1991, clearance of the Department of Environment of the Union government in early 1992 and negotiating with foreign banks for 50 per cent of the loan and the balance from the public. One important and rather simple distribution channel that has been devised by TICAPCO is that the power generated is sold to the 96 sponsoring companies. But even here the question of the price needs to be decided at which the power is to be sold and that has been the price fixed for all private sector projects, at the price which has been fixed with TNEB, and by CEA for all India projects. This month these demands are coming in a rush, with state government reporting that 8 private sector projects have been cleared, involving two of them having got so far as to start the building

for the plants and for the third a 4 member US based consortium. In addition Tuticorin Thermal (stage IV IX 500 MW) is ready and is open, for bids by the private sector. Further, important developments in the state and country's power sector area: a) the lignite deposits in South Arcot are attracting a number of private sector units such as the 4 member US based consortium referred to earlier which is developing its plant at Cuddalore, the 96 unit consortium developing its 250M power plant at Srimushnam, the TIDCO-Bharat Engineering plant also in South Arcot; b) in regard to gas supply a US Boston company in association with the Dyanora group is developing the 300 MW gas based integrated combined cycle power project (stage I) at Pillaiperumallanur (Nagapattinam-Quaide-Milleth). Third, TNEB reports that it has obtained union government approval for operating a captive coal mine in East Kalinga, Orissa, the first power plant to enter the mining sector. Fourth, 5 foreign companies — 2 Japanese, 2 German and 1 Russian — have submitted offers to rejuvenate our thermal power stations, and 3 companies — 1 Canadian, and 2 Swiss — have offered to help restructure our hydel power stations at Sabarigiri, Nerriamangalam and Peringallathur. Fifth, foreign aid has also been offered in the form of \$195 million (Rs. 585 crores) to develop the non conventional energy programme comprising activities in mini and micro sector (100 MW), wind energy (85 MW), solar photovoltaic (3 MW) of PV systems during the 3 year 1993-94 to 1995-96. This flurry of private sector activities in the power sector is welcome as the country has a long way to go as it is at the bottom in regard to per capita energy use at 250 KWH against 11000 KWH in US and 14000 KWH in Canada, even as it stands at the top in the loss of energy at 20 per cent, which it is

hoped that the decision to transfer transmission lines and sub stations to the Power Grid Corporation of India will lessen. This may also be related to the very strong criticisms voiced by the World Bank on the working, rather non working of the power sector — the SEBs, NTPC, PHC, and CEA, in delayed and inefficient procedures which causes endless delays, with agency interference particularly by CEA, the lack of matching funds which goes along with not being able to spend the allotted money before claiming reimbursement and other types of mismanagement. This is strong medicine which should wake up the power sector and lead to some corrective actions. Our DAE and IAEA refer to eco-friendly nuclear energy plants which produce electricity but the price in terms of nuclear reduction and pollution have to be faced.

Water

The North East monsoon ended in mid-December with some light rain in Madras city towards the end. As against the heavy losses and damage due to the storm, rains and floods reported in the last issue, the farmers have worked to bring the state back to normal in a rather speedy manner doing all that they can do to drain the flood waters from the fields, to repair the tanks, clear the farm lands of silt with the help as appropriate from the government. In the case of tanks, the 11,000 PWD tanks are being repaired speedily, some temporarily to meet the farmers' needs, but the situation with the 20,000 Panchayat union tanks is more serious as they were neglected and have been silted up and to bring these tanks to standard, the government estimates that Rs. 250 crores will be needed and for which World Bank funds have been requested. This is in addition to the Rs. 50 crores this year from the EEC to modernise the Tiruchi and North Arcot

tanks which irrigate 250-500 acres. With regard to rehabilitating houses lost by the poor, the Union government is giving Rs. 118 crores for housing for the poor in the flood affected district. There are two residual problems that the people and the government must face. First, at the end of the North East monsoon, the 3 city water reservoirs, Red Hills, Poondi and Sholavaram had a storage of 1916 mcft against the total capacity of 6483 mcft, which was also about last year's level. To continue the daily supply of 56 million gallon a day till the onset of the next North East monsoon in November 1993, the storage should be 4200 mcft. Hence Madras city has less than 50 per cent of drinking water storage that it needs. This means the citizens of Madras city should follow the good example of the farmers as referred to earlier and make all efforts to cut down their daily consumption by 50 per cent, and activate the domestic wells, with the corporation doing its best to supplement the water supply through lorries and trains. The Telugu Ganga project will be of help only 2 years later. The second problem faced by the state is with regard to the Parambikulam-Aliyar agreement with Kerala. Here the state government needs to wake up because the PWD minister in a statement in Madurai that said: i) the Parambikulam-Aliyar agreement which has expired 2 months ago is "outdated", ii) hence attention should be turned to the Pamban-Achankoil river project and iii) to make the best utilisation of the west flowing rivers of Kerala and that the Kerala government "was positive in this direction and that state was very keen to help the Tamil Nadu government". It is not known from where the minister got this information summarised in the above 3 points because the reports from Kerala do not support his position. The report from the Kerala Assembly dated December 24 (from the Assembly's II member commit-

tee) states that "Kerala had not been getting adequate share of water under the scheme, would be looked into and necessary steps taken". The committee chairman said "the Tamil Nadu government had violated the provisions of the contract, diverting waters for power generation and other projects. Tamil Nadu was using 2467 tmcft available at Niran Subbasin. Tamil Nadu has been backing out of talks on the project". The report says the state had lost 76,724 tmcft of water from the project between 1980-81, while Kerala was getting only 21.05 tmcft out of its due share of 41.71 tmcft. So the committee recommends that the government set up a committee with the Irrigation and Electricity Minister and department official for "the proper implementation and periodical review of the project". This is far away from the optimistic view expressed by the Tamil Nadu Minister.

Transport

Tuticorin port has carried a record 41.72 lakh tonnes between April and November. The second coal jetty nearing completion will handle 50 lakh tonnes a year. Given the similar performance by Madras, the question arises whether what is called minor ports in the state should not be developed, mainly for intra state trade to relieve the congestion on the road and railway and also lower per tonne cost of transport of goods.

National

Plan

Now that the 1993-94 Annual Plan outlays for the states and UTs has been completed, some 4 features of the coming year's plan deserves special mention. First, the fact that the total outlays proposed record a 14 per cent increase over

that of the current year, which when allowing for inflation means that the real increase is nearly nil is a pointer to the continuing resource crunch faced by economy and the government. Second, it is said as a consequence that the outlay on rural development has been reduced by Rs. 2000 crores to Rs. 4000 crores. This is: a) illtimed because at this time of structural adjustments reducing employment generation and rural development makes the reform regressive, b) surprising because the liberalisation under which the government is shedding many functions is against reduced resources available for the infrastructural sectors of rural development — health and education and c) will contribute to recession and its impact on the weaker sections. Third, the changed procedure, noted in the last issue, of first fixing the overall outlay for each state and then subjecting it to review by working parties has certainly speeded up the exercise but has made no difference in substance. Fourth, there is the usual appeal to all state plans to increase resource mobilisation; and reduce unplanned and wasteful expenditure and concentrate on rationalising and toning up the state enterprises to obtain higher returns on investments have not been realised in the actual exercise leading to the fixing of the outlays. In other words, it looks as if it is a case of the same old wine in the same old bottles and not even more of the same.

Prices

The annual rate of inflation fell to 8.55 per cent at the end of November, the WPI by 231.1 on November 29, falling by 0.7 per cent during the month. Most groups—primary articles, manufactured articles, and fuel, power, lubricants either fell or marginally remained stationary. The government takes credit for the

annual rate not rising as a mark of the economy achieving its objectives. But as even a small rise in price is an addition to last month's, last year's rate of inflation, there will have to be a continuing policy of money supply and tightening BOP and trade deficits. All this will not only be reflected in the reduction of the room for manpower of the government - both union and states on plan outlays and implementation as just noted but also the little relief in primary articles prices will bear heavily on those least able to bear it. This is no time for the government to take credit for the achievement of the economy's objectives. The economy and the people have to bear the burden of continuing inflation. It is now 8.33 per cent and last year was 12.3 per cent.

Stock Exchange

SEBI's programme to reform the stock exchange which is welcomed by investors and resisted by the stock brokers is well timed. First, it is standing firm on the date fixed for registration of brokers. Second, the banning of insider trading with penalties of Rs. 5 lakhs or 2 years imprisonment or both is a much needed step. Third, the plan to set up the National Stock Exchange by government is continuing and the stock exchanges resistance will only mean that its effectiveness will take longer to be realised. Fourth, trading sessions have been extended by 23 hours, which will curtail curb trading. Fifth, the exchanges have been asked to reduce the settlement period from 14 days to trading day plus five days to reduce speculation. Sixth, the government is insisting on 60:40 ratio in favour of government non officials on the stock exchange boards. Seventh, the move to increase the number of brokers by 500 and develop capital adequacy norms will strengthen the stock exchange movement. All these moves will improve the function of stock exchange and restore some credibility to them after the scam.

on 71 writ petitions by members of the Madras Exchange on the SEBI directive to pay registration fees. The court should observe some self discipline in highly technical and professional matters. This is especially so after the fall in the Bombay SEs sensitive index which took long to recover after the scam but a fresh set back over the Ayodhya events. This will involve a halt to government's programme for selling public sector equity and that of the corporate sector to raise capital from the market. What is worrisome is that in December when share prices fell steeply prices of consumer essentials like rice, pulses and vegetable oil shot up.

Budget

The presentation in and approval by Parliament at its winter session of the supplementary demands points to the lack of any evidence of tightening expenditure control as well as the familiar issue as to whether these demands will swell the budget deficit. This is important because last month, the ministry of finance not only was positive on the issue but actually stated that there will be no deficit this year. But now matters have changed and the ministry is desperately trying to stay within the budget limits agreed with IMF for the end of the quarter and the year. This should not be done by book keeping methods, that is using capital account surplus or by postponing disbursements to the following year to meet rising revenue account expenses. This must be accomplished by reducing expenditure, which both our economy need or pledge to IMF/WB demand.

Economy

To start with, to understand the functioning and financing of the economy, the dis-

inction between loans contracted by government from multilateral agencies, IMF, WB and ADB and External Commercial Loans need to be understood. In December, the country's foreign exchange reserves rose by \$1 billion due to IMF releasing two tranches of the Standby Agreement amounting to \$640 million. ADB released \$150 million as the first tranche to support the financial sector reform, and WB released \$200 million of the first tranche in its structural adjustment loan in support of the social sector programme and the National Renewal Fund. There are conditions attached to these, set forth in the Policy Framework Paper (PFP) which depends on the ESAF lending focussing on tax and public sector reforms. India is to have access to \$7 billion as IMF loan under its extended fund facility including \$1 billion under ESAFC (Extended Structural Adjustment Financing Facility) over 3 years. Turning to External Commercial Borrowing (ECB), the ceiling of \$2.5 billion for 1992-93 was referred to in the last issue. There is some resistance to this from the corporate sector and even some of the ministries. It is therefore timely that the 14 point policy guidelines on ECB issued by the Finance ministry in August 1992 and published in the November 1992 issue of the RBI Bulletin will enable everyone to understand what is involved in ECB and its operation. It is well to remember that the external financial crisis faced by country in the first quarter of 1992 was due to the run away ECB that was indulged in. The guidelines: a) establish a ceiling to keep the borrowing within sustainable limits; b) provides for prioritisation of ECB use among sectors; c) gives priority to core and infrastructural sectors and where ECB is a residual resource after exhausting to external equity; d) giving preferential access to self liquidating loans as EOU's, e) a minimum fund maturity period of 3

year for all loans; f) on government guarantee to ECB except for PSUs. The guidelines give adequate leeway for the viable units in the corporate sector to resort to ECB on the basis of its priorities. Only what is needed is for the ministry to acquire the expertise in swaps and options which was the two key elements in ECB. On the general performance of the economy, the 1992 scene is depressing, (except for the inflation rate); with the BOP gains being due to IMF/WB loans and exports performing poorly; with the Ayodhya calamity resulting in slowing of the economic reform process which through contributing to the gathering particularly in automobiles, steel, electronics, paper and petro chemicals needs to be quickly reversed; with the calamitous stock exchange scam which showed up the weakness of RBI and the ministry of finance (is it true that in a developing capital market that of India a market legislation cannot dictate the behaviour of market operation?) and which has depressed the investment and economic climate, and with agriculture not performing extraordinarily both in 1991-92 and in 1992-93, seen in the poor foodgrains production resulting in the wheat imports; and with industry being stagnant; and the 1991-92 overall growth being 2 per cent and likely to be the same for 1992-93; despite the optimistic projection of 3.5 per cent by RBI. Against this backdrop, the reduction of the fiscal deficit to 5 per cent of GDP is going to involve a drastic cut in all subsidies; besides the sale of PSU shares to get \$1.2 billion, Rs. 3500 crores against which Rs. 1183.83 crores was realised in the disastrous December sales, making a total so far for the year of Rs. 1878.3 crores, (the first sale in October realised Rs. 53 per share compared to Rs. 38 in December) with the 5 per cent target of sales of shares being achieved in only 5 out of 12 companies both face innumerable problems and seem doubtful of

attainment. All this is necessary to get the continuing IMF standby loan referred to above and against impossible set back; the RBI for the first time after the March 1992 partial convertibility, devalued the Rupee by 1.18 per cent against the dollar probably to pave the way for IMF standby loan. There is ofcourse the problem of the aggregate domestic non performing assets of banks being at a high 14.46 per cent of their total advances in 1991-92 which makes the stalled financial sector reform policy important. Two other related issues with regard to the current performance of the economy are: a) the government's plan to use black money collected by the National Housing Board through its voluntary deposits, immunities and exemptions scheme for slum improvement in 454 small towns with population between 50,000 to 5 lakhs and 129 medium cities with population of 1 to 5 lakhs and b) the decision to review by X Finance Commission the calamity (disaster) relief scheme, which has not stood up to the 1992-93 calamities. Both these are urgent and essential, only the use varies. Immunities and incentives given to the users of black money raise against the question of instrumental vis-a-vis the full tax payers and their role in the economy.

Industry

The serious retarding impact on industry of the Ayodhya disturbances was earlier referred to. It is too early to assess the all India picture; reports on the effect are arriving in bits and pieces. The chambers of commerce and trading organisations state that in the first 3 days, the business and industry have suffered a loss of Rs. 300 crores, that the external production loss in Bombay's industrial belt amounted to Rs. 30 crores, the capital market has received a body blow, the pace of India's industrial and economic

reforms has slowed down, that the working of industrial units country wide has been partially affected through riots and bhandas, though the large units have not been much affected, that export consignments worth Rs. 1500 crores including textiles, leather goods, garments and agency goods for despatch to US, UK and Europe have been piling up in airports, and docks and even the union economic ministries have been discouraged because they find that the economy has taken a back seat in government's priorities and the country's reputation and credibility has taken a severe blow internationally. This is particularly tragic because this disruption has occurred just when the reforms were making more funds available to Industry through improved productivity and efficiency of the firms and the first 6 months (April to September) record showed a selective improvement in industries. In the infrastructural group, coal production moved up by 32.2 million tonnes compared to the first 6 months of 1991-92, electricity generation was simultaneously higher by 144.3 billion KWH, and fertiliser, steel and kerosene and petroleum products also recorded some increases, all of which moved up the Industrial Index by 2.2 per cent for the period April-July. But all this has now received a set back, as noted earlier and it looks as if the industrial performance will be stagnant for the year. At the individual industrial level, the major event was the issue of the Textiles (Development and Regulation) order 1992 which among other matters delicensed the textile industry, keeping special provision for certain segments of the industry and the consumption of weaker sections. Another development to be noted was the reported reduction in sugar production after the high point referred to in the past issues.

Public Sector units

The continued failure of the Second round of the public sector disinvestment in December was earlier referred to. A study by the Institute of Public Enterprise, Hyderabad of the first disinvestment operation in October showed that the fixing of a very low reserve price for PSU has caused a heavy loss to government. For instance the extent of realisation per share was lower by Rs. 39 in NLC, Rs. 48 in HMT, Rs. 31.17 in HCL. And yet the lesson was not learnt and applied for the second round in December. What is involved is simple and straightforward - the lowest bid at the auction. Is there some force attempting to sell the shares at throw away prices for personal gains? It is significant that Parliament has raised this question sharply and has suggested a JPC to supervise the disinvestment procedure.

National Production Front

Steel

It is difficult to judge the state of the steel industry from the official reports of the Rs. 52.76 crores net profit in the first 6 months of the current financial year, and a profit before tax of Rs. 370.30 crores for 1991-92. SAIL Plans to invest Rs. 1597.53 crores on modernisation without an indication of the amount available from internal sources in 1993-94; and its going global, not only exporting some of its products but also offering technical services in engineering, in know how and human resources development; and its 11 per cent growth in sales during April-November. What is serious is the fact that moving away from treating the steel industry as an homogenous group, the recession hitting the induction units, 100 out of 700 units being closed and the rest forced to cut their production by 20 to 40 per cent in the last 3 months.

The reaction of this section - Induction Furnace Association which bands together the units in the usual very short term relief (which is needed to stop the further closing down of the units) in the form of removal of the import duty on steel melting scrap, reduction of excise duty on ingots from Rs. 920 to Rs. 200 per tonne and reduction in the banks' lending rate to a maximum of 16 per cent. But the industry and the government must also address themselves to counteracting the factors making for the steep fall in demand of the mother industry. SAIL must not only deal with industry wide problems and issues, but also with issues like the necessary conditions faced by the induction arc furnace units.

Crude

It is not surprising that domestic crude production is falling, which is known on the basis of previous reports. Though the precise amount of domestic production decrease is not known to any one, neither to the petroleum ministry nor ONGC. And what is even more worrying is the rate of increase of consumption of petroleum at more than double that of last year. It is disturbing to see the inexorable rise in the rate of consumption of petroleum products - from 1.7 per cent in 1990-91 to 3.3 per cent in 1991-92 on to 7 per cent in 1992-93. This has serious implication for our foreign exchange position. Against last year's 33.44 million tonnes of crude and petroleum products imports, for this year 39 million tonnes imports were planned but now it looks as if the imports will be even more than the 6 million tonnes excess production. In the first 6 months of the year, the import of crude and products is 19.62 million tonnes valued at Rs. 1115 crores compared to last year's Rs. 14,13 million tonnes imports costing Rs 5344 crores. This means that there is no alternative to cutting the

consumption of petroleum products, particularly by the transport industry and other petrol/HSD gobbling manufacturers like fertilisers, which come at an awkward time when the complex production has been decontrolled.

Coal

The increased coal risings were earlier referred to as part of the country's infrastructure. Two negative factors however should be noted. The Bangla Bandh and the Bharat Bandh did cause some disruption; the daily production falling from 6.73 lakh tonnes to 5 lakh tonnes till December 13, when it has started picking up. Second, there is the problem of unviable, sick mines. 18 mines belonging to BCL, ECI, and CCI employing 13,000 workers and producing 1.5 million tonnes of coal annually will be closed in the next 5 years. This should be compensated and the personnel redeployed under the new mines and modernisation programmes being operated. Can there be the necessary synchronisation for this purpose?

Agricultural Production

Agriculture at the macro level poses several problems. On the one hand, the Congress of Agricultural Scientists meeting in Delhi in December compute that with the change in peoples' food habits involving larger consumption of animal products, the estimate for foodgrain has to be revised upward as 1 kg of meat requires 7-8 kg of foodgrains; the government reports that area under wheat was declining annually leading to a shortfall in its total yield resulting in import of 3 million tonnes of wheat, which FAO computes have to be increased by 500,000 tonnes. FAO also forecasts the country's rice demand exceeds its output

and so may result in rice imports starting this year. Further the FAO reports on the low fertiliser offtake and that the shortfall of fertilisers demand for the current rabi, will reduce the new output for the year, against which the Convention of Agricultural Scientists warns that the inefficient use of nitrogenous fertilisers by our farmers is increasing the dangers of green house gases on which a firm data base is needed for the country. Another issue raised is that against the declining capital formation in agriculture, the Convention of Agricultural Scientists calls attention to the increased capital requirement caused by the weather conditions in the country is the target of 240 million to be reached by 2000 AD. Further, there is the problem in the case of agriculture in the absence of long term policy, leading to facing and solving on an ad hoc basis its problems as they arise, and from this point it is hopeful that the government informed Parliament at long last, the draft agricultural policy is finalised and will soon be released for review and discussion. The one bright spot in the agriculture scene is in the oil seeds economy which has been stagnating at 17-18 million tonnes since 1987-88 but is expected to increase to 22 million tonnes this year, with the major increase coming from rabi which is not subject to annual fluctuations like the kharif crop. This is bringing down the price of oil seeds and edible oils, which is already taking place, will make imports, a rather large foreign exchange drainer, unnecessary and will boost exports of oil meal and its derivatives. Further, the farmers have begun using non traditional oil seeds like soya beans and sunflower which this year will increase oil supply by 1.5 million tonnes. The problem in the oil seeds area is variability of the groundnut crop which needs special attention, particularly the Gujarat

area which is the major growing area. The other disturbing area is the steep increase in the food subsidy to Rs. 4360 crores, up by Rs. 1500 crores over the budget provision of Rs. 2500 crores and the trend for its continuous increase, unless the underlying problems of the producers and consumers are faced and tackled. On top there is Uruguay Round guidelines.

Foreign Trade and BOP

It is no news that in the first 7 months (April to October) exports increased by 6 per cent to \$10.09 billion and imports shot up by 18 per cent at \$12.58 billion. The effects of the foreign trade liberalisation and the shooting up of the petroleum import bill referred to earlier accounts for the increased deficit. The government is still trying to increase Rupee payment exports. These should be treated like any other exports in order to free ourselves from excessive dependence on one source and really to rely on improved quality of domestic production to improve our export demand. This may reverse the declining trend in India's share of world exports, in place of its being 0.59 per cent in 1989 and 0.54 per cent in 1990. The government is once again finding excuses for this in the world recession which affects all countries and not only India. The Merrill Lynch forecast is that BOP deficit will be \$3 billion in 1993, with imports of \$28.5 billion and exports of \$23.5 billion and the Rupee depreciating from Rs. 31 to Rs. 33 in 1994. The negative trade balance of 12 per cent in both 1991-92 and upto October 1992 is despite the good export performance of a number of items like handicrafts (49.7 per cent growth), cashew kernels at Rs. 616 crores last year, bicycles, (24 per cent), and textiles Rs. 1800 crores).

Loans and Aid

In addition to the loans in December from the World Bank, IMF, Asian Development Bank, referred to earlier, Japan in December has given a grant of Rs. 33 crores for group water exploration and import of fisher vessels for offshore and deep sea fishing and Denmark joining with World Bank in making a loan of \$195 million for developing wind power, small hydel stations and market development for solar energy system. The World Bank reports that India's external debt in 1991 was \$71.5 billion, which may have increased because of large borrowings from IMF and bilateral sources. It also warns against the non utilisation of \$20 billion of its external aid and plans reduced Special Account to cover 4 months expenditure of new loan. How far is this non utilisation of World Bank loans related to the structural adjustment programme and the expenditure cuts that it has involved? The finance ministry points out that the quarterly financial targets and the ceiling on RBI credit to government has reduced government resources to use World Bank and other countries loans. The huge external loans from the multilateral agencies now replace the external commercial borrowing, but does not alleviate the problem of debt servicing, which faces the calamity.

International

World Economy

Reports on the World Economy are gloomy. IMF forecasts that IMF economies will grow by 2 per cent in 1993, mainly because of the contraction indulged by OECD economies in the earlier half of the decade. Even Japan records a decline of 6 per cent for the 12 months ending

October, Germany a 3.5 per cent decline, and US industry being only 0.6 per cent. OECD reports a fatigue with supply side policies and so the economy is entering the 90s with commitments only to themselves. UN forecasts that third world growth will be 5 per cent, with low growth for industrial countries and more economic declines for Russia. IMF forecasts that in 1993 Asian economies will grow by 6.5 per cent. This is only true of China and Malaysia, Indonesia and Singapore with India being mired in the heavy debt servicing. It also says that the new regionalism — North American Free Trade Agreement, EC, ASEAN etc. which parcel out the globe into inward trading blocks is here to stay.

World Debt

The World Bank states that the III world debt crisis which began a decade ago is now easing except for the poorest countries and the former Soviet countries where it is only just beginning. The World Bank reports on debt in 1991, points out that though Russia and other former Soviet Republic's are behind in payments on their foreign debt, some of their new business men have found illicit ways to pile up billion of dollars abroad, and have joined the army of illicit money makers all over the world.

IDA

The 10th replenishment of IDA, July 1993 June 1996 has been pledged at \$18 billion by 34 countries. In addition the World Bank provide IDA will \$5 billion of their own funds, making the total for the 3 years \$22 billion. The pledges of \$18 billion is compared to the \$15 billion for IDA II but in real terms represents no increase and will face strong competition from several new countries — Russia and the

former Soviet countries, the Eastern European countries etc.

MTO

A powerful new trading body, the Multilateral Trade Organisation (MTO) which will be the outcome of the current Uruguay round and which will oversee \$6 trillion worth of trade and business between nations will damage and increase poverty of the III world. It is not talked about, it is tucked away as an annex in the Dunkel draft because it poses some threats to national sovereignty, is ambiguous and flimsy. It does not consider the impact of the proposals on the environment nor the strengthening of the multinational companies which will be in risk. It internationalises GATT, increases its powers, expanding its Laissez Faire model into new areas and will become the third leg of the Triumvirate along with World Bank and IMF to dominate world affairs and take trade out of multilateral decision making. It will, like GATT, have a secretariat and General Council, along with new councils covering trade in goods, services and patents. It will weaken and possibly kill UNCTAD. The third world stakes in this proposal are high but are not being debated.

World Water Crisis

ADB forecast that in the 21st century, some 90 countries will face chronic water shortage - as against 25 countries at present. This means 5 billion people (against the present 1 billion) face malnutrition, disease and famine. The Bank calls on the people and the governments to arrest the spiralling population at 12 to 14 billion in the 21st century and use fresh water, which is only 2 per cent of all the available water carefully and increase it globally.

UNICEF's Report on the State of the World's children

UNICEF in its State of the World's Children report for 1993 states that: a) 35000 children die every day in the developing world from pneumonia, diarrhoea and measles; b) 250,000 die every week of malnutrition and c) the means to prevent this wider tragedy are both available and affordable. For an extra \$ 25 billion a year, child malnutri-

tion world wide could be halved, major childhood diseases can be controlled, polio could be eradicated and clean water supply, basic education and family planning made available to all. American expenditure on cigarettes every 6 months or European expenditure on alcohol every 3 months, or 6 months army wages in developing countries could provide, the needed \$ 25 billion. The resources are available: the political decision is lacking.

II. Agricultural Development in Tamil Nadu

Paddy and other crops

As noted in the last 2 months, the opening of Mettur on the scheduled June 12 (the first in 8 years) together with plentiful south west and north east monsoons, has enabled the farmers to bring 6.4 lakh hectares under sonawarai and kuruvai paddy and 11 lakh hectares under rabi paddy which it is hoped will be extended to 15 lakh hectares and to produce a record 33 lakh tonnes of paddy. This record paddy crop raised by the farmers has had three consequences. First, the monopoly procurement of paddy is being extended to the samba season also this year in the delta region. Second, the levy paddy share is being held in abeyance. Third, the government is resorting to compulsory hulling of paddy. In the kuruvai, it has procured a record 5.6 lakh tonnes, but has been to hull only 1.5 lakh tonnes. So the government is taking over 100 private rice mills to increase and speed up the hulling of paddy. The farmers are glad that the standing crop is in good condition and looks as if it will be a higher yield this year. Both the farmers and the state Civil Supplies Corporation are finding the

problem of storage a difficult one and so the compulsory hulling plan will relieve the problem for both. Farmers who have been affected by the recent cyclone and floods are receiving relief from NABARD through that district central cooperative banks and the regional rural banks. These flood affected farmers are thus able to convert their short term loans into 3 years medium term loans and have their long term loans rescheduled. In addition they will receive some Rs. 16 crores as subsidy from the state government (Rs. 8.6 crores for foodgrain growing farmers, Rs. 4.3 crores to plantation and horticultural crop farmers) and Rs. 3 crores for land reclamation and desilting wells. The small farmers face a particular problem in repayment of their short term and long term loans on which they need relief and resources for recovering or repurchase of lost assets- cattle, and farm machinery- so that they could quickly resume cultivation of samba which had been interrupted at the sowing stage by the November floods. This is the state subsidy of Rs. 900 per hectare of paddy against the cost to the farmer of Rs. 5725 in the case of paddy or the subsidy of Rs.2000 per

hectare for sugarcane whose hectare cost is Rs. 13,350 will need to be supplemented by the central cooperative banks and regional rural banks. Will this be done on time? One effect of the plentiful rains, is the decision of the farmer aided by government to raise oil palms in 20,000 hectares in 1993-94 in the districts of Thanjavur and Tiruchi. The young sprouts are being grown in special nurseries in Tiruchirapalli, Pattukottai and Sakkottai (in Thanjavur). These are to be transplanted next month. Farmers with the help of students are similarly planting 1 lakh coconut seedlings in these districts. Could these oil growing plantations help reduce their paddy area and its call on the scarce resource of the area-water?

Research Reports

No research reports from Agriculture and Veterinary universities/faculties, research stations/centre, Krishivigyan Kendras, have been recorded in December. Their subject distribution is: Rice 4, cereals 4, fruits and vegetables 9, non food crop and seeds 8 and animal husbandry 5. This is a good distribution. The greater number of fruits and vegetables reports and non food and seed research reflect the emphasis in the farm sector during this part of the season. All reports refer to research undertaken over a short period ranging from 3 months to one year. This too reflects the response to the demands made by the farmer. But there is no evidence on the two questions which are essential. How many of the recommendations are adopted by the farmer-especially the small farmer who is the majority? And what is the difference between the yield of the demonstration farm and the farmer's yield? Till the answers to these two questions are to hand, it is not possible to pronounce the effectiveness of the research

results. This calls for the kind of survey-which the ICMR is equipped to undertake.

Plantation Crops

The plantation industry is facing problems on all its crops — tea, coffee and rubber. *Tea* production, exports and prices are down in 1992. As a result of bad weather that south Indian plantations have faced, tea production for 1992 will be 40 million kg less than the year's target of 740 million kg. A curious feature that this shortfall in production has gone along with a decline in tea prices by Rs. 2-4 per kg in all the auction centres, Calcutta, Gauhati, Siliguri, Cochin, Coonoor and CTC teas are selling at Rs. 37 a kg against Rs. 44 last year. The tea growers both large and small, are also facing a rise in their cost of production because of the rise in prices of the inputs. Exports have fallen by 30 million kgs from 200 million kg last year to 170 million kg. This is due to the break up of the Soviet-Union which was the major purchase of Indian tea, of over 50 per cent of all exports. This is the occasion when tea producers, the Tea Association and the Tea Board should follow the example of other tea exporting countries. Sri Lanka which exported 12 per cent in 1990 and 5 per cent in 1991 of its production to the USSR is diversifying its export market. The insistence of the Tea Board to get the Finance ministry to release increasing technical credit to Russia — which has already received \$3,2000 — plus \$10,000 in December is short sighted because there is little use in continuing the over dependence on one source and a source which also causes many foreign exchange losses because of the Rouble - Rupee exchange rate which is in favour of Russia, against the trend of the trade between the 2 countries. *Coffee* production faces a problem because it is a heavily export dependent crop. The

domestic market for coffee has been stagnant for years and no efforts have been made to expand domestic consumption. Further, coffee growers in the South are apprehensive about the implementation of the internal sales quota (ISQ) because the growers have for over half a century been selling their coffee to the Board and have no experience of independent marketing. Also they are unsure about the coffee board's attitude on this matter, whether it will unload stocks to depress prices so that the growers will return to it and not use ISQ. In addition there is the problem faced by countries like India which have been depending on exporting coffee to non quota countries, which now can obtain their coffee from any country as the quota system has been scrapped and not as yet revived. This would have a depressing effect both on the export value and price as far as Indian coffee is concerned. In the case of *rubber*, 1992 looks as if it

will be another year of good rubber production. There is no significant growth in demand for rubber and prices are tending to decline. There should be no import of rubber both this year and next year. In the case of *spices*, there has been a drop in export volume in 1992-93 (April-September) at 51,430 tonnes compared to the same period last year's 65,000 tonnes. Pepper exports declined sharply in the first 2 months but has picked up since, along with rise in unit value. Chillies also declined sharply in exports but the value rose by Rs. 4 crores to Rs. 41.09 crores. Turmeric also declined in export volume but rose in value by over Rs. 3 crores. The same trend is repeated in garlic, ginger and curry powder. The total for the first six months shows an export income of Rs. 168.55 crores which is very near last year's Rs. 169.47 crores. This is an area which could be further developed.

III. Industrial Development in Tamil Nadu

The Industrial Development recorded in the state has a large number of positive features and only a few negative ones.

The positive side begins *first* with the chief minister who is the industries minister meeting a number of Tamil Nadu and out of state industrialists and discussing the prospects and potential of the state for industrial development. As a result, 29 industrial projects involving a total investment of Rs. 8500 crores were cleared. About half of these projects are by industrialists from outside Tamil Nadu. Three power projects involving an invest-

ment of Rs. 5400 crores include a Rs. 3000 crores project by a US company, and in automobiles (Rs. 400 crores), citric acid and polymer chemical Rs. 1100 crores, plastic components (Rs. 32 crores). Other proposals discussed and favourably reacted to are a Rs. 1000 crore oil exploration cum fertiliser project for Rs. 1500 crores and Rs. 800 crores respectively. The mega investment proposed by *the Government* of the Leyland in Hosur (Rs. 675 crores), *the Government* Group's pig iron project in Salem (Rs. 200 crores) and a lignite based power project at Neyveli by an NRI (Rs. 800 crores) and 4 new export oriented projects invol-

ving an outlay of Rs. 100 crores. As stated above, this procedure included clearance of projects of major industrial groups from outside the state led by the multinational, Bayer India, which is investing Rs. 1000 crores in the manufacture of polymer chemicals at Manali and Rs. 100 crores for the manufacture of citric acid at Cuddalore. The Essan Group is investing Rs. 1000 crore in oil exploration and a fertiliser plant. A Hyderabad based lab is developing a Rs. 30 crore project for the manufacture of bulk drugs. EID Parry has got cleared a Rs. 25 crore ammonia terminal and a project for manufacturing vinyl acetate monomer. A C Muthia has obtained clearance for TPLs Rs. 200 crores diversification plans: Thiagaraja Chettiar has obtained approval of 100 per cent export oriented project for manufacturing membrane key switches. TIDCO is investing Rs. 1000 crores in these 15 projects cleared now and the 8 cleared earlier - as joint/associate sector projects in the manufacture of radial tyres in Kanyakumari, the TPL project in QM district, the Rs. 215 crores Chemplast synthetic rutile project, the manufacture of plastic components for the video audio cassettes, the coke oven project at Mettur, the Rs. 100 crore chemical unit, the Rs. 110 crore polyester filament yarn project, the Rs. 30 crore vanilla unit in Coimbatore, the Aruna Sugars two plants for Nbutanol and upper shoe and the Rs. 16 crore, 100 per cent export oriented unit for the manufacturing of grey cloth and the Rs. 11 crore shoe project of Sky Line industry. This whole procedure makes *the Government* nervous: Not only is there no way of monitoring what happens on the basis of the TN approvals, the responsibility for *the Government* decision should be that of the industrialist — entrepreneur and not the government which knows nothing of the substance of any project involved. The risk is one that the industrialist bears and not the

government. Should the government get into industrial production by the back door, instead of limiting itself to ensuring that the project is within the broad parameters of plan policy?

Second, the Small Industries Development Corporation is putting up 24 sheds in the Ambattur Small Industries Estate for renting them to small entrepreneurs wishing to start food processing units. The entrepreneurs will be given training on food processing by the AIEMA technology centre in cooperation with the Central Food Technology Research Institute, Mysore. This is the kind of industrial promotion activity which is appropriate to the state.

Third, SPIC Fine Chemical has in cooperation with Tata Oil Mills Company (TOM Co) decided to enter the premium segment of detergent products and will be using TOMCo and its strong marketing network with the 37 depots for marketing the produce. TOMCo has been chosen after considering 5 companies including a multinational. *Fourth, SPIC* has reported an impressive half yearly performance for the period ending September 30, 1992 with increases in its fertiliser production, sales, gross profits and research. *Fifth*, a 25 member team of bankers, business men, lawyers has cleared the 70 million Euro bond that *SPIC* is issuing. *SPIC* thus becomes the first south India unit to tap the Euro bond market. *Sixth*, Engineering Exports from the state and the South have increased by 19.76 per cent during the first 6 months of the current financial year, with Tamil Nadu being responsible for Rs.166.50 crores out of Rs. 229.03 crores exports from the South in April-September. *Seventh*, the Jagat group of companies has drawn up a series of projects including a Rs. 92 crores sugar mill, software exports as well as

a finance company and an amusement park. This last has raised some questions. *Eighth*, the government is now inviting the private sector to build the infrastructure needed for setting up the proposed Singapore corridor at Sholingnallur, near Madras. This brings this long dormant project alive. *Ninth*, a Bangalore based private sector firm is building a Rs.5 crore plant which will convert garbage into pellets, useful for industrial purpose and will generate 5 MW of electricity. The Corporation of Madras will give 600 tonnes of garbage a day and the government is examining the request for 2 acres of land to set up and operate the plant. This will be a very challenging project. *Tenth*, Saptrishi Agro Industries and TIDCO are setting up a Rs.21.40 crores 100 per cent exports oriented project for the production of canned button mushrooms with the technology obtained from Dalsam Veom of Holland which will also participate in the equity. The firm reports that the total world demand for button mushroom is 14 lakh tonnes, of which India produces only 1400 tonnes, with the demand going upto 20 lakh tonnes by 1995. The company with a capacity of 3000 tonnes will have no marketing problem. *Eleventh*, the Tirupur based Amarjothi group is setting up a modern cotton spinning unit to cater to the growing demand for high quality polyester yarn in both the domestic and export market. The Amarjothi Spinning Mills Ltd (ASML) with Rs.11.80 crore capital is being set up in Puthusuripalayam near Tirupur and will have a capacity of 12096 spindles to produce 12 lakh kg of yarn a year. *Twelfth*, the state's Steel forging industry which till now played a purely qualitative role is now being expanding and modernised to tap the global market for forged products in the automobile, oil

field equipment and mining industries. El forge has expanded its capacity from 4800 tonnes to 10,200 tonnes, this year at a cost of Rs. 3.5 crores for this purpose. *Thirteenth*, the government has ordered the reopening of this Metal Box Ltd. under the Industrial Dispute Act and has referred the dispute over the wages to the industrial tribunal for adjudication. The issue is the decision of the management to continue the deferral of wages beyond March 31, 1992. The tribunal is to decide whether it should be continued and if not to suggest remedial measures. The government should be careful in using the act, as, if the trade union defies it, the government is really helpless and that will promote contempt of law.

On the negative side, the serious question raised by the procedure of block approval/clearance of projects has been earlier referred to. *Further*, despite the child labour (Prohibition and Regulation) Act 1986, Tamil Nadu is the foremost of the states using child labour. The fire works, matches and printing industries in Sivakasi are run entirely on child labour—with children working long hours—12 hours—, under dark, dingy and insanitary conditions; with no provision for their health problems. Also the granite trade has had to go to court to obtain some relief. The Madras High Court has struck down the order of the Tamil Nadu government of June 1992, canalising the granite trade. The union government has made several representations to the state government to reverse its decision to canalise the trade. It is on the point of declaring granite a major mineral to take it out of the purview of state government. The third and serious issue is that the small industries which are contributing to production and employment are not able to avail themselves of the capital subsidy, sales tax

deferral, raw material allocation and bank credit they face a lot of hurdles and getting them permanent SSI registration, all due to interminable red tape. The specific negative features are few,

but the rush and the hurry with which industrial projects are being approved, calls into question not only the procedure, but also the intention to promote the states industrial development.

IV. Education, Science and Health

Educational Reforms

The nursery school stage of preprimary education is completely unregulated and is therefore the subject, a deal of exploitation of needy parents—in Madras a place for a child in the 1st KG class requires payment of a fee of Rs. 25,000, and is an area where teachers are over worked and underpaid. The committee enquiring into the nursery schools in its report submitted in December states that most of the 12,825 teachers who are young women are paid in the range of Rs. 101-300 and Rs. 301-400 a month, 8183 teachers get Rs. 501-1000 and 9830 teachers get Rs. 301-500. Only 145 teachers get more than Rs 2000. The report noting the large inter-school salary differences remarks that "salaries are negatively disproportionate to their qualifications" and recommends Rs. 600 for SSLC and HSc teachers and Rs. 1400 for graduates. The problem is that the government which finances and runs primary schools—on a shoe string basis in the matter of lack of minimum by the fifth All India Educational Survey in the matter of black boards, drinking water, building etc. and has no resources for pre primary education. Hence this stage of education which is in increasing demand has to be met by private bodies. It is no use establishing strict and tight

regulations. That will only kill off these schools and so the committee's recommendations of a code of regulation, controls and monitoring which are more like guidelines and its wise advice to advance slowly in the matter of finance seem appropriate. The syllabus which is essentially a play and games methodology should be left to the individual schools and teachers making available to them broad guidelines and models. In the field of higher education, the 5 years since the National Policy of Education 1986 was adopted has seen a rather rapid expansion of colleges—universities from 149 in 1976 and colleges from 5818 to 7121, particularly in the 4 states of AP, MP, Maharashtra and Karnataka. Here the first task of the State Council for Higher Education, when established or in its absence the state government in cooperation with UGC should be to survey this proliferation of colleges, to establish a computerised Management Information System in the state, to identify areas not served and even more importantly to grade the colleges by their level of efficiency and infrastructural adequacy. This must not become another bureaucratic channel for UGC and other functions which also it should undertake, but without spending too much time on it. As an aside, can the state councils develop the status and tradition to undertake

this task against the resistance of the colleges and some departments of government?

Adult Literacy

The Total Literacy Campaign (TLC) is now operating in 118 project areas spread over 178 districts and has produced in general important results. There are however some questions that arise from its functioning that needs attention. First, the key person in the TLC district is the district collector, most of whom are committed and dedicated to the cause of literacy, but when they are doing a good job they are transferred by the government either because it is the routine that any collector must change his post every 3 years or because he has fallen out of favour from the political party in power. Can there be a convention which the government should adhere to that a collector should stay at his post for 5 years and in special cases for longer periods? Second, the literary campaign is seen in some, states as the means by which the opposition party or non ruling party is infiltrating into government in this state, gave into this temptation and in fact dubbed the devoted workers as communists in its report to CAGE in 1991. The TLC is based on the principle of voluntarism, wherein the volunteers from the mobilisation to the post literacy stage serve without any remuneration. If the political party in power feels that a non party agency is working successfully in the programme, it is surely a challenge to it to enter the area and intensify its work. Third, the most serious development reported in the last issue is when the women on attaining literacy started a successful campaign against arrack and alcohol sales and consumption, leading to the governmental fears

that its large revenue from the sale of alcohol will be affected and so placing a number of barriers in the way of TLC — like all its materials and texts to be approved by some central person in government - is really calamitous for the people. These and other problems must be faced openly in Parliament and the Legislative Assemblies and resolved, if the programme of TLC, which has started so well, is to attain the target of making the country illiteracy free by the turn of the century.

Technical Education

Two important developments in the technical education area in the state in December may be noted. First, the Madras IITs Ocean Engineering Centre is being equipped with a Rs. 6 crore multi element wave maker to stimulate high sea conditions. This should be used to train scientists in understanding and controlling mini cyclonic storms which the state and AP face frequently. The second development, is the establishment of a training and testing institute of farm machinery at Tiruchi. The institute must not only train young farmers but also run inservice training courses for older farmers and ensure that farm equipment is not idle but always repaired. Also the institute can help farm equipment manufacturers in getting their products - equipment and machinery tested. This can be an important means of helping the farmers in the day to day use of their machinery.

Science

The sixth national conference on house research and development in industry jointly run by CSIR and FICCI recommended the setting up of a joint industry-government Research and Deve-

lopment Fund. The commendation has been accepted by both government and industry. The initial corpus to the fund will be contributed by government but industry - both medium and small companies - will be the main fund contributor as they will be the main users of the fund to undertake R and D activities in a more organised and regular manner. CSIR is drafting the details of the proposal which after review and approval by industry will be presented to the finance ministry and for formal approval. This is an important development and should make up for the long lag of industry in the R and D field. Scientists in the laboratories and government are concerned about the fall out of Ayodhya on scientific research and development. The government will be and is preoccupied with the fall out of Ayodhya. And so industry should take the lead in filling the void left.

Health

An important development in family planning is the introduction of a bill in the Rajya Sabha which amends the constitutional provision on the disqualification for elective offices for those who deviate from the small family norm. The proposal was made to the NDC committee by its population panel and was commended. Though the quantity effect of the provision will not be large because the elected MPs and legislators are a small group, it is needed, as a quick survey has found that the average MP has 3-4 children and that many MPs have at least 3 children per family. The question has been raised whether the law would be an infringement on a

fundamental democratic right; it would be as much a limitation as not to be provocative in our speeches or writings because of the danger to society which, having many children per family involves. From this point of view, the Planning Commission proposal to link at least 2 per cent of funds allocated to states in 1993-94 to their performance in increasing female literacy, reducing the crude birth rate and infant mortality rate is also a move in the right direction. While the average crude birth rates for the country is 30.2 per 1000, for MP it is 37 and similarly for UP, Rajasthan and Bihar. For Kerala it is 19 and Tamil Nadu 22.4. In female literacy, for every 1000 male illiterate in 1991, Rajasthan had 292, Bihar 233, UP 243, MP 218 while Kerala has 103 and Tamil Nadu 110. This points to the fact that the quality of life of people everywhere depends on education and family planning will be benefitted by some attention to it and by a touch of compulsion to enforce the small family norm. Tamil Nadu is the second state to achieve the birth rate below the optimum of 21 per 1000 fixed for the country by 2000 AD. Despite not having Kerala's high female population education and literacy rate and low infant mortality rate, a combination of EVR's pledge to free women from frequent delivery by using contraceptive, and fixing the age of marriage for women at 21 and other individual measures like the drive for female literacy, the noon meal scheme, an alert public health team, and the measured effort of the 1681 village health nurses. This can be replicated in all states particularly in the Hindi heartland which is the main factor for the high population growth as seen earlier.

V. Employment and Labour Relations

The employment generation target for VIII Plan is creation of 1000 million mandays each year, which is not an impossible target as under JRY 800 million mandays of employment had been created per year so far. This would include separate employment schemes in the VIII Plan for regions facing out migration particularly for the rural people, which the 1991 census put at 521.50 million, about half of whom are in the employable age of 15-24 years. Employment schemes are needed in areas where there is no employment because they are not touched by the Green Revolution, advanced technology and new agricultural strategies which have caused the rural youth in the above age group to migrate to urban areas, whereby they join the ranks of the unemployed or the thinly employed. The areas needing special attention also include those affected by recurring droughts and floods. So the schemes for this group are in the development field in the villages, and the union governments literacy programmes. IRDP, JRY, new

cottage industries with supporting marketing bodies, food processing, packaging of agricultural products, manufacturers of coir mats, and domestic appliances, repairs of agricultural tools and machinery, fabrication of bricks, sports good and toys. The package of the incentives to entrepreneurs for setting up industries in these areas which were backward areas will promote entrepreneurship and employment among rural youth. For regions facing out migration which are special areas demanding attention, schemes are to focus on degraded forest lands the cultivation of bamboo, horticulture like mango, coconut and sericulture in appropriate climatic regions. The schemes include suitable programmes for a minimum of five artisans in every village, who will be provided with the necessary raw materials and training, resulting in employment of a lakh artisans, which together with IRDP and JRY will provide employment for 3 crore rural families during the VIII Plan, it is hoped, a hope which seems somewhat unrealistic.

VI. Other Items

Lions Club Conference

A conference of the Lions club in Central Madras was held in early December. The important work being done by Lions to promote health of school children, prevent communicable diseases and contribute to the well being of the community, especially to the physically handicapped, was used, on the occasion of the Ayodhya disaster to

review and examine our attitudes to other religions and to plan study groups on culture and religions. This should go alongside of the excellent humanitarian work that the club is doing. ~~to take~~ nationally and internationally.

Alliance Francaise

A meeting of the members of the governing body of the Alliance Francaise

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was held in mid December when apart from meeting and welcoming the new members of the governing body, the work of the Institute in language teaching, cultural promotion and Indo French bilateral relations were reviewed and various programmes for strengthening them were suggested.

Fullbright Scholars Meeting

A seminar of Fullbright Scholars was held at the end of December when the new educational policy was discussed. The new policy of education 1989, followed by its revision in 1992 together with the Programme of Action attached to the two policy statements were discussed in some detail. It was noted that the Normative Framework established by the Kothari Commission 1954-56 was untouched. This problem is that the actual educational system is far away from the framework at every point and the new Policy on Education should address itself to this gap between the Normative and Actual. It was also noted that programmes of structural adjustment that have been followed for the last decade and a half in Latin America and Africa has involved steep reduction in social expenditures, particularly education and health. India which has now entered the structural adjustment programme also faces similar prospects, in educational expenditures, which is at a low, below 4 per cent of GDP level.

TN Agricultural University and Endowment Lecture

by a TN Agricultural University Endowment Lecture for 1992 on the occasion of the 52nd conference of the Association of Indian Agricultural Economists at Coimbatore, dealt with the theme — The Gap in the Economic Reforms policy Today — Agriculture. It was pointed

out that our economic reforms policy also called the structural adjustment policy; the policy of economic liberalisation deals with all aspects of the economy — industry, trade, prices, credit, foreign exchange — except agriculture, where its silence is matched by its ignoring the problem of unemployment and poverty. Some of the issues crying aloud for research in the agricultural field were dealt with including the forces which determine agricultural prices, the farmers' production schedule, capital formation, the linkage between agriculture and industry, ending with a plea that we researchers, should not be taken up with the neo classical model mechanism only, but spare some time to deal with the urgent problems of agriculture.

Structural Adjustment and the State of the Child

The M. S. Swaminathan Foundation organised a seminar towards the end of December on the Structural Adjustment programme in India and the state of the child. It was agreed that the programme will, as it has done in some 100 of the developing countries, bear heavily on the social sector, particularly education and health, and the child whose development is the central purpose of all development needs, to be protected by following the example of Tamil Nadu which has protected the minimum food, medicines, health care, nutrition and primary education for the child despite the impact of the structural adjustment programme.

January Seminar Paper

The paper for the January Seminar "Fiscal Policy and Privatisation" appears as the first article.

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Second Article

"Some Comments on Advances in Agro - Chemicals" by Malcolm S Adishiah appears as the second article.

Book Review

The review of Rohini Nayyar's book Rural Poverty in India: An Analysis of Inter-State Differences appears in this section.

MIDS News

Mr. S. Guhan gave a lecture on "Industrialisation in India" at the Spastics Society of India, Madras, on January 2, 1993.

Dr. Paul P. Appasamy participated in the United Nations Expert Group meeting on Technology Assessment, Monitoring and Forecasting, held at UNESCO, Paris, from January 25 to 28, 1993, and presented a paper on "The Social and Environmental Impact of Technologies" for Development: The Indian Experience.

He also gave two lectures at a Workshop on "Environment and Development"

organised by the Department of Zoology, University of Madras, on February 5, 1993.

Dr. R. Hema gave a lecture at the Regional Training Institute of Indian Audit and Accounts, Madras on "Electricity Audit: A Macro Approach" on January 22, 1993.

She also presented a paper on "Mechanisms to Promote Efficient use of Electricity" at the Annual Energy Conference of the Energy and Fuel Users' Association held at Connemara Hotel, Madras, on January 30, 1993.

FISCAL POLICY AND PRIVATIZATION

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NO subject has attracted greater attention in the past five decades, as the theme of Privatization of State Owned enterprises and Services (SOEs). Privatization is a new word, so new, that it was found in no dictionary before 1980s. As a reaction to the world trend towards the growth of government, a strong movement has emerged in the past two decades to reduce the role of government in the national economies. The word 'privatize' first appeared in a dictionary in 1983 and was defined narrowly as "to make private, especially to change (as a business or industry) from public to private control or ownership. E.S.Savas in his monumental work (1989) defines privatization "as the act of reducing the role of the private sector in an activity or in the ownership of assets. According to Elliot Berg, privatization in its broadest sense means making the economy more private-changing the public-private mix in several dimensions like financing, management of production or delivery of services and giving private sector a bigger role in deciding how production is to be organised.

Privatization is a reaction to the excessive government regulations and interventions that characterised fiscal policy in the middle of the present century.

The assumption of greater role in the economic affairs of the whole country by the government led to an unregulated growth of public sector budgets. Many countries increased the scope of government by embracing the concept of an entrepreneurial state one that is allegedly the engine of growth and development as well as one that attempts to achieve growth by either operating nationalised industries or intervening heavily in the operation of private firms leading to what some critics have labelled as 'State Capitalism'.

Since 1980, the trend towards more government spending, ownership and intervention has been seriously questioned. This has sparked a new debate about the merits of private VS public ownership. Privatization, meaning the transfer of assets or service function from public to private ownership or control, has emerged, as the focal point

of the debate. Whereas in 1972, only 13 Central governments were responsible for spending one-third or more of GDP, around 1980, according to the IMF data, the number had risen to 38 countries out of 90 for which data existed. Between 1960 and 1975, the number of public or State Owned Enterprises (SOEs) grew at a fast pace especially in the less developed countries. Tanzania's SOEs, for example, grew from 50 to 400. Brazil's from 150 to 600, and Mexico's from 1500 to 1000. By 1980, these SOEs across the world were producing 10 to 20 per cent of the GDP. They were dominant in modern manufacturing and undertook nearly half the capital investments. This remarkable growth of the state's economic presence was not accidental. The massive decolonisation of the post-war decades created new ethnically diverse, weak, fragile governments what Gunnar Myrdal characterised as "Soft States". The new national governments chose to pursue the prevailing ideological orientation that government must intervene because private markets do not work due to lack of infrastructure, information and entrepreneurs; or should not be allowed to work because of unequal bargaining power between the rich and the poor makes market outcome inherently unjust. Indigenization was a major post independence goal. National economic independence required State take-over. In poor countries there was a growing need for education, health, road, and other infrastructure as well as for industrial diversification. This necessitated not only State spending, but the creation of SOEs to operate industrial and other activities that private capital was not willing or able to undertake.

The turnaround came in the 1980s. The general slow down in the world economic growth since 1980, depressed

commodity prices, reduced real resource and heavy debt burdens coupled with a growing scarcity of budgetary and credit resources, led to a slower LDC growth, manifested in stagnant or falling real government revenues and lower volumes of resources available for development spending. The changed economic environment reduced the scope for increased taxation without negative incentive effects and ruled out the continuation of old spending policies like good subsidies for consumers, generous scholarship to university students and the practice of giving government job to all university graduates. Simultaneously, dissolution set in about the performance of SOEs. Instead of becoming leaders of the development process; creating new savings out of profits and investing it productively, SOEs became heavy consumers of budgetary and credit resources and displayed little entrepreneurial dynamism. Certain general behavioural characteristics of state enterprise management came to be observed.

A. M. Choksi in his World Bank Staff Working Paper no. 341 (July 1979) commented as under :

Most studies have evaluated SOE performance on the basis of financial rather than social profitability. Based on this criterion, many (but not all) countries operate public enterprises that show low profitability or large and mostly continuing financial losses. The losses are due mostly to : (i) inadequate and poor planning and feasibility studies resulting in ill-conceived investments; (ii) lack of skilled managers and administrators; (iii) centralized decision making; (iv) State intervention in the day-to-day operations of the firm; (v) unclear multiple objectives; and (vi) political patronage.

Analysing the reasons for inefficiency of the SOEs Leroy P. Jones and Edward S. Mason in *Role of Economic Factors*

in Determining the Size and Structure of the Public Enterprise Sector in Mixed Economy LDCs points out thus :

- 1 Public enterprise work under bureaucratic systems which usually control processes but not outcomes. The time-consuming traditional rules of government (procurement procedures, for example) are difficult to reconcile with the needs of an organization that must operate in a dynamic marketplace.
- 2 Political influence is often used to transfer income to special interest groups, usually not openly.
- 3 Public enterprise decision makers lack incentives to control costs. One of the important reasons for this is the fact that it is hard to distinguish good from bad managerial performance, since there were both legitimate and illegitimate reasons for losing money.

Apart from increasing awareness of public sector, constraints and inadequacies, there was a growing recognition that private money, skills and energies represent a potentially powerful source of new economic growth and new dynamism - something that has been neglected in the past. In an environment of extremely rapid technological change and intense international competition, survival and growth demanded highly competent, flexible, innovative industry and service enterprises qualities often found lacking in SOEs. This combination (in the words of Elliot Berg) of negative and positive factors explains the surge of interest in privatization in the 1980s.

It was Adam Smith who argued that "no two characters seem more inconsistent than those of trader and sovereign (Wealth of Nations, pp. 771)". According to him, people are more prodigal with the wealth of others than with their own. Public administration was negligent and wasteful because public employees do not have a direct interest in the commer-

cial outcome of their actions. The most frequently cited objectives of privatization include :

- 1 Improvement of the economic performance of the assets or service function concerned;
- 2 depoliticization of economic decision;
- 3 generation of public budget revenues through sale receipts;
- 4 reduction in public outlays, taxes and borrowing requirements;
- 5 reduction in the power of public sector Unions, and
- 6 promotion of popular capitalism through the wider ownership of assets.

The literature on the subject of privatization analyses the issue in all its various facets in different countries of the world. In U.S.A. the deregulation movement had broad bipartisan support - both the Democratic and Republican leaders advocated deregulation influenced by the argument that markets represent a superior mechanism for allocating resources. The fiscal policy of deregulation percolated into taxation, and the Tax Reform Act of 1986 sought to diminish the intrusiveness of government in private sector decision. Economists and policy makers made an intellectual case for tax reduction and for a more neutral tax system. There were significant shifts away from the government control over the economy and towards greater reliance on private market forces. The deregulation movement and tax reduction movement in U.S.A. show that the privatization movement itself had become a significant ideological force in the American political system. An equally important issue concerns the divestiture of government-owned properties. Conrail was one such

instance in U.S.A. However, the federal government in U.S.A. failed in its attempt to transfer public lands into private hands. The Reagan administration announced in 1982 a major initiative to privatize portions of the public lands, the most visible effort at outright divestiture of government property in U.S.A. A year later, the entire effort was unceremoniously cancelled. The attempt floundered on the existence of *de facto* property rights. Public lands constituted about one-third of the land area of U.S.A. a huge federal domain of ownership that is hard to reconcile with the reputation of the country as a citadel of reliance on markets and the private sector.

Privatization in Other Countries

We may now study how privatization has worked in various countries in the past 20 years. U.K. is supposed to be the main dynamic example of success of privatization. Before taking up the case of U.K. we can consider the history of other countries in this regard.

Chile: The history of State Owned Enterprises (SOEs) in Chile dates back well into the 19th century with the development of industry such as rail, roads, postal services and finances. During 1970-73, the Allende government sought to convert Chile into a fully socialistic economy resulting in a dramatic increase in the size of the SOEs to around 40 per cent of the GDP, a sizeable part of which was accounted for by the nationalisation of the copper industry. The Allende government was overthrown and the military government that succeeded swore by privatization, deregulation and liberalisation. In the first phase in 1974, nationalised enterprises were returned to the original owners and these transfers did not involve payments either to or from government. In the second phase

more than 100 enterprises were privatized in order to raise revenue for the State. In 1975, privatization raised revenues equal to about 3.3 per cent of the GDP. The main object was to raise resources for the government. Fiscal deficit had soared to about 25 per cent of GDP. In Chile privatization proceeds fell to 1.5 per cent of the GDP in 1976, and then to less than 1 per cent. The main sales method was the public auction followed by negotiation with the most qualified bidder. The buyers included corporation, notably banks but not individual investors. Many of the sales involved partial payment with the balance financed by loans from the States. The granting of loans lowered the net revenue on any given assets sale, but the procedure was intended to increase the number of SOEs that could be sold quickly. One consequence of the approach was a commercial structure characterised by highly leveraged financial and industrial conglomerates and by concentration of ownership. This structure failed to withstand the financial crisis of 1982-83 when widespread bankruptcies including bank failures led to many of the newly privatized enterprises again being placed under State control. The third phase in 1985 was motivated by desires to reverse the renationalization that had taken place during the 1982-83 financial crisis and to promote popular capitalism by wider share ownership, including employees' share ownership by appropriate share pricing and allocation rules. The attempt was to enhance the durability of privatization. In the fourth phase from 1986 onwards, the SOEs established prior to Allende were sought to be privatized on the model of the U.K. experience.

The most important lesson to be drawn from the Chilean experience is that

privatization per se is not always an effective way to establish credible commitments to new incentive structures and that the method of privatization may well be of crucial importance in this regard.

Poland: In the late 1980s the State ownership dominated both the industrial and service sector of the economy in Poland accounting for over 85 per cent of the GDP. In the industrial sector private production accounted for less than 6 per cent of the measured output. Only in agriculture was private ownership prevalent. In came the Solidarity government in 1989 with its first priority as macro-economic stabilisation in the face of hyper-inflation. The Polish government had given a high priority to securing an acceptable property rights settlement, implying that at least some distributional issues had to be tackled before privatization could even begin. Conflict over the distributional consequences of alternative privatization schemes acted as a brake on the development of the enabling legislation for privatization during the course of 1980. Like other former communist economies, Poland lacked capitalist financial market and institutions like a stock market, pension funds, private banks, mutual funds, etc. Various techniques have been proposed for privatization including distribution of shares to individuals, employees and financial intermediaries.

U.K. Tall claims have been made that privatization has accomplished wonders in U.K.. Moore, a Minister for ten years in Margaret Thatcher's government trumpets in an article (1992) that whereas by 1979 the borrowings and losses of state owned industries were running at about three billion Sterlings a year, from 1989-90 companies privatized by the Thatcher

government fattened the government's purse by some two billion Sterlings. Large amounts of public sector housing stock were sold in the early 1980s: There has been considerable contracting out of services at local government level and in organizations like the National Health Service. In 1979, SOEs accounted for about 10.5 per cent of Britain's GDP. There were problems concerning inefficient resource allocation but still, the overall productivity growth was comparable to that of the private sector. However, the situation turned for the worse in the late 1970s. The SOEs had persistent financial deficits. The conservative government came to power in 1979 and chose to privatize a vast majority of SOEs and assets leaving coal, rail and postal services as the only major industries, still in the public sector. In the first phase, port operation, aircraft and defence contracting, Northsea oil exploration and production, telecommunication operations, road haulage and British petroleum were privatized, yielding 500 million Sterlings per annum. Both efficiency and revenue objectives were involved in these privatizations. In the second phase between 1983 and 1987, sales of enterprises operating in reasonably competitive industries continued and these included such activities like oil exploration and production, motor cars, British Airways and Rolls-Royce etc. The distinguishing feature of the second period, however, was the first sale of a utility network industry, in the form of flotation of just over 50 per cent of British Telecom shares in November 1984 followed by the sale of British Gas in 1986. The government emphasised that the British Telecom should have access to capital markets so that investments in new technology could be undertaken without increasing public sector borrowings. Because pri-

vatzation proceeds are treated in British public sector accounts as negative public expenditure, selling British Telecom helped the short term deficits, whatever its effect on the networth of the public sector in the long run. Selling bonds and selling equities are rather similar in economic terms. But their very different accounting treatments enhanced the attractiveness of privatization. (see Vickers and Yarrow 1991: 111-32).

Yet another important innovation of the British Telecom sales was the extent to which the share issue was targeted at small investors by advertising, generous pricing, share allocation rules, and loyalty bonus to encourage individuals to hold on to their shares. There were millions of successful applicants for shares.

A similar pattern was followed in respect of several other industries. Whereas in the earlier periods sale by tender offer and privatization of companies in stages were common, after 1985, tendering was rarely used and sales were all in one go. The government attached importance to wider share ownership. Simultaneously, new regulatory bodies were established in connection with these privatizations in order to apply price controls and to promote competition.

In the third phase, between 1987 and 1991, water and electricity industries were privatized, and sales were targeted at small investors. Unlike in the case of Telecom and Gas, however, the government resorted to substantial restructuring of the SOEs in the field of water and electricity before privatization in order to separate environmental regulation from the business of water supply and to enhance 'competition by comparison'.

The British privatization programme raised billions of Sterlings for the treasury,

created millions of new share-holders and has significantly reduced State involvement in enterprise decision-making in a number of industries. However, in the opinion of several leading observers of the British economic scene, its impact on economic efficiency is rather less clear. The main dramatic changes occurred in SOEs like pre-privatization British Steel and British Coal where, productive gains have been massive. In steel and coal, there was less scope to meet tighter financial constraints by price rises than in more monopolised industries and the government successfully confronted the coal miners' union. Perhaps, the only sound conclusion at this stage can be that the British evidence is consistent with the view that competitive conditions and regulatory environments are key determinants of performance.

Venezuela: In the words of Janet Kelley Escobar, Venezuela is an ideal type, revealing not only a gradual change in favour of market forces as a shaper of government activities, but also a continuing underlying faith under the primary role of the State as both regulator of private sector transactions and direct actor in publicly controlled enterprises. The philosophy governing State owned enterprises activities underwent important changes after the first oil boom of the 1970s began to subside, changes that seemed to imply movement towards public sector restructuring and greater reliance on market force. The policy makers considered privatization as only one possible tactic, in a strategy aimed at improving overall productiveness of the economic system and appropriate only when it was obviously related to the objective. Over a period of time, the State control tends to shrink by attrition leading to what has been described as "privatization by stealth". The government passed a law for disposal of public

sector assets outside of basic industries in 1986. PSUs changed over a period of time and started adopting new strategies.

France : The Government of France started privatization in the 1980s. A legislation passed in 1986 set out certain objectives of the programme like improving the economic and financial performance of SOEs and developing financial markets to expand popular share holding. Yet another objective was to relieve the State treasury from the burden of chronic deficits accumulated by certain SOEs.

A legislation sought to ensure that privatization proceeds must go into a separate government account which can be used for reducing the national debt or for capital support to PSUs being restructured for eventual privatization such as Renault or for special enterprises projects. India can profit by such a scheme and can set apart funds for modernisation of units like the Indian Iron and Steel Company which needs over Rs. 6000 crores for this purpose.

Germany : In Germany the law requires that before privatization the balance sheet should be prepared for the SOEs for sale" as a going concern" and that assets and liabilities should be evaluated from the historical costs to current values. A "Trust Agency" has been established for privatizing former State owned assets. The agency has been directly selling about 20 enterprises each day and till the end of 1991 about 24,000 enterprises were privatised.

Mexico : In Mexico the methods adopted since 1989 for privatization included not only sale of enterprises but other options like merger, reduction, transfer and winding up. Privatization through flotation of shares of Telefonu Demexico (Telemat) has been highly successful.

This was one of Mexico's profit earning units. Till May 1991, 826 PSEs have been privatized, including 141 sold to the private sector. A comprehensive document called the "White Book" was prepared compiling all the official documents relating to each state of the transfer process.

Hungary : In Hungary The Ministry of Industry and Trade selected 590 industrial and Trading enterprises in October 1990 with an expected revenue of over 5,73,000 million Forint and these companies were classified according to their size, nature of operations and levels of viabilities.

However the shortage of foreign capital and high unemployment consequent upon privatization are serious handicaps but otherwise, it has been a successful and ambitious programme.

Japan : Next to the U.K., Japan is a country that has launched a massive privatization scheme. NTT became a private company in April 1985 and its public issue was a big success. Japan specifically barred foreign buyers unlike the British Telecom. The Japanese sale was drawn out over several years in bid to maximise the price gained. The Japanese Airliner was to be privatized next. But the biggest of the privatization efforts related to sale of the Japanese rail system. The loss making group was paying interest of 15 million U.S. dollars per day on an accumulated long term debit of 100 million pounds. Privatization in these cases led to mass retrenchment, bringing down the work force from 4,15,000 in 1980 to 2,15,000.

Privatization in Indian Context

India has been the socialist citadel from the days of Jawaharlal Nehru. The preamble to the Constitution of India

was itself amended to ensure a "socialistic pattern of society". There was enormous growth in the size and scope of number of enterprises in India. Both ideology and practical considerations necessitated a major role for the State in the early years of the Republic. Capital markets were practically non-existent and private capital was shy to take up projects involving high costs and long gestation periods. There was a scarcity of trained manpower to run modern complex industrial organisations. Industrial infrastructure was weak and regional disparities prevailed. The public sector captured almost "commanding heights" in the economy. However, disillusion came in when it was found that despite the increase in size, the public sector failed to deliver results. Losing public sector enterprises became a drain on the public exchequer. Instead of contributing to the State revenues, they were eating away into the vitals of the public exchequer. The deficits and losses of the public sector units assumed the characteristics of an invisible form of taxation.

The public sector has become the focus of criticism. While it was allowed to make its presence felt in the major and core sectors of the economy, the performance of the PSUs has been such that the overall return from hundreds of thousands of crores of rupees sunk into these units has been marginal. The total investment in 248 PSUs accounted for Rs. 1,05,000 crores in 1989-90. An average return in the five year period ending 1987-88 was just 1.5 per cent per year. The end profit of central PSUs numbering 181 during April to September 1990 aggregated just Rs. 481 crores.

In the first half of 1991, 100 PSUs incurred losses totalling Rs. 653 crores. The profit making PSUs fell to 81: Coal, lignite, chemicals and petro-chemicals accounted for the bulk of the losses.

According to the report of the Public Sector Enterprises Board, out of 244 public sector undertakings with an investment of Rs. 99,315 crores in 1989-90, 131 made profits, 98 made loss and 15 worked on no profit no loss basis. The profit making units earned Rs. 5,471 crores in 1989-90 while others incurred losses of Rs. 1,959 crores. The ever widening fiscal deficits in the Union Budget led to borrowal from the Bretton Woods Twins; but borrowals were not forthcoming without conditionalities. A major stipulation was that the fiscal deficit should be contained, while another stipulation was that there should be disinvestment of PSUs at least to the extent of 5 per cent. The Economic Survey for 1990-91 had itself drawn a dismal picture of the performance of PSUs in India. The investment in PSUs during the Seventh Plan could be made only by 40 per cent budgetary support and internal resources of the central PSUs amounted to only 32 per cent.

The State undertaking incurred net loss of Rs. 1,928 crores in 1990-91. According to the survey, the total loss of loss making undertakings amounted to a staggering Rs. 8,579 crores during the Seventh Plan period. No wonder, there were calls for closure or privatisation of these PSUs. The Narasimha Rao government accepted privatisation as one of the policies to be pursued from 1990 onwards. The object has been to bridge the fiscal deficit and the government has chosen the path of "disinvestment". The shares of companies like BHEL, HMT, SAIL, NLC, STC, FACT, ITI, etc., were offered in blocks in auctions. The transactions in 1991-92 were concluded on the basis of package offers containing different portfolios. As the prices realised were not quite attractive, institutional investors benefitted immensely through their acqui-

sition. The government has now been adopting different procedures for securing larger resources through disinvestment of smaller portions of government holdings. In respect of five PSUs, 5 per cent of the equity capital is being disinvested and these are BPCL, HPCL, NALCO, Bongai-gon and SAIL. As against the target of Rs. 3,500 crores, the government realised only Rs. 1,866 crores by sale of blocks of shares in two auctions. Two more auctions are expected.

Privatization in India is now in the initial experimental stage. There has been no uniformity of views either among the political parties or among the economists about the necessity for privatization. Controversies abound with regard to the mode of privatization. It should be noted that the share of public sector enterprises in the capital formation in India stood at 10.5 per cent in 1988-89. Any decision to restructure the PSUs is going to have far reaching consequences. The government has committed itself in its memorandum to the IMF that the budgetary transfers to PSUs will be progressively reduced, that part of the equity in selected enterprises will be disinvested and that chronically sick PSUs will not be allowed to continue incurring heavy losses.

Though private management has much to contribute, it will be misleading to portray it as universally efficient. In poor countries, managerial capacity is weak both in public and in private sectors. Privatisation is a politically sensitive issue and charges of corruption and nepotism will have to be faced. Capital market in India is weak.

Disinvestment can take place only in respect of profit making PSUs and this can lead to a situation best described by Prof. Madhu Dandavate as privatization of profits and nationalisation of losses.

The economic benefits of privatization are not measurable in the absence of well documented data. There has been a continuing nexus between the big business and the government and such nexus has not answered well for the Indian economy. Financial Institutions hold substantial interests even in private sector companies and have not chosen to influence the conduct of the giants in the private sector.

An expert on the subject Dr. Trivedi has pointed out that privatisation is an ideologically loaded word and is unpalatable in the Indian context. It will create only new owners among the relatively rich sections of the society. In a monograph on the performance status of Central public sector enterprises laid before the Parliament in December 1991, the government outlined its thinking on this issue. Examining the issue in the light of the monograph, Dr. Trivedi concludes that 85.5 per cent of Rs. 99,315 crores investment in the Central government owned public enterprises yielded a positive rate of return and only 14.5 per cent of the investment is loss making. Most of the 77 Enterprises identified to be referred to the BIFR accounted for 61 per cent of the loss making investment. The objectives of the disinvestment policy must be to raise resources for the public sector for improving part of the causes associated with closure of sick units. These costs primarily include expenses relating to voluntary retirement schemes. Another part of the revenue should be used for restructuring those enterprises which are on the verge of becoming chronically sick but are as yet not beyond redemption. These enterprises should be given extra infusion of capital after ensuring that the management accountability system based on memorandum of understanding is in place. Finally a big part of the money raised from disinvestment should be

used for retraining of the workers displaced or affected as a result of the closure and internal restructuring involving down sizing. He concludes that the accent hereafter should be on improving the performance of public sector enterprises.

Professor R. P. Iyer, currently Director of ACMF, while commending the policy of MOUs in his Foreword to Dr. Trivedi's book has observed that a mere 5 per cent improvement in the public sector efficiency as a result of the policy of MOUs could provide an extra Rs. 4,000 crores to the exchequer annually. The pendulum of public sector ownership has swung from one extreme of unbridled enthusiasm for public enterprises to other extreme of dogmatic advocacy on privatisation. The intermediate area of performance improvement will have to be explored.

Even in U.S.A. there has been prolonged debate on the prospects for privatisation. The President's private sector survey on cost control, better known as Grace Commission, provoked a spate of articles and debate on the scope for better efficiency and productivity in government. What is necessary in the Indian context is to set up a high power body on the model of the President's Commission on privatisation that was established in USA in September 1987 to review appropriate division of responsibilities between federal government and the private sector and to identify those government programmes that are not appropriately the responsibility of the federal government and can be transferred to the private sector.

The President's Commission on Privatisation in U.S.A. was required to study and evaluate past and current privatisation efforts by governments both

in U.S.A. and abroad and the literature and writing on privatisation.

What is happening in India is that public sector shares are being sold in the first instance through mutual funds, where again the government had a big say. What is necessary is to ensure a better rate of return and the question is whether we can achieve this objective by privatisation. Private sector is not an angel. It is no doubt true that we have to avoid diversion of budgetary resources for meeting cash losses on PSUs. But the socio-economic and cultural dimensions of privatisations cannot at all be ignored in Indian conditions. It is easy to say that business is not the business of the government. Much of the blame for the failure of public sector in India should rest on politician-bureaucrat nexus. The public sector is being treated as a department of the government with no care for its individuality and profit making capacity. Several countries like South Korea and even our neighbour Pakistan have successfully tried the MOU system and the performance evaluation methodology is undergoing a radical change. We have the example of Venezuela which does not support the theory that public enterprises activities will diminish in the foreseeable future. Market forces will no doubt increase with the pace of development in general. Unbridled market capitalism can lead to what Paul Samuelson characterised as "Market facism". By restructuring State owned enterprises, giving them less protection, encouraging them to compete in international markets and by inviting private investments to collaborate in government projects, the State can still increase the influence of the market without giving up its direct role in key economic sectors.

As Hemming and Mansoor write in *Privatisation and Public Enterprises* (an

IME Working Paper), "despite the inconclusive nature of evidence, it is difficult to believe that existing public enterprises are not capable of achieving significant efficiency." Our PSUs will have to adopt

new strategies which call for a commitment both from the bureaucrat and the politician. It is a sad thought that after the demise of Jawaharlal Nehru such commitment is a rare commodity in India.

Bibliography

- Hankee, H. Steve (ed.) 1988. *Prospects for Privatization*, Proceeding of the President's Commission on Privatization.
- John, Moore, 1992. *British Privatisation Taking Capitalism to People*; *Harvard Business Review*, January-February.
- Privatisation Toward more Effective Government-Report of President's Commission on Privatisation.
- Savas, E. 1989. *Privatisation: The Key to Better Government*.
- Trivedi, Prajapati, 1988. *Memorandum of Understanding - An Approach to Improving Papers Performance*.
- Vernon, Raymond (ed) 1988. *The Promise of Privatisation: A Challenge for American Foreign Policy*.
- Vickers, John and Yarrow George, 1991. Economic Perspective on Privatisation, *Journal of Economic Perspectives*, 5 (2).

SOME COMMENTS ON ADVANCES IN AGRO-CHEMICALS*

Malcolm S. Adiseshiah

Definitions

I wish to begin this Symposium on Advances in Agro-chemicals with some simple and familiar definitions.

Agro-chemicals comprise fertilisers of various kinds, of which the principal ones used in our country are: N which stands for nitrogen, P which stands for phosphorous and K which refers to potash. Today over 110 million tonnes of fertilisers are consumed and 170-175 million tonnes of foodgrains are produced. Only 65 per cent of the fertilisers consumption has been used for food-crops.

The second major component of agro-chemicals are pesticides of various types — insecticides, weedicides, fungicides, rodenticides and nematocides, with an annual usage of 90,000 tonnes, of which 63 per cent is used in agriculture and the rest in malaria control and other public health programmes.¹

Fertilisers use especially in the 110 districts of assured irrigation of the country has the potential to produce 210-215 million tonnes of foodgrains, as we shall see later. Similarly pesticide consumption concentrated in 45 to 80

districts of Andhra Pradesh, Gujarat, Karnataka, Punjab, Tamil Nadu and Uttar Pradesh has raised foodgrains output by 20 per cent.

Against the above positive results of the use of agro-chemicals; it is found that the overuse and abuse of fertilisers in areas of assured irrigation along with the underuse and neglect of the rain-fed areas, account in the main for the stagnation of crop yields. Currently we seem to have hit a plateau of 170 to 175 million tonnes of foodgrains production. Further there is a problem with fertiliser mix of NPK, where N is being equated with K; when our basic soil fertility deficiency is Nitrogen which is 80 per cent, whereas the deficiency of K is only 20 per cent. Why are we promoting this criminally wrong equalised mixture?

Again the computation of the annual crop losses due to pests and diseases requires a technology still to be developed, but are tentatively estimated at Rs.6000 to Rs.7000 crores of which 35 per cent are due to weeds, 26 per cent to plant diseases, another 26 per cent to rodents and insects and the balance 15 per cent to nematodes and birds.

* Inaugural Address at the Symposium on Advances on Agro-chemicals, delivered at Taj Coromandal, Madras, on October 15, 1992.

The heavy loss suffered by small farmers who are over 80 per cent of all farmers are serious post harvest losses in storage are severe where storage facilities are inadequate, as is for small farmers where rodents, nematodes; insects and mites lead to 15 to 20 per cent of losses in the first half of the season.² On top, for the large and medium farmers there is also the temptation to pesticide overuse which creates environmental problems, bioamplification of the residues in human fat and resurgence of pests, and results in development of pesticides resistant/tolerant types of organisms. Chemicals Business reports that in 1955 only 25 species were pest resistant and that in 1992 the number has increased to 447. In 1972 the task force on the pesticides industry of the Ministry of Chemicals and Fertilisers reported that crop loss due to pests in fertilisers which was 15 to 20 per cent in traditional agriculture, is now known to exceed 50 per cent, particularly in rice, pulses and oil seeds under intensive agriculture. The National Commission on Agriculture estimated fertilisers consumption at 434 tonnes in 1953-54, while the VII Plan Working Group on pesticides estimated it, the 1983-84 consumption, at 71,656 tonnes, with agriculture using 55,000 tonnes, and projected a total demand of 1.44 lakh tonnes, of which the agricultural use would be 1 lakh tonnes at the end of the IX Plan.³

One general caveat should be mentioned about the pejorative terms, pest and pesticides, which are not based on scientific classification of the species. Not all insects, arachnids and other group of species attacked by pesticides deserve that description — like honey bees on Asia and elsewhere, spiders in Africa. Some rhetorical flourishes to which all of us are inclined, as in the case of the

world renowned Norman Borlaugh who declared "we can either use pesticides and fertilisers at our disposal or perish", and the ten plagues of Egypt — the frog pestilence, water turning into blood etc.⁴ What we can all agree upon is that regulating pesticides is ruined by misuse of data, that we need more data for proper, scientific regulation and that meanwhile we should use what data we have for informed control and regulation.

Integrated Pest Management

One move in this direction is the development of Integrated Pest Management (IPM), particularly for paddy and cotton. IPM is a system that relies on a variety of techniques for controlling pests, utilising physical, biological, genetic and environmental controls. It does not preclude use of pesticides, but keeps it to a minimum and regulates its use. Its techniques include breeding disease/pest resistant crops, establishing planting timings to avoid peak pest periods, rotating crops and introducing insect predators and parasites. As a result, the comparative experiences of IPM vis-a-vis chemical intensive methods are the lowering of cost, reducing of yield and income fluctuations, decreasing of losses from pests and lowering of threats to public health and environment. IPM involves not only pest management but also pesticide management, which means pesticide is used only when the pest has reached a critical injury level, its timing and method of application is phased, the least toxic pesticide to the natural fauna is used along with selective insecticides rather than broad spectrum ones.⁵ The World Bank terms IPM one of two recent technological developments.⁶

Search for Advances

Given the environmental hazards, pollu-

tion, resurgence of target and non-target pests and development of resistance in pests to pesticides, the search for advances is not only within the framework of the agro-chemicals like the development of decamethrin insecticide which is 100 times more powerful than malathion and as of today is the most powerful insecticide advances must also include alternatives.

Alternative agriculture, or regenerative agriculture or organic farming is one advance. I do not use the restrictive definition of alternative agriculture which aims at self sufficiency of the farm by minimising the use of inputs obtained, from off the farm, and eliminating synthetic inputs of chemical pesticides and inorganic fertilisers.⁷ I see the need for both in limited and regulated amounts. But the alternative advances need our attention. That is to be found in biological pesticides-bio-pesticides which have a much higher molecular weight than the chemical pesticides, are extremely specific to target species and are bio-degradable. Here the most important advances are *Bacillus Thuringiensis* which acts against pests of crops and vegetables and *Bacillus Sphaericus* which acts against malaria, filariasis and encephalitis transmitting mosquitoes and because of their high potency, stability and low cost are particularly effective agents.

Similarly bio-fertilisers are being developed and are used along with fertilisers as integrated plant nutrients to lower the depletion of soil fertility and productivity caused by intensive use of NPK. In this area, genetically engineered rhizobium bacteria are being developed as one means of fixing atmospheric nitrogen more efficiently and consequent reduction in use of N. Already the 17 gene complex that enables the bacterium *Klebsiella pneumonias* to fix nitrogen has

been isolated, reproduced and introduced in *E. coli* to be nitrogen fixing. Now the work is proceeding apace on the enhancement of current symbiotic systems, the decrease of nitrogen fixing enzyme systems to function in presence of Ammonia and nitrate so that the load of applied nitrogen is reduced, and the transfer of nitrogen fixing genes to plants takes place.

Another area where advance is being made is bacterial cloning where functional genes are inserted into a living cell (from another) to provide resistance to pesticides, tolerance to salinity, toxic metals and other such environmental conditions. This involves isolating one or more segments of DNA from a living organism which is then spliced into the DNA of the vector of the virus, and when introduced into a host cell reproduces the DNA many times and also alters the DNA within the genes to yield proteins with improved properties.

Yet another advance being probed is Transgenic plants which develop insect resistance by the transfer of biocidal genes. To genetically engineer such plant cells, an unusual soil pathogen in which a large tumour inducing plasmid is used to insert again part of its DNA into the DNA of another plant cell, to both introduce novel DNA into plant cells and develop whole plants through exposure to proper combinations of plant hormones and nutrients.

Other advances in the offing include Anti-sense where strong insecticidal properties are developed; plant growth promoting Rhizobacteria replacing synthetic plant growth promoters; wild hybridization which transfers pest resistant genes from wild crops to cultivated crops; and herbicide tolerance being

engineered into crops, the commercial strategy of which is to gain a share in the herbicidal use market not to add to it.

Advances in Fertilisers Use : Dryland Farming and for Small Farms :

The main development in the fertiliser use field is to provide indicators to the farmer of the optimum of fertilisers, which will prevent both its over use and under utilisation which reduce the crop yield. In other words fertiliser use efficiency holds the key to productivity and income increase for the farmers as fertiliser prices have risen faster than procurement prices and nitrogen referred to earlier, results in the urgency of avoiding the over use of nitrate pollution of ground water, Hence

the new technology of management to improve plant output is : i) no application of nitrogen till the plant has exhausted that in the soil; ii) where nitrogen deficiency is known, potash can be used prior to the NK mixture; iii) the use efficiency of inorganics will increase only when blended with organics which means farm yard manures, compost, green manure and crop residues which meet this vital requirement; and iv) use "breeding soil" technique which is crop rotation of cereal - legume to upgrade soil fertility. Against the decreasing use efficiency in fertilisers over the years set forth in the Table it is pointed out that if the above 4 point discipline is followed, 12 million tonnes of NPK use by 2000 is adequate to ensure a food production of 240 million tonnes with use efficiency of 10.8.⁸

Fertiliser use efficiency and food production

Year	Total food production		NPK used		Extra yield due to fertiliser alone	FUE kg. grain / kg. NPK
	(a)	(b)	(c)	(d)	(e)	(f)
1970-71	107	56	2.25	1.46	25.0	17.1
1980-81	130	82	5.51	3.58	37.0	10.3
1983-84	150	100	7.71	5.00	45.0	9.0
1988-89	170	118	10.00	6.50	53.0	8.1
2000 (1)	240	188	12.00	7.80	84.6	10.8
2000 (2)	240	188	20.00	13.00	84.6	6.5

Note : (a) Total food production in million tonnes

(b) less the food production level of 1951-52

(c) Total N+P+K used for all the crops

(d) 65 per cent of the total (c) used for food crop only

(e) and (f) in million tonnes.

(1) Possible production with only 7.8 million tonnes of NPK under disciplined agronomy at 10.8 FUE.

(2) Even with 10 million tonnes of NPK for food crop current agronomy may yield 240 million tonnes but only at the FUE level of 6.5.

For small farmers the priority areas identified are :

Rice,

Sorghum, Millet, Maize.

Roots and Tubers, especially cassava and potatoes

Grain legumes

Vegetables

Cotton

Rodants, and

Stored products pest control

The strategy on this is optimal use of local knowledge; development of adaptive research concurrently with the transfer of known technology; innovative research in biological research on bionomics, on pest/host interactions, breeding new varieties of plants, basic taxonomy and techniques for genetic control, control research on hormones, pheromones and pest control agents, resistance to pesticides, development of selective pesticides, long term environmental effects of pests, and stored products pest control.

A brief comment on dry land farming which bears also particularly hard on the small farmer : 105 million hectares are used as dryland farming in the country. Three major leads for dry land farming which is characterised by heavy rain fall in 2 to 3 months of the year with consequent erosion of top soil, moisture deficits at critical stages of growth, weeds competing for scarce reserves of moisture and nutrients and poor ground water recycling in years of monsoon failure, are : an economically viable location specific package of practices including fertiliser use; a major emphasis on coarse grains, neglected for over 30 years 1950 to 1987, and water shed management, regulated underground

water exploitation and spread of drip irrigation

Economics of the Advances

The advances briefly summarised earlier rest on research which demands large resources. The trends based on chemical technology is more costly than the earlier ones based on mechanical technology and the new trends based on biochemical technology if not in some cases more costly. Chemical Business estimates that at the end of the century, the microbial pesticides market will be \$16.8 billion.⁹ Where is this money to come from? Till now the major source all over the world has been the government. But with governments increasing their expenditures on armaments and R and D related to defence, there is less money available for agricultural (and industrial) non-military research. The largest international scientific project in the world today is not the \$1 billion Global Change programme in which scientists from over 100 ICSU-UNESCO countries are cooperating with a focus on the interactions between the geosphere (the earth's physical systems and resources) and the biosphere. In essence the project is vital to mankind, it is the scientists analysis understanding and suggested control policies on the physical, chemical and biological processes that support life on earth. But the largest project is the US Strategic Defence Initiative and the Starwars programmes on which \$9 billion have been spent so far.¹⁰ The same situation prevails in India. The government expenditure on defence research, on space, and on missiles are many times over that on civilian industrial and agricultural research. At the micro-level, it is reported that on a major scientific project for producing certain life sustaining chemical tablets in the US, the government agency in 1990 could spend only \$93 million and could

not complete the product, whereas a multinational company spent the needed \$108 million and produced and marketed the product.¹¹ I believe this has a lesson both for the future and for us in India. Future scientific research financing will be essentially by multinational companies and that has some lessons for the Indian public and the corporate sector.

At the level of the Indian farmer, who, like farmers all over the world, is guided by the cost and returns in deciding on his production line, rice or millets, and the technology that he uses. The farmer's fertiliser use or pesticides use behaviour is governed by the price he pays for it (the cost) and the value of the produce with it. We, economists clutter up this simple reasoning of the farmer by speaking of the point at which the cost of the marginal unit of fertiliser or pesticide applied equals the value that the last unit sold brings in, and further complicate our lives by applying the formula of the Production Function. In this talk, I am leaving all this baggage behind. It is the farmer's balancing of his costs and the value of his product which is important when we consider the procurement prices or support prices or market prices of his product and the cost of his inputs, water, HYV seeds, fertilisers and pesticides, the largest item in his cost being fertilisers and pesticides. Here the question of the fertiliser subsidy on which Rs.5000 crores is proposed in the current 1992-93 budget comes in. The subsidy was originally

introduced to induce the farmer to use the fertiliser. Is this now necessary? The subsidy involves the transfer of national resources from one use — say employment generation to keeping fertiliser prices low, fertilisers, as seen earlier which are used mainly by the large and middle farmer. As for procurement prices their continued rise increases the income of the large and middle farmer who has the marketable surplus, but also involves a subsidy vis-a-vis the PDS prices and the transport and storage costs. Is it time to begin phasing out all these subsidies over a period of years and let the market determine the income that the large and middle farmer gets in equating his marginal costs with the value of his marginal products? This will also provide the corporate sector, which produces about 50 per cent of the fertilisers consumed every year and about 70 per cent of the pesticides, an incentive to update their technology, streamline their marketing and cut out uneconomic and wasteful items of expenditure. Economists also calculate the social costs and social benefits of fertiliser and pesticide. This is a more uncertain field because there is no agreed means of measuring social costs and social benefits and establishing the economic threshold for guiding the socially minded entrepreneur and the government in policy regarding fertilisers, pesticides use, production and pricing.

Against this somewhat daunting backdrop, I have pleasure in inaugurating this symposium.

References

- 1 Annual Report, 1991-92. Ministry of Chemicals and Fertilisers, Government of India, New Delhi, 1992.
- 2 Nagarajan R.S. 1990. *Pest Management*, ICAR, New Delhi.
- 3 Report of the Working Group on Pesticide Industry, Seventh Five Year Plan, Ministry of Chemicals and Fertilisers, Government of India, New Delhi, 1984; Report of the Task Force IV on Pesticides, Ministry of Petroleum and Chemicals, Government of India, New Delhi, 1972.
- 4 Pesticides in World Agriculture; Macmillan Press, Hampshire, 1986.
- 5 Malhotra, K.N. *Agriculture Vs Environment*, Indian Agricultural Research Institute New Delhi, 1991; *Resources for the future* no. 89, Fall 1987, Washington D.C.
- 6 World Development Report 1992. World Bank, Washington D.C., 1992.
- 7 *Alternative Agriculture: Resources for the Future* no. 92, Summer 1988, Washington D.C.
- 8 Sankaran, A. "Towards Efficient Use of Inputs, Survey of Indian Agriculture, 1990" *The Hindu*, Madras.
- 9 *Report of the Steering Group of Small Farmer Food Crop Production*, Organisation for Economic Cooperation and Development, Paris, 1977.
- 10 "Bio-pesticides", *Chemical Business*, Washington D.C., August 1992.
- 11 State of the World 1987, Lester Brown *et al*, W.W. Norton and Co., New York, 1987.

Book Review

Rural Poverty in India: An Analysis of Inter-State Differences, by Rohini Nayyar, Oxford University Press, 1991; pp. viii+297, Rs. 350.

V. Chandrasekara Naidu

The book under review is a revised and updated version of the author's Ph.D. thesis in Economics submitted to the University of Sussex in 1984. Two major objectives of the book are: 1) to measure poverty—both absolute and relative—, based on alternative concepts and criteria, 2) to explain inter-state differences in rural poverty. Accordingly, the book is divided into two parts. The study covers the period between 1960-61 and 1983-84. The analysis pertains to only 13 states of the Indian Union.

In comparison to other studies, the present study claims to have made a departure in the measurement of poverty because it is based on the degree of undernutrition rather than notional poverty lines or inflated base-year poverty lines. Hence, the measurement of poverty in this study is based on the actual consumption of food by the rural population. The relevant data are drawn from the National Sample Survey (NSS) reports relating to 1961-62, 1970-71, and 1977-78. The author has used two alternative caloria norms in order to measure the incidence of rural poverty. They are: 1) 2200 calories per capita

per day, and 2) 2000 calories per capita per day. In addition to the calculations of head-count ratios of poverty across the states, the author has also worked out the Poverty Gap Indices (PGI) and the Sen Indices of Poverty (Sen's P). The analysis of data has led the author to conclude that while between 1961-62 and 1970-71 there was an increase in the incidence of poverty at the all-India level, the same remained unchanged between 1970-71 and 1977-78. The experience of the individual states showed that while in some poverty increased, in others it declined during the period under consideration (p.36). Regarding the magnitude of poverty the author's estimate is that over 200 million people lived in poverty towards the end of 1970s. Methodologically, the author finds the estimates of poverty based on the inflated poverty lines using the Consumer Price Index for Agricultural Labourers (CPIAL) lower than those derived from actual consumption data. According to the author, this suggests that the prices paid by the poor were much higher than those captured by the CPIAL (p.38). If this is so, then there is urgent need to reconsider the methodo-

logy of working out the CPIAL by the concerned agency.

After measuring the incidence of poverty based on alternative concepts and criteria, the author has proceeded to analyse the relationship between poverty and some of the other important aspects such as malnutrition, disease morbidity, health and education. Like others the author has identified the inadequacy of health and educational facilities provided to the rural population. Though the discussions on many of these aspects are on the expected lines, the author needs to be complimented for her effort at providing enormous amount of data and information on them.

In the second part of the book, the author has tried to explain the inter-state differences in rural poverty based on regression analysis. This is followed by a detailed discussion of the factors involved in rural poverty. Towards end of the book, the author has taken a critical look at the government policies and programmes implemented for the eradication of poverty during the last three decades.

According to the author, the results of her regression analysis show the price factor playing an important role in explaining the inter-state differences in rural poverty, and the output generated in agriculture has been found to have a definite bearing on poverty. The author has further argued that her regression results imply landlessness as an important determinant of rural poverty (p. 165).

The relatively small chapter on regression analysis is followed by elaborate chapters on prices and production, land reforms and agricultural labour. In one of these chapters, the author has also

explored the mechanisms through which the factors like prices and food production affect rural poverty. Since landlessness plays an important role in the determination of rural poverty, in chapter 9 the author has tried to evaluate the impact of land reforms on rural society. However, chapters 8, 9 and 10 provide a great deal of information on prices, food production, land reforms and the economic conditions of agricultural labour—both time-series and cross-sectional—, which were scattered earlier in many published and unpublished sources. This by itself can help other researchers immensely in the further analysis of issues relating to poverty and the factors affecting it.

While reading the book one gets the impression that the author is not consistent in deriving conclusions from her own analysis of data. Some other shortcomings have also been noticed with respect to the quality of data and methods of analysis. For instance, for estimates of poverty, the author has depended mainly on the data available just for three years in a period of two decades (p. 36) even though she knows well that they cannot capture the real changes in poverty and the trends in it over the years. Further, the quality of the NSS data relating to the early 1960s, has already been questioned by many scholars. The criticisms relate to the overestimation of cereal consumption in the upper deciles with the consequent underestimation of the same in the lower deciles by the NSS. Given the author's methodology of calculating poverty magnitudes, this could only result in the overestimation of poverty in her base year of 1961-62 and the changes in it in the subsequent years.

When one looks at the author's regression results and her interpretation of them, it is apparent that some of her

conclusions are not well-founded except for the positive influence of prices on poverty levels. For example, her argument that the regression results imply landlessness as an important determinant of poverty is not supported by many regression coefficients and their signs. Whereas the variable on the distribution of ownership holdings shows no significant relationship with poverty in two out of the three years, the variable on the distribution of operational holdings shows it to be insignificant in all the three years considered for analysis. Even the other variable of proportion of agricultural labourers in the rural working population, which represents landlessness, turned out to be insignificant in one of the three years for which regression analysis has been conducted. All these go to show that the author's conclusion of landlessness playing an important role in the determination of poverty is not correct. Instead, the regression coefficients mean the opposite. They indicate that landlessness *need not* be an important factor in the determination of rural poverty.

The author has argued at some other place in the book that "while the coefficient of variation in the distribution of ownership holdings has a significant correlation with rural poverty in 1970-71, the same relationship does not hold, good for 1961-62 & 1970-71 and 1982. this fact is *puzzling*" (p. 165) (emphasis added). However, the more important issue that needs to be examined is whether the aggregate data fitted into the regression equations can capture the real relationship prevailing between poverty and landlessness in the rural economy. Such issues can be better sorted out by resorting to the analysis of data at sufficiently disaggregated levels of the economy which the author herself admits during the course of her discussions (p.182).

In fact, how poverty interacts with some of the other important factors can be better understood if we compare the specific experience of neighbouring states like Andhra Pradesh and Tamil Nadu during the last two and a half decades. This comparison is interesting because while the former experienced significant trend decline in poverty between 1960-61 and 1973-74, Tamil Nadu did not (Table 3.13). This important differences in poverty incidence between the two states has been observed despite the near equal concentration of owned (Table 9.3) and operated lands (Table 9.4) and only slightly differing price levels of cereals prevailing in them in 1970-71 (Table 8.1b) and 1977-78 (Table 8.1c), and the equally high proportions of agricultural labourers in the rural working population both in 1970-71 (Table 7.1b) and 1977-78 (Table 7.1c).

The experience of these two states show that landlessness and prices of cereals need not be the important determinants of rural poverty. Certainly, there are some other important factors which are at work in the declining incidence of poverty in Andhra Pradesh and the non-declining incidence of poverty in Tamil Nadu. However, these other important factors, which either reduce or do not reduce the incidence of poverty, cannot be established by fitting the aggregate data into the regression equations. The identification of such factors requires micro-level intensive studies rather than macro-level studies. The experience of Andhra Pradesh and Tamil Nadu also reveals what these some other important factors are. For example, the data provided by the author show that in comparison to Tamil Nadu, Andhra Pradesh had achieved much higher trend rates of growth in production, gross cropped area, labour productivity and employment per hectare

between 1971-72 and 1983-84 (Table 10.11). Unfortunately, the author has not tried to analyse the relationship between these factors and poverty at the state level. The specific example of Andhra Pradesh also invalidates the author's assertion that between the rice-eating and wheat-eating states, the former experienced higher levels of poverty. It is not possible to observe any such patterns from the data and calculations provided by the author.

Unlike others who examined the "income effect" of growth the author has analysed the "consumption effect" of growth (p.179). She has argued that her approach is superior to others because the increased production can improve the consumption level of the poor via reductions in the price levels of cereals. But the author's approach is more relevant to the urban poor who earn their incomes outside agriculture and for whom the declining trend in prices of food certainly benefits.

As far as the rural poor are concerned, the "income effect" of growth which Ahluwalia and some others have examined becomes all the more important because their incomes are earned mainly from agriculture while producing food. Moreover, one hardly sees any downward trend in the prices of cereals even in the phase of increased production because of several factors, including the government's price protection policies consequent on the increased input costs in agriculture. Again, the specific experience of Andhra Pradesh and Tamil

Nadu support the methodology of examining the "income effect" of growth. While the slightly lower cereal prices prevailing in Tamil Nadu were not associated with lower levels of poverty, the lower unemployment rates and high productivity of labour in rural areas were associated with lower levels of poverty in Andhra Pradesh. This comparison suggests that "income effect" of growth is more relevant in the analysis of rural poverty.

The author is also quick to come to the conclusion on the relationship between poverty and literacy levels. She has not found any correlation between the two. In this connection, she has cited the experiences of Punjab and Tamil Nadu which respectively witnessed low and high levels of poverty despite the low drop-out rates from primary schools observed in both (p. 276). She has also cited the examples of Maharashtra, Tamil Nadu and West Bengal which experienced high levels of poverty despite high rates of literacy in 1971 (p. 104). Since the author has examined the data on these aspects only upto 1981, it may be too early to come to such a conclusion. For instance, the experience of Tamil Nadu in the 1980s reveals considerable declines in both drop-out rates and poverty levels, especially after the introduction of the Nutritious Noon Meal Scheme in 1982.

Despite some shortcomings; the book by Rohini Nayyar is a welcome addition to the literature on poverty.

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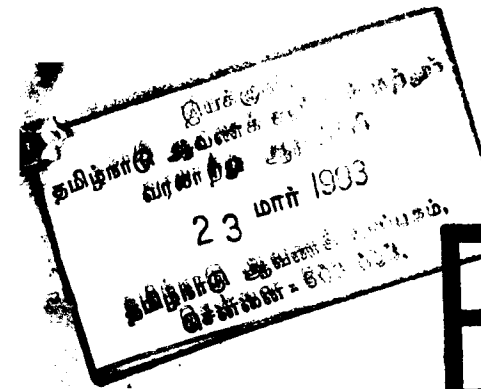
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Small Scale Industries in Tamil Nadu :
Development of SSI Sector in India

A Note on the Economic Outlook for 1993

EDITORIAL HIGHLIGHTS

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I. General Economic Scene

State Finances

There seems little coordination between the poor State of the State's finances as set forth from time to time by the State's minister of Finance and the decisions of the State government as to its non-development activities. In the latest statement in mid-January, the minister of Finance forecasts a minimum deficit of Rs. 800 crores facing the forthcoming budget for 1993-94 due, in his words, to among other things, the government spending huge amounts on the supply of free power to the farmer, relief to agriculturists, payment of subsidies to the poor. On the other hand, the government also reports with satisfaction that the scheme for the free distribution of sarees and dhoties to nearly three crore persons for the second year running and similar large scale expenses on renovating the Nehru (Football) stadium for an amount of Rs. 40 crores have been spent. The State and the country needs this sports facility to develop sports and games in the country, but the question is that at this time of inflation and the resources crunch whether the project should not have been examined carefully to economise wherever possible and to make the stadium a multi-sports activity and not solely for football. There are other financial pressures facing the government. Its plans to sell rice at

prices much lower than the market prices through the cooperative network will certainly help the poor sector of the people which has been frustrated. Because in late January, the union government raised the price for the latest kharif and rabi crops both the issue price by Rs. 60 a quintal and procurement price by Rs. 40 a quintal in the case of rice. The State government issued the ordinance raising the price of rice issued through PDS by 0.75 paise for all varieties. The new prices Rs. 2.75 per kg for the common variety from the Rs. 2 per kg, Rs. 3.75 per kg for the fine and superfine variety from Rs. 3 per kg. Even so, the State government will have to incur Rs. 100 crores as the additional food subsidy which will add to the financial deficit of Rs. 800 crores. There is strong opposition to the price increase by all political parties but the increase is the only way of not adding to the deficit. The State government's issue of 1.25 crore of the new family cards through the 22,000 fair price shops has involved long queues for the potential card holder and a lot of time wasted by the fair price shops and the government. All together the State's finances and the increasing calls on it, against what seems to be a block on raising its revenue or cutting its expenditures, particularly on the various forms of subsidies, is an ominous augury for the forthcoming budget which will be

presented in early March to be legislative assembly.

Power

Was the State right in isolating the Tamil Nadu power grid from the Southern Power grid to restore "full supplies" to the State where all the thermal power stations tripped on Sunday (December 31, 1992) from 22.30 hours all night, due to a fault in the Ramagundam power plant in AP? All of TN, AP, Karnataka, Pondicherry and part of Kerala were plunged into total darkness on that Sunday night. The 14 tripped power units were restored by January 12 and the State was linked once more to the power grid by the end of the week. This experience has an important lesson for all States and for the South whose grids should be closely interlinked, with no shortage of power for any individual States. There is need for a satisfactory clearing system which will ensure that only the needed quantities of power are exported to areas which are technically deficit along with maintaining the efficient functioning of inter-state transmission lines and the maintenance of voltage at the required levels. There is also need for the thermal and hydel projects planned during the VIII Plan to be taken up with no delay in the public, joint or associate sector which is not taking place. In fact, in Tamil Nadu (and Karnataka) full hydel reservoirs have led the two governments to put off the importing of coal of two million tonnes for Tamil Nadu and one million tonnes for Karnataka which have been permitted, together with the reduction of their import duty from 85 per cent to 35 per cent. In the case of Tamil Nadu there are also a number of projects for the private sector for setting up lignite based thermal stations referred to under the industrial development sector in earlier issues. Further, the

question of private sector distribution of power seems to be still hanging fire, going by the government statements on this subject. There is also the decision of the State Power Ministers taken in September 1991 and reiterated in the ministers meeting in January 1993 to impose a minimum tariff of 50 paise per unit on the agricultural sector, which 11 States have implemented by January 1993. Tamil Nadu is one of the few large States which has still not made up its mind on this levy. Also given the parlous position of the State's finances referred to earlier, there is urgency for Tamil Nadu to fall in line with this decision. This is more useful than the planning of new projects which the State announced, reported in the last issue at a cost of Rs. 4800 crores.

Water

This is one of the years when water for the farmer is less inadequate, than drinking water supply because the rainfall has been normal or above normal in all districts except three (Periyar - 15 per cent, Salem - 9 per cent, Dharmapuri - 7 per cent). But the normal rainfall does not assure adequate drinking water supply because the storage in the reservoirs and the rains in its catchment area could be inadequate. Thus Madras is not a rainfall deficit area as it received normal rainfall; the storage in the 3 lakes however is 1524 mcft (against the full capacity of 6483 mcft). Hence from January 10, water supply in the city is on alternate days. The government has directed that all village panchayats and other habitats in the State must have provision for potable drinking water (100 per cent State lighting) by January 31. To ensure this, special action will be needed in dry areas of the State and rain deficient areas. The Rs. 804 crores World Bank assisted water resources consolida-

tion project will help in evolving water management policies and achieve equity in distribution in these areas. For Madras city, the real long term solution is the Telugu Ganga which will assure drinking water to the city from 1995.

Population Trends

The January publication of the final computation of the population trends in Tamil Nadu of 55,858,946 being 6.6 per cent on the country's population of 844,302,688, with a growth rate of 15.39 per cent against 17.50 per cent in the previous decade, reveals negative as well as positive features. On the negative side, the sex ratio continues to fall to 1000:974 and while between 1901 to 1951, the rate was above 1000 per family, it has since dropped and in 1991 is 974. The reason for this needs study. Certainly female infanticide has been a contributing cause as well lower nutrition and health care of the female child. On the positive side, the census shows an encouraging development in the literacy rate from 54.38 per cent in 1981 to 62.66 per cent in 1991 for the population aged 7 years and above. The literacy rate for females has increased from 40.43 per cent in 1981 to 51.33 per cent in 1991 and from 68.05 per cent to 73.75 per cent for males. The census has not collected information of a person's caste and so it is not possible to compute the number of backward castes in the State and even if that was available there being no data on it for 1981, it would not have been positive to compute the trend. The scheduled castes are 10,712,266 being the 19.18 per cent of the population against the all India schedule caste ratio of 16.48 per cent. The scheduled tribes population in the State is 574,194 being 1.03 of the State population as against the all India schedule

tribes ratio of 8.08 per cent. In 5 districts the scheduled castes population exceeds 20 per cent and the 3 districts the scheduled tribes - ratio is above 3 per cent.

National

Prices and Inflation

In the plethora of data on prices and the inflation rate being reported every week by CSO and various organs of the government, one fact stands out that the rate of inflation is still high for the year 1992-93. As at December 26, on a point to point basis the rate of inflation was 7.54 per cent, the WPI registering 231.1 per cent which was the same at the end of November. During December there was a sharp fall in non food articles, a rise in food articles, and high prices for jowar, ragi, moong, vegetables. There is somewhat confusing data reported by various agencies. CSO reports that for the year 1992 the annual rate of inflation based on weekly average of the wholesale price index was 11.5 per cent compared to the year end figure of 7.8 per cent computed on a point to point basis. In 1991 the rate of inflation based on weekly averages was lower at 13.7 per cent compared to 14.5 per cent computed on a point to point basis at the end of 1991. Two features of this report are disturbing: one is that the rate of inflation is rising and the other is that this rise in both years is due to increase in prices of primary articles, though the 1991 rise was much higher at 20.4 per cent compared to that of 2.3 per cent in 1992. Another report - that by the National Informatics Centre of the Planning Commission predicts a provisional inflation rate of 9 per cent at 31 March 1993 and a rate of 11.39 per cent based on projections for actual estimates of the

wholesale price index which in March 31 will be 237.3 per cent. Further a sharp decline in consumer price index for agricultural labourers from the record 23.9 per cent in May 1992 to 8.6 per cent in November. Also the consumer price index for industrial workers fell from 14.7 per cent in May 1992 to 8.4 per cent in November. This sharp decline was due to the good monsoon and the record increase in food grains it is said. Also the CPI index and WPI index nearly converged in November and relieved the hardships faced by the poor rural majority in 1991-92. Against this backdrop, the increase in procurement and minimum support prices for the rabi crop, is not based on any cost calculus or recommendation by the CACP. The effect will be sharp increase in the floor prices in the open market. This action will fuel inflation further and increase the price of food which will hit the poorer sectors hard. What stands out from all this varying data is a) the rate of inflation is high. b) the monthly figures for 1993 have to be added to the base figure in 1992 for that month c) the calculation of the WPI provisional figures will further rise when the final figures become available.

Budget and Stock Exchange

The budget deficit target set with the World Bank/IMF for 1992-93 is Rs. 5389 crores, which is about Rs. 2000 crores less than the revised budget deficit for 1991-92. This reigning in of the deficit is sound and necessary and should not be something done on the pressure of external bodies. The pluses of the exercise is the careful collection of all governmental revenues during the last quarter of the year, including unfortunately Rs. 1700 crores from PSU disinvestment, unfortunately because the capital consumption involved should not be a means of meeting the budgets'

revenue deficit. The minus point is the temptation to cook the books particularly putting off for the next year the payments that should be made in the current year. This should be watched and avoided. On the stock exchange front, the RBI decision to set a 5 per cent ceiling on any bank's exposure to individual brokers is open to question. This would simply multiply many job, the number of brokers that a bank has to deal with as there are not enough brokers to meet these conditions as the numbers of sound brokers is limited. There is also the question of confidence which will suffer if there are too many brokers for a bank to deal with. Actually the RBI can achieve the same result by requiring the banks to report periodically as to the price at which the various deals are made, the nature of the securities, the name of the counterpart and the name of the broker. The Janakiram committee does call attention to the large total securities transaction within a short period of 13 months (Rs. 12 lakhs crore), but this need not be repleted, if RBI monitors the securities trend and trading is a part of the market; and commission made out of such trading is normal business practice. At bottom what is being dealt with is corruption, political interferences in appointing bank chairman; and violation of banking norms. This is the root cause which calls for the appointment of good men as bankers, and no rules or ceilings on transactions can solve the root cause of the malaise.

Economy

The effect of the Ayodhya disturbances on the economy seems to be everybody's concern; particularly its effect on the process of economic reform: 1993 starts off not too badly on prices, net RBI credit, fiscal deficit, but imports and exports and the economy generally need

monitoring. In any case, the field is well set to work out the continuation of the economic reform process. This is all the more necessary because the overall development of the economy which averaged over 5.4 per cent in the 80s, according to CII, was spluttering at 1.2 per cent in 1991-92 according to CSO's quick estimates compared to 5.2 per cent in the previous years and CSO's advance estimate of 4.2 per cent for the current year 1992-93 which is due to the good monsoon, causing the sharp increase in agricultural production. Per capita income was a dismal -1.2 per cent in 1991-92, an expected 2.2 per cent this year, agriculture production is expected at 4.2 per cent against last year's -1.4 per cent, mining and quarrying 5 per cent against 4 per cent, manufacturing 3.5 per cent against -2.5 per cent, electricity, gas and water supply 3.7 per cent against 8 per cent, construction 5.3 per cent against 4.7 per cent, trade, hotels, transport and communications, 4.5 per cent against 3.4 per cent, financing, insurance, real estate and business services 6.6 per cent against 8 per cent and community, social and personal services 1.8 per cent against 2.3 per cent. For the current year 1992-93, RBI estimates are broadly in agreement with the above CSO advance estimates. RBI's quarterly review states that net capital inflow from abroad declined from 2.8 per cent of GDP in 1990-91 to 1.2 per cent in 1991-92 the rate of net capital formation declined from 16.8 per cent to 13.7 per cent which led to contraction of public investment despite improved public sector savings by 8.2 per cent and household sector savings by 18.3 per cent, pushing up the overall savings rate to 24.7 per cent. On the external front imports have shot up by 22.3 per cent while exports have lagged at 5.4 per cent during the first 6 months of 1992-93, so that the trade balance will be under continued pressure.

Expansion in money supply during this period was 1.6 per cent due to lower expansion in bank credit to the commercial sector and net RBI lending to the government. For the year ending September 1992 bank credit contracted to 11.2 per cent compared to 12.2 per cent in the previous year. During this 6 month period, RBI compute the current account deficit at \$4 billion. This estimate has led RBI to offer Rs. 1000 crore as credit support through IDBI to stimulate industrial growth and NABARD to finance agricultural growth. Further, there is a case for reviewing with IMF the spending and fiscal deficit targets, so that development expenditure is not sharply reduced and the poor use of World Bank funds referred to in the last issue and to be referred to again in this will not be further worsened by a cut in the World Bank special account allocated to India. Even the World Bank in its recent report states that poverty which was declining in India, might well increase again. "With slow down in economic growth, there is the danger of the proportion of the poor increasing", it states. While the link between growth and poverty reduction can be questioned, it is true that the structural adjustment policy is leading to a decline in investment, particularly in the social sectors which will hit the poor sections. So the World Bank has advised the government to restructure its social programme to increase the investment, improve its quality and ensure its benefits reach the poor and are evenly distributed. But what the Bank does not realise is that the structural adjustment programme which it is promoting in India leads to decline in investment resources and so there can be no increase in social investment. One positive development is the FERA ordinance issued by the government which dilutes its regulatory problem and brings it into line with the new liberalised industrial, trade and exchange rate

policies. It puts into legislation all the various orders and amendments issued as executive orders so far including allowing Indians to hold \$ 500 in foreign currency, government permission not being requested to set up joint ventures abroad and trade in gold and silver being regulated by Ex-Im Policy.

Industry

For the first 6 months of 1992-93, the signals of industry are mixed. CSO reports a (IIP) growth of 3.9 per cent which is in contrast to the -1.2 per cent recorded during the first 6 months of 1991-92. The fact that the industrial growth is accelerating from 2.2 per cent in April-July to 2.4 per cent in August, and to 6.3 per cent in September seems to indicate that the recessionary trends in industry are subsidising. Against this positive trend, the Economic Times Survey of 300 of the large private sector companies shows that they suffered a set back in 1991-92 and that their recessionary phase in that year continued into first half of 1992-93 and that this trend is likely to continue into the second half of the year, particularly for the larger firms. The main problem faced by these capital intensive firms in steel, automobile, cement, petrochemicals which slowed down their pace during the year because in part of the increasing competition of the foreign multinationals who are entering the economy under the open door policy that is being followed. There is nothing wrong in the open door to foreign capital provided it is part of a well considered industrial policy where the priority areas of investment, are clearly set forth and the place of exports in every firms production are elaborated, as the only way in which the massive foreign debt of the country can be serviced is not by IMF/WB loans which is a short term instrument but through export expansion. Thus what is absent is an industrial policy to replace

the well established policy established in the late 80s for the public, private and joint sectors. Now we need an industrial policy which establishes priorities in investment into which the BOP objectives of earning foreign exemption is woven. This is all the more necessary as there is a rapid increase in the foreign investment proposals being approved by government in 1992 to Rs. 3534 crores at over Rs. 300 crores per month. At the regional level, there is a case for importing natural gas in the form of liquified natural gas for the southern States and for this a southern gas grid should be formed. In this context, the new Ambattur Industrial estate for tiny units will also be an energy saver as is in the SIDCO aided estates being set up by Tamil Nadu entrepreneurs. At the individual industrial level, sugar factories are building up a huge inventory in 1992-93 with the total availability at 17 million tonnes against an internal consumption of 11.7 million tonnes and exports of 50,000 million tonnes. This has also been the record for the previous 2 years. It is necessary for the export policy on sugar to be reviewed in order to relieve the industry of the huge inventory.

Steel

The decision of the SAIL plants and TISCO to expand their business by exporting the semis-such as slabs and billets is essentially a means of overcoming the recession hit demand decline that they face. Will this really help? Will the foreign market absorb a sustained quantity of their idle inventories in this area? What is needed to relieve the steel producers of their large and growing inventory of semis is for the investments in the core sector to be increased as to expand demand for semis. Here is another case where the question of following the World Bank insistence

on lowering customs duties will add to the problem of the large steel producers in the country. It remains to be seen whether the finance ministry is able to withstand the World Bank pressure.

Crude

The effect of the 3.8 per cent shortfall in the country's crude production in April - November (ONGC alone reducing crude production by 1.5 million tonnes) means crude imports have increased, so that 29 million tonnes of crude and 8 million tonnes of petroleum products are being imported. Despite the softening of the national petroleum prices, the oil pool account shows a deficit of Rs. 100 crores, instead of the government forecast of Rs. 450 crores surplus, but this is due to government miscalculation which would have resulted in a larger gap but for the steep hike in petroleum prices (see Vol XXII p484). There is little hope of improvement in the future, as the Bombay High wells have been over exploited and any increase in production by the foreign oil firms which have been invited will take time to result in actual production. The only saving is the result of the work of Petroleum Conservation Research Association (PCRA) whose work on making the users aware of the possible economies is resulting in the saving of 1.3 million tonnes of petroleum products a year. This could be doubled and even quadrupled if the consumers, particularly transport operation follow PCRA instructions. Meanwhile the prospects for next year will not be the predicted surplus of Rs. 1000 in the oil pool account, based on crude price of \$19 a barrel and Rs.26 to the US dollar, but a very high import bill as OPEC has decided to cut its production and raise crude price to \$21 per barrel by 1993. This raises once more the suggestion urged by this Bulletin of rationing the

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use of crude and petroleum production and making their rationing compulsory.

Coal

The coal sector - its three main components of CIL, Singheri and NLC-will not have available either this year or next any government/budget resources for its functioning. Hence it will be dependent on bilateral assistance and World Bank loan which will amount to Rs. 18000 crores (Rs. 1340 crores to OIC, Rs. 335 crores to Singheri and Rs. 140 crores to NLC). Here the World Bank may have helped the sector by dropping its 2 conditions — the complete decontrol of coal prices and CIL be disbanded — but should not the former be pursued in the interests of increasing the productivity and even the profitability of the sector.

Agricultural Production

There is need for a full fledged enquiry into the steep fall in wheat procurement by 17.7 per cent as at December 29, 1992 at 6.38 million tonnes. Fortunately the offtake from PDS has fallen by 7.7 per cent from 12.68 million tonnes in the same period in 1991 to 11.3 million tonnes. Rice procurement has increased by 18 per cent at 5.96 million tonnes but this has not prevented foodgrain stock from falling to 11.82 million tonnes at November end 1992 compared to 14.74 million tonnes in November and 1991 - a fall of 20 per cent. Why has this taken place when there is an increase in production estimated at 177.8 million tonnes against 1991-92's 167.06 million tonnes? How much of this is due to traders holding back stocks? Producers/farmers holding on to stocks? How much is due to wastage and corruption? All this needs a full enquiry. It is expected that with the above 10 million tonnes additional foodgrains, there should be no foodgrain imports. Oilseeds production

has increased to a record of 22 million tonnes against the target of 19 million tonnes. This will relieve import of edible oil. Pulses too will be attaining its target of 14 million tonnes against last year's 12.05 million tonnes. The negative features in the agrarian scene is that AP (some districts) and Rajasthan are in the grip of a drought and need drought relief quickly. Similarly poultry and meat production face negative features, this year's prices rising by 75 per cent. Meat prices rose also substantially - by 50 per cent. Though fish production is reported to have increased by 9-10 per cent, fish prices are high and out of the reach of the common man. At the policy level, the Rs. 1890 crores to be spent in 1992-93 by government on agriculture should be adequate given current resource constraints, the rise in fertiliser prices has not decreased its consumption; but the agri business consortium announced in the budget to help the small and marginal farmers has not yet been started because of policy divergences among ministries. To some extent, this is compensated by the new thrust given to horticulture on which Rs. 8000 crores has been allocated during the VIII Plan.

Foreign Trade and BOP

The Foreign Trade scene continues to be disturbing. For the first 8 months, April to November, the trade deficit was a record Rs. 8828.71 crores (\$3096.88 million) against the 1991-92 9 month deficit of Rs. 3797.98 crores (\$1430.23 million) - which was a matter of doubling. The country's aggregate exports during April-November was \$11,593.99 million against imports of \$14,000.87 million. Thus the exports in dollar terms grew by 5.9 per cent in the first 8 months, by 13.38 per cent in the general currency area. In Rupee terms aggregate exports increased by 27 per cent while imports

rose by 18 per cent from Rs. 2941 to Rs. 41881.32 crores. At December end foreign exchange resources rose to \$5.8 billion from \$5.09 billion in November end. The decline in reserves in October and November was due to the trade deficit of \$2.7 billion in April-October, while the increase in December was due to the release of 2 stand by instalments at \$648 lakh million by IMF, a financial sector loan by ADB at \$150 million and a social safety programme loan by IDA at \$200 million. Thus the increase involved is not earned by exports but is the result of the borrowing from the banks. This situation will have to be corrected soon and the reserves will have to be fed by export earnings, which requires that the export target of 12 per cent be attained, and which will be unlikely as only 3 months are left to make up some 6 percentage point. One of the consequences of the structural reforms of the country is that it has to integrate itself with the world economy which is called globalising of the Indian economy. For this the country's strengths are: relatively low labour costs in some industries, high calibre of technical and managerial manpower, especially to learn fast and adopt, expertise in software, use of English language and social resilience. These strengths can be used for a number of Indian firms to go global and exhibit the following features: scale economies, productivity, end product quality, increasing market shares for their products in the domestic market, constant search for new markets including export markets, clear understanding of consumer needs and shifting brand loyalties and extremely focussed Research and Development. On this basis India has a high present potential for globalisation in 2 wheelers, leather, textiles and garments in which the targets are exceeded this year, gems/jewellery, software and light engineering products, (engineering export declining

by 9 percentage points should be corrected) and a high potential in food processing, agricultural commodities, automotive parts, engineering services, hosiery and textiles and tourism. It is poor in banking/finance, consumer products, petro chemicals, high tech products and industrial machinery. There is need for prioritisation of the industries with high global potential and concentration on them. Globalisation cannot be achieved without action - planning and decision and resource support by Indian government, with its effort being coordinated with corporate sector plans. This is how Japan has attained its globalisation. This means the loose talk about globalisation and liberalisation depending on the full and sole play of market forces from which the government is excluded is wrong. Whether it is Japan, or France, or Germany or US government intervention and support is necessary for globalisation.

Loans and Aid

In addition to the IMF/World Bank and ADB loans referred to earlier, WB is also providing \$92 million as loan to extend rubber cultivation into a new area, in January UK made available aid grant of pound sterling 90 million, Italy made available an export credit of 33.7 billion lira (Rs. 68.4 crores) for financing the import of capital goods. ILO is spending \$2.25 million to implement an action programme to reduce and eliminate child labour in India. India will be saving 90 tonnes crude oil under ADB multinational techno efficiency programme. A major problem is that a large Rs. 72000 crores of external assistance is being unutilised. The union government has used only 34 per cent against the year's target 61.7 per cent and the States are equally laggard with Haryana using 236 per cent and Bihar 4 per cent. In the first 6 months

of 1992-93 the utilisation has been 15 per cent which is half of the previous year's use which led the World Bank to cancel \$1 billion loan to India and transfer 65 per cent of it to IDA. The highest use is in fertilisers (450.5 per cent), coal (85.4 per cent), power (45 per cent), industry (45.7 per cent), agriculture (41.6 per cent and structural adjustment (78.2 per cent). Infrastructure which is a crying need and on which industrial development depends is a poor user at 21 per cent with ports using only 10.5 per cent, railways 13 per cent, textiles 19 per cent. The cause for this is multifarious. They include recession hit industries, bad planning, over casting, slipshod home work by the finance ministry and the method of resource allocation. Above all there is a long term problem - the unavailability of rupee resources, and this will be long term and preexisting problem with the fiscal squeeze being one of the results of the conditionalities of IMF/World Bank borrowing. Another general problem, which is not related to aid utilisation but to loan and aid availability is that India does not have strategic relationship with the rich countries. For US, from which India gets \$4 per capita, Egypt gets \$247 and along with Israel, Turkey, Philippines and El Salvador which are the major recipients. Also trade barriers hamper access to international markets. It has been computed that the III world loses \$500 billion a year in such market opportunities.

International

World and IMF

The World Bank has laid as condition that the Indian government maintains its social sector outlays in real terms, strengthen the delivery mechanism for effective utilisation of such outlay and ensure further focussing of areas that need to

benefit from the allocation in relation to the \$500 million IDA loan referred to earlier which is recycled funds of unused loans to India. But the problem is that the other condition which imposes a fiscal squeeze of a 5 per cent of GDP ceiling of fiscal deficit makes it impossible to fulfil these 3 ideal conditions. This same situation occurs with IMF threatening to cut off its stand by loans if the fiscal target is not kept. The World Bank has actually done this in 1992 with its unused loan to the extent of \$1 billion. It seems that the Group of 15 needs to take up with the Bank/Fund Governing Bodies this issue of the conditionalities of the World Bank and IMF which makes the use of their loans and credit impossible. The problem facing the developing countries in operating the adjustment programme under conditions set forth by IMF and World Bank should be brought to the attention of the governing organs of these bodies, because what is happening is what the right hand gives, the left hand takes away. There should be clear directives on that to both the Bank and Fund.

India-Russia Accords

During the visit of the President of Russia to India a number of accords were signed, the most important being the accord on the long standing recalcitrant rupee rouble exchange rate. On the basis of the 9875 million rouble debt, India agreed that 62.7 per cent of it will be repaid at the rate of Rs. 19.9 per rouble which was the rate on 1 January 1990 and the residue of 7.3 per cent will be repaid at the rate of Rs. 37.75 per rouble which was the rate prevailing on 1 April 1992. This latter amount will be fixed in rupees and rescheduled; and repaid over 45 years with no interest being charged. It will also have no protection against any fluctuation in the value of the Rupee

for a period of 5 years as from 1 April 1992. Thereafter it will be indexed to the SDR; if the annual average inflation rate of the rupee exceeds 3 per cent over the five year period and similar review will be conducted every 5 year period. If the rupee's depreciation is less than 3 per cent per annum, this portion of the debt will not be indexed. The government states that under this agreement 62.7 per cent of debt will carry an average of 2.4 per cent and be realised in the next 12 years. The government states that India's debt service ratio will each be reduced by 30 per cent under the agreement. On the 63 per cent part, India will have to repay Rs. 1700 crores, which means it will have to curb plan expenditure to ensure that the fiscal deficit does not exceed 5 per cent. This is another reason for renegotiating the limit with IMF. What is worrisome is that the rouble has depreciated to a point where while the dollar is equal to Rs. 30/32, it is equal to 872 roubles on January 30, 1993. How can this be reflected in the Rupee Rouble exchange rate and the Indian debt to Russia computed at \$2785 billion by Russia, while the OECD estimate based on the market exchange rate is \$2.8 billion?

ILO and Industry Study

ILO's study "Industry on the move" examines the effect on labour as firms across the globe relocate their firms and operation to meet rising costs and a hotter competition. In the face of recession, new trends are spawned regarding the polarisation or the workforce into relatively secure "core jobs" at one end and less protected peripheral work at the other. This results in declining employment, higher skill profiles and decentralised collective bargaining. "Production organisers" are now central in the industrial stage as they increasingly decide

what to produce, when, how, and by whom and also from where to supply to which market. These firms provide the brains, leaving the brawn to the sub-contractors. For some industries where labour cost are the decisive factor, this option is the only way to stay in business, while for others it is a marriage of convenience. Unlike the past, when firms had a large core of employees, the current trend is towards fewer people on the shop floor at all times and more on call outside the factory. While changing international division of labour is not new, what is new is the speed at which the relocation of industry proceeds today because of the bourgeois integration and interdependence (globalisation) of the world economy. The enabling factors in this new scenarios include mobility of capital and technology, followed by persistent improvement in communication and transport. Competition is so fierce that enterprises have to force productivity to stay in

II. Agricultural Development in Tamil Nadu

Paddy and other crops

Farmers are growing and harvesting a bumper paddy crop, with rice productivity increasing to 10 tonnes per hectare. The food grains production for the next year is expected to cross 100 lakh tonnes, compared to last year 71 lakh tonnes. The farmers are ensuring a high seed replacement at 35 per cent, the highest in the country and are increasingly turning to the use of bio fertilisers in view of the rising cost of potassium and phosphatic fertilizers. The state farmers particularly in South Arcot are raising a record groundnut crop, making for the record all India crop referred to earlier. In fact

business to such an extent that shedding labour become understandable. For instance in the last 15 years the OECD steel industry has suffered a 3 per cent decline in demand, a 6 per cent drop in output but a 50 per cent loss in employment, due mainly to increased productivity. The introduction of new technologies lowers labour inputs as in colour TV sets where direct labour costs now make up less than 5 per cent of total production costs. Under such conditions, the loss of cheap labour loses its appeal. But activities which could not be mechanised will be attracted to low labour costs areas with high productivity as in the case of clothing and footwear. This means that as changes in the industrial landscape spread and pick up speed, workers have to adopt accordingly. People trained for a certain job cannot count on doing it even for the next 4 years.

the availability of edible oils has improved to such an extent, that the government and trade have not been able to lift all of it-3000 tonnes out of a total of 10,000 tonnes. The union government has announced the increase in procurement price and issue price of rice and wheat crops for the rabi/samba season. To reduce its subsidy burden the issue price of rice has been raised by the union government. This means that the rice subsidy will be increased by Rs. 200 crores for the state. With regard to wheat whose procurement has been slow last season, the government has announced a special bonus of Rs. 25 a quintal to those farmers who deliver

wheat and the union government subsidy will be increased by Rs. 135 crores. Similar increases have been announced for barley, gram, rape seed/mustard seed safflower in line with the ruling market prices and to compensate the farmers for the increased cost of fertilisers and diesel. The minimum support price for wheat has been raised for Rs. 275 a quintal to Rs. 330 (a 25 per cent increase), its issue price raised by Rs. 280 to Rs. 330, providing no measure to cover handling costs. The issue price of rice increased by Rs. 40 per quintal, the support price announced at the kharif season being Rs. 377 quintal for coarse type, Rs. 437 for fine and Rs. 450 for the super fine variety. The State government announced at January end the increase of the procurement price of sugarcane from Rs. 300 to Rs. 320 per tonne at an average minimum recovery of 8.5 per cent. The Tamil Nadu Agricultural University is planning with the state agricultural department and some foreign agencies to help farmers to increase their productivity and output. At present 21 lakh hectares in the State are being farmed by the cultivators to raise 62 lakh tonnes. Farmers in some identified areas are being trained in the use of the new variety, JJ9 developed by Aduthurai (AB 41) to get 4.7 tonnes per hectare, and for hulling it in rubber rolling mills, to get 56 per cent instead of the normal 40 per cent. Also the university is helping farmers in Pasumpon, Ramanathapuram, VOC and Kanyakumari districts to bring uncultivable rainfed dry lands using the appropriate variety of paddy. A new date variety 'palm rosa', grown by farmers in the Koilpatti area is being further developed to prevent soil erosion and earn foreign exchange with the perfume extracted from its nuts. To help delta farmers grow super fast rice (3 months) 4 varieties, Kalinga M1, Rana Prabha, Kalyan, Hesna are being developed. Groundnut

farmers in the GA command area are looking forward to their 75 days rice crop. In the rest of the delta paddy farmers can with their variety grow 2 crops and a third pulse crop. When kuruvai farmers go for a second crop in thaladi, samba farmers grow a pulse crop after the main harvest. Now this short term variety can also be grown by them.

Inland Fisheries

A feasibility study is underway to develop further the high protein content in inland water fish called murrel, which will increase the total fish production — both inland and marine — at present at 450 lakh tonnes and on exports at Rs. 225 crores last year. There is a huge potential deep sea fishing, particularly 'Tuna' over the long Tamil Nadu sea coast which fishermen are to be helped to top. Here private entrepreneurs could be encouraged with various facilities and incentives to enter this profitable area in cooperation with the State Fisheries Development. Similarly the production and development of cultured sea pearls at Mandapam which has yielded over Rs. 15 lakhs can be increased manifold with the training of pearl fishermen.

Research Report

In January 1993, 62 research reports were tabled, including 14 from the Tamil Nadu Agricultural University which aggregated its research work for the Pongal festival. The distribution of the research results is heavily in favour of fruits (19) followed by vegetables (15), paddy and cereals (10), animal husbandry (4) and others (4). This is a sound distribution of the research effort continuing the trends reported for every months of last year. Again the research results have been tested in demonstration/extension farms with encouraging and positive reports on

their applicability. There is still no direct data and precise figures on how the farmers are reacting to this mass of material — seeds, water conservation, fertiliser mixes, nutrient management and various formula for controlling/eradicating diseases and pests — on the basis of which the research bodies can push forward in some areas, while easing upon others.

Plantation Crops

Both coffee and tea are in 1993 adjusting to changes in internal production conditions and external circumstances. In the case of *coffee* in January the government fixed an increased release price for coffee. This increase of 20 to 22 per cent for 1993 was not based only on the increase in its cost of production but also on the basis of what the Coffee Board and the government call development expenses. The cost questionnaire answered by 163 estates out to 1200 (15 per cent) showed that cost of cultivation worked out to Rs. 8.47 per kg for Arabica and Rs. 14.33 per kilo for Robusta. But taking into consideration development expenses which include crop charges, return on capital and other charges, the minimum prices has been fixed at Rs. 28.93 per kg for Arabica and Rs. 23.48 per kg for Robusta. This flexible use of the cost factor is justified because the answer by 15 per cent of estates is too small a base and the price fixed is to compensate to some extent the low international prices. And here even the prospect of an International Coffee Agreement which will fix the quotas for the producing countries is not certain to improve international prices. Even as the negotiating group of the International Coffee Organisation in January/February is meeting in London, prices of coffee in the international market is falling because the market does not believe that there will be an agreement on quotas

which will be adhered to. Hence the higher minimum price will allow the Coffee Board to pay a higher return to the growers which will also increase the floor price in the open market. Given the squeeze faced by the coffee growers both by the collapse of the ICO's quotas and the loss of the vast soviet market, the principle of the domestic consumer subsidising the growers seems justified, particularly because till recently the MRP was not adjusted when the world market prices rose. There was a long delay. But the principle of subsidising the growers has its dangers, as it will not encourage Indian growers to face competition and enter the world market, which also may not be sustainable, as the coffee crop varies annually and exporting the entire surplus over domestic consumption in the absence of the Soviet market seemed impossible. Hence the Indian Coffee grower must enter the world market and to face its competition must pay close attention to the quality of the coffee grown and the cost of production. On *the tea* front, there seems to an air of optimism despite the shortfall of 42 million kg tea production this year and the loss of the Soviet market which absorbed 100 million kgs of the 200 million kgs which were exported. 30 per cent of the loss has been made up last year by exports to hard currency areas and there are export possibilities in Egypt, Pakistan UK which are good prospects. Here again the principle of exporting only the surplus after meeting the domestic demand cannot be faulted because India is a major tea consuming country, though the per capita consumption of tea is only 0.1 kg, but this figure should allow for the fact that tea is not the common man's drink in the South. The total domestic consumption is 530 million kg in 1992. Exports are stagnating at 200 to 210 million kgs. The

tasks confronting the tea industry to increase tea production to meet the 3 per cent annual growth in demand are; a) 40 per cent of the land on which tea is being grown is old and need to be recultivated both to increase output and improve quality; b) government owned badly managed tea estates should be liquidated and sold to private enterprises to ensure full utilisation of production capacity; c) to continue expanding new areas for tea cultivation as in Orissa, Arunachal Pradesh and Baruch valley. On *spices*, the total area under spices cultivation as reported by the Spices Board is 1.8 million hectares and produces 20 lakh tonnes, of which 94 per cent are con-

sumed domestically and 6 per cent exported. 1 to 4 per cent of production is exported in major spices like chillies, ginger, turmeric and coriander, 89 per cent of cellar, 61 per cent of pepper, 33 per cent of saffron and 27 per cent of cardamom. There is the growing export demand for vanilla and paprika which are being increasingly produced. Also what is needed is an integrated plan to improve productivity through replanting, improved marketing and diversification into value added items to meet both an expanding domestic market and export demand which seem continuously on the rise.

III. Industrial Development in Tamil Nadu

After the rather hectic industrial development, particularly the flurry of industrial approvals, January was somewhat quiet, with few negative features to be noted.

On the positive side, *First*, the Rs. 34 crores *Indian Additives plant* (phase I) was inaugurated at Manali a joint enterprise of Madras Refineries and Chevron chemical of the US. It will manufacture 15,000 tonnes of petroleum additives to improve the quality of lubricants and the functioning of engines. *Second* *MALCO* is to be reopened, possibly helped by the improved power position of the state following the good rains which have improved hydel generation. On this basis, it is contracting a rather large loan of Rs. 60 crores from financial institutions. *Third*, as noted earlier, the 'in principle' accord given to the *South Gas grid* will bring natural gas in liquified natural gas to the southern

states. Their own gas supply from the Krishna Godawari basin and the Cauvery basin are limited to 3.2 million CMO which could increase to 8 million CMO by the turn of the century. *Fourth*, the *MVR group*, a major cashew exporter is entering the capital market to raise Rs. 35 crores. It recorded an export turnover of Rs. 100 crores last year and is estimated to pass Rs. 175 crores this year, and provides a sound base for its programmes of diversification and modernisation including a plant for production and export of salted and roasted cashew packs. *Fifth*, the union government has cleared its Rs. 487.47 crores modernisation cum expansion plan of *Madras Fertilisers*. The project will update its Manali plant, extend the life of the plant by 15 years and increase its production capacity by 40 per cent and reduce its energy consumption by 41 per cent, making it environment friendly.

Sixth, a Rs. 12 crore extraction plant set up by *Indian Castor* will process 150 tonnes per day of seeds and will take up down stream chemicals at the second phase at a cost of Rs. 24 crores. *Seventh*, *Poompuhar Shipping* has asked the government to approve a \$50 million equity participation by the Canadian steam ship company. The Canadian company will be ploughing back profits into Poompuhar. *Eighth* *Innovation Modi Equip* is setting a medical engineering project to manufacture medical implants like knee and total hip as well as accessories and instruments such as ring fixation, precise surgical pneumatic drills and all precision engineering products made out of alloy steel and special plastics. *Ninth* *South Indian Bank Ltd.* received RBI license for its first industrial finance branch in Coimbatore. It is a specialised bank financing only industrial ventures. Its base in Coimbatore is well established with more than 51 years of services to industry in the state. *Tenth*, *specialised TTG Industries Ltd.* has itself designed, developed and tested a fully automotive warehouse system. It incorporated fully automated conveyors, pick up machine and loading and unloading machines all interlocked through a micro processor system. Using just one operator, it can load and unload 100 operations per shift at the central control console.

On the negative side, *first*, severe demand recession has hit the *tiny and small scale industries* in the automotive, electrical and engineering sectors. Unfortunately the industry is unable to evolve a common strategy to solve its problems. There is no one who seems capable of understanding and analysing its situation. One of the problems is that the large firms, like TELCO had not paid the December dues and this was passed down to the ancillary suppliers, Lucas TVS and lower

down the line. Lay off of workers is expected to begin in March. *Second*, the *state government* is reported to have imported graphite refining technology from Sweden, when that technology is available within the country from CSIR at much lower cost, with no foreign exchange outgo. TAMIN is building the Rs. 500 crore graphite beneficiation plant at Sivaganga with the capacity of 200 tonnes per day with "column floatation technology" supplied by a Sweden firm. The Madras unit of the National Metallurgical laboratory, one of CSIR's laboratories, has demonstrated that Sivaganga ore could be converted to high purity graphite using its column floatation cell. Why TAMIN has wasted resources importing this technology from Sweden is under investigation? *Third*, the state government is setting up through *SIDCO* an industrial estate for food processing with Yen credit from Japan. It has identified land on which the shed and other infrastructural facilities can be built but is unable to persuade entrepreneurs to commit themselves to start units in the estate. It is a pity that the government and SIDCO have gone so far without ascertaining the reactions of the Tamil Nadu Entrepreneurs to the proposed project. *Fourth*, *Small Scale units in Pondicherry* producing sachet shampoo have run into financial difficulties as well as competition from large units and are therefore pressing the union government either to grant total excise exemption for their product or include them in the list of commodities exempted from excise. Even so they want that the exemption limit should be applied to units with capital of Rs. 20 lakhs and not Rs. 5 lakhs as at present. Here again the units should not have gone into operation without prior clarification of these issues. Now it is going to be a long drawn out process during which some of them will have to close down their shutters.

This month the positive features are pre-dominant, but what is being reported month after month as approved are inten-

tions and promises and not actual operations, on which data is needed and is not available.

IV. Education, Science and Health

This group of activities in this section and the next concerns the development of the state's human resources on which the agricultural programmes and industrial development is dependent.

Educational Reforms

There was yet another National Seminar in Madras on autonomous colleges in which both the seminar conclusions and that of UGC and the government was to agree on the need for the increase of such colleges as the means of higher education reforms. And yet there is no movement on it.

Literacy

The census data on the state referred to earlier shows a sensible rise in the ratio of literate persons to 62.66 per cent and even more in the percentage of women literacy which increased in the decade 1990-91 by 11 percentage points to 51.33 per cent. The results of the total literacy campaign operating in 170 districts will further push forward the literacy of the people. Three issues need to be noted. The first is the close relation between culture and education. The use of local talk, arts and other cultural activities of song, dance, drama and music has created the proper environment before the actual teaching and learning gets under way and has improved in efficiency of TLC. Second, the rapid increase in the first generation literates

who have completed their study of the first 3 literacy texts should be followed up by post literacy programmes, if there is to be reversion to illiteracy. Third; the voluntary agencies must maintain their presence and strong activity in the programme both to prevent its politicisation and give support to the social reforms that the literacy campaign generates. One development that the evaluation of the programme by the Development Education Communication unit of the Space Research centre in Ahmedabad report is that functional literacy and numeracy is more important for the learner than alphabetical literacy and here both local dialects and the further increase of radio and TV should be used to achieve the end purpose of functional literacy.

Technical Education

UGC's expert committee has called for effective steps to improve the quality of MBA students, beginning with rigorous criteria for granting approvals to management programme. UGC and AICTE should not economise programmes which they have been doing without ensuring that basic facilities and adequate teaching faculty exist; it is important to develop greater industry and institute interaction. The "user system", particularly the corporate sector needs to be involved in curricular reforms, training and research in management institutions. There should also be greater community

involvement in management programmes through curriculum that reacts to the requirement of non corporate and under equipped sections which is a strong case for making management education mass based with considerable emphasis on the unorganised sector.

Science

As is the tradition, the Prime Minister inaugurated the Indian Science Congress. He called for developing an appropriate development model suited to Indian conditions and not duplicate western life styles. There is need for massive employment generation and increased research funding particularly from industry which is contributing only 13 per cent of the needed funds, unlike industries in the developed countries. The Congress for more adequate funding of scientific research. The Congress also was warned that if India accepted the Dunkel draft, we shall be signing our rights to independent opinion with regard to the country's legal procedures concerning software. Opposition to the Dunkel draft should pin point how it will damage chemical industry and agriculture. The Ministry of Science and Technology has identified 16 major projects to give result oriented direction to various ongoing R&D activities undertaken by the various departments during the VIII Plan. In this regard, several R&D documents are aiding SSI facing funds crunch to get over the problem. Three southern agriculture universities are to have monoliths of major soil types to understand the mysteries of nature for sustained utilisation in the changing global environment. The union government has allocated Rs. 1000 crores for horticultural development during the VIII Plan

and a further Rs. 450 crores to promote horticultural exports — much needed for a long time and for which the country is well suited. The Department of Ocean Development is setting up a national Institute of Ocean Technology in IIT, Madras to study exploitation of wave energy and explore the sea in the Andamans. In view of the lack of any scientific activity, the chairman of the Programme Management Board of the National Superconductivity Programme, Dr. CNR Rao, has resigned. It is hoped that this will shock the body into more effective science action.

Health

An important development is the increasing participation of voluntary agencies in health care programmes. In Tamil Nadu the Environmental Society, Madras, with the Centre of Biotechnology, Anna University and the Madras Corporation launched in January a mosquito control programme. 26 students of class 9A of Boston Matriculation Secondary school formed the core team to implement the mosquito control programme in South Madras in the 12 sq km area extending from the Boat Club to the YMCA including the Adyar river. The two pesticides in use kills mosquitoes at the larval stage itself. The spraying of the area once a fortnight is being supervised by the centre of Bio technology, Anna University. The pesticide, Biocide's, is not a chemical and so is not harmful to the marine and human life. In the course of their spraying these are being explained to the housewives by the students who go from house to house with leaflets. So there is an educational programme also under way in this campaign.

V. Employment and Labour Relations

The 34th conference of the Indian Society of Labour Economics was an important occasion to examine the macro situation on labour and employment. It was noted that the liberalisation policy of the economy which is aimed at opening up large prospects of trade and industrial growth has also begun to throw out the workforce from employment, particularly in the public sector. It is stated that the new economic policy is likely to result in an additional 1 to 3 million unemployed in the current year 1992-93, and 4.8 million in 1993-94 — mostly from the Public Sector. An important contribution to this unemployment is the mismatch between employment increases and addition to the labour force over the 70s and 80s leading to the huge unemployment backlog with which the VI and VII Plan started. According to the Planning Commission in 1990-91, unemployment was high at 13 million — (7.63 million rural and 5.46 million urban). The labour force is projected to increase by 35 million in the VIII Plan (1992-93) and a further 36 million in the IX Plan 1997-2002, which means that 58 million will have to be provided with employment between 1992-1993 and 94 million in the decade 1992-2002. Employment potential in the organised sector will grow by 2.6 per cent per annum during the VIII Plan on the basis of the pattern of investment and production assumed in it. Eight million jobs would be generated during the first couple of years, nine million in the later years, including nineteen million towards paid employment in the unorganised sector. One of the features of unemployment is with a more educated unemployed in the rural areas than in the urban areas as jobs for the educated are difficult to come by in rural areas. According to

NSS in 1987 of the 47 per cent men and 63 per cent of women unemployed were matriculates or graduates, while for women 43 per cent in urban and 24 per cent in rural areas were educated ones. Studies show that women face a higher incidence of unemployment than men and form half the total jobless. Women are subject to labour market discrimination and are relegated to low paying occupations. Development is increasingly marginating women, they are usually excluded from productive work, are pushed into marginal occupations and are increasingly casualised in terms of employment. One economist explains this phenomenon: "the implicit association of the term workforce with some form of compensation say wages is, singularly, the most important among the factors contributing to a dichotomous analysis of the entire gamut of activities performed by women into domestic/non domestic, inside/outside the household, more important in the process of emancipation of women consequently and finds expression in the need to mobilise women into paid employment. This almost exclusive stress on the accessibility of women into wage work ignores both the question of women's inferior position in a segregated hierarchal workforce and the stringent demand of their combined duties. In the Indian context, a cultural cum material patriarchy, interwoven with perhaps the most hierarchal social structure of caste, constrains women far more than men in confining them to certain areas or kinds of work and excluding them from certain others". This can be seen in the work participation rates for 1981 and 1991 (the census data) which show a) the unemployed

rates of female participation; b) a continuous decline in the proportion of economically active female population; and c) the slow change in the pattern

of their employment dominated by low paid agriculture work despite over three decades of planned development.

Workforce Participation Rate*

	1981			1991			Female worker on % of 1000 male workers
	Persons	Male	Female	Persons	Male	Female	
Total	36.77	52.65	19.77	37.64	51.52	22.69	409
Rural	38.87	53.80	23.18	40.13	52.43	27.06	486
Urban	30.00	49.07	8.32	30.45	48.96	9.73	178

*in percentages.

These trends are also confirmed in the census data on percentage of population by activity and percentage distribution of work force by industry gaps which are, as of now available for the 1981 census, but will soon be available for 1991 also.

There is one interesting demonstration of the operation of the exit policy in organised industry. The Hindustan Ciba-Geigy has closed its pharmacy plant in

Bhandup after all their 914 workers decided to make their exit under voluntary retirement scheme which provides a monthly pension, confining education allowance and scholarship schemes for employees children, medical benefits for 10 years and hospitalisation benefit for the workers and spouse for 12 years. All this cost the firm less than Rs. 7 crores that it was losing this year and annually.

VI. Other Items

General Council of TNSCS & T

There was the first meeting of the new council constituted for the 3 years 1993-1995. The President, Minister of Education chaired the meeting which reviewed the work of the Council in the past 6 months covering research projects and publication of some of their findings, the

approval of all projects for this year, the growing programme of support to young scientists to attend important international and national science conferences in which they present their research paper and the work of the cell for Industry-Institution interaction. The programme for the balance of the year was discussed and approved.

Agricultural Education in Schools

A meeting of agricultural scientists and educational specialists was held in mid-January to review the proposal for introducing agriculture as a curricula offering in schools. It was agreed that upto Standard IX, there would be no agricultural subjects separately taught but that there should be an agricultural bias in the existing science and language subjects. Agriculture should be offered as part of the curricula in Standards IX & X. In Standard XI & XII the vocational stream has an agricultural option which should be updated and strengthened. The outline of the agricultural curricula for standard IX was reviewed and approved.

Madras Craft Foundation

A meeting of the Board of governors of the Madras Craft Foundation held in early January noted with satisfaction the progress made by the Foundation in taking over the land near Mahabalipuram allotted by the government for its functioning, the first building which has been erected on the basis of Laurie Baker's architectural plan for the buildings and the surrounding grounds. The plans for raising some further funds for completing the building programme were discussed and finalised.

IIC

There was a meeting of the Standing Finance Committee of the India International Centre which reviewed in some detail the Rs. 3 crore project for building an Annex to the centre on the land near it being allotted to it by the DDA. The cost estimates were discussed in general terms because no details could be developed until the land was received and the architectural plans finalised. At this stage it was felt that the project is

soundly conceived, that it should be related to the objectives of the centre and that the rate of inflation should be watched to see how much beyond the Rs. 3 crore, the estimate would go. As of now Rs. 2 crore could be obtained from the internal sources mainly the Depreciation Fund of the centre and Rs. 1 crore will have to be raised. Even this could be reduced by economies in the plan. The year's monthly panel discussions which are to centre around the new Economic Reform policy, began with a review of the new industrial policy. The delicensing and decontrol was welcomed and the means of streamlining the public sector enterprises and make them conform to the criteria to be laid down for their programme functioning were stressed.

AIACHE

The Southern zonal meeting of the All India Association of Christian Higher Education (AIACHE) was held at January end. The work of the association since its inception in 1927 was recalled and its strengths and weaknesses referred to. The occasion was used to recognise the services to higher education of some 20 distinguished specialists who were felicitated and given a silver tray and certificate of honour.

SRC and TNBCE

The two monthly meeting of the Governing Council of the State Resource Centre was held in the last week of January. The follow up of the recommendations of the meeting of the voluntary agencies was received and noted with satisfaction. Similarly the follow up of the decisions made at the last governing council with authorities in Delhi and the government in Madras was insisted on. The Director reported on the preparatory work for the

February Seminar

The paper for the February seminar "Small Scale Industries in Tamilnadu" appears as the first article.

Second Article

"A note on the Economic Outlook for 1993" appears as the second article.

Book Review

The review of Gabriele Dietrich's book "Reflection on the Women's Movement in India" appears in the Book Review Section.

MIDS News

Dr. C. T. Kurien addressed a meeting organised by the Tamil Nadu Science Forum, Madras on February 11, 1993 on "Secularism" and participated in a convention on "Secularism and Nation Building" organised by Citizens for a Secular Society, Madras on February 28, 1993.

Dr. A. Vaidyanathan spent two weeks visiting Delhi School of Economics, and lectured on Agricultural data base, Agricultural and Structural reforms and aspects of irrigation institutions. He also delivered the Dr. L. S. Venkataramanan Memorial Lecture on February 1, 1993 at ISEC, Bangalore.

Dr. S. Neelakantan delivered the Valedictory Address on "The Role of Transaction Costs in Indian Agricultural Development" at the National Seminar on Planning and Development organised by the Centre for Scientific Socialism and Rural Development, Nagarjuna University, Andhra Pradesh, on March 4, 1993.

Mr. S. Guhan gave a lecture on 'Ayodhya and Future of India' at Centre

for Policy Studies, Madras on February 14, 1993. He also gave a lecture on "Adjustment in the Fiscal Sector" at Loyola College, on February 25, 1993, and participated in a seminar on "New Economic Policies", at the Institute of Public Enterprises, Hyderabad, on March 8, 1993.

Dr. M. Thangaraj spoke on "Buddhism and Dalit Liberation", in the Inter-religious Dialogue for Dalit Liberation, on February 26, 1993, organised by the Department of Dalit Theology, Gurukul Lutheran Theological College, Madras.

Dr. Sudipto Mundle, RBI Chair Professor, Institute of Public Finance and Policy, New Delhi, presented a seminar on "The Economic Instruments of Pollution Control" at the MIDS on March 3, 1993.

Prof. Alladi Venkatesh, Visiting Professor, Institute of Afsaetningsokonomi, Odense University, Denmark presented a seminar at the MIDS on "The Rise of Consumerism in India: A Postmodern Perspective" on March 10, 1993.

SMALL SCALE INDUSTRIES IN TAMIL NADU : DEVELOPMENT OF SSI SECTOR IN INDIA

M. Sundara Rajan and K. Namagiri
Small Industries Service Institute, Madras

THE growth of small scale industries during the last three decades is one of the most significant features of planned economic development in our country. The increase in number of units, the increase in the volume of production, the wide variety of new products requiring highly developed skills, the employment opportunities created, the entrepreneurial skills developed, the increase attained in productivity, the extent of industrial dispersal achieved—both spatial and ownership, the amount of capital mobilised for industrial purposes, the contribution to total industrial production, all these testify to the progress achieved and the vast potentialities that further exist in the small-scale industrial sector.

Progress of Small Scale Industries Through Successive Plans

In the first Five Year Plan, small scale and village industries were broadly divided into village industries, handicrafts and small scale industries. The small scale industries were again divided into three groups.

1 Those for which small scale production had certain advantages and not affected by large scale industry.

2 Those which manufacture certain parts or certain stages of production in a manufacturing process in which the predominant role was that of large scale industry.

3 Those which have to meet competition from the corresponding large scale industries.

A positive programme for the development of modern small scale industries was suggested by the Ford Foundation Team in 1954 because with lower investment, small scale industries can create more employment opportunities. The Team recommended the establishment of three national organisations in the mid and late fifties to provide specific support to that sector, i.e., (1) the Small Industries Development Organisation (SIDO) to provide technical consultancy; (2) the Small Industry Extension Training Institute for training personnel connected with the development of small industries;

(3) The National Small Industries Corporation (NSIC) for undertaking commercial operations in aid of the small units. The first plan provided a total outlay of Rs.5 crores.

In the Second Five Year Plan, to give speedy encouragement to the development of small scale industries the government launched an assistance programme which included (1) providing information on prospects of industries; (2) drawing up schemes for the manufacture of various items; (3) technical assistance; (4) assistance in procurement of machinery on hire purchase basis; (5) training; (6) factory space in industrial estates; (7) credit facilities on liberalised terms; (8) participation in Government Stores purchases; and (9) modernisation in technological development.

In the successive Five Year Plans, the Government of India increased the outlay and also announced concessions. It was stated in the Third Five Year Plan that there should be close integration between small scale and large scale units over a wide range of industries and development of small industries as ancillary industries.

The Fourth Plan insisted on formulation of a small scale industrial policy involving

modernisation of the small scale sector, incentives to selected small scale industries, marketing and export promotion, close link between large scale industries and small scale industries, encouragement to entrepreneurs with technical and managerial background, key statistics for the small scale industries, supply of critical inputs, and promotion of industrial cooperatives of the service type.

The Fifth Plan aimed at removal of poverty and inequality in consumption standards of persons, creation of large scale opportunities for fuller and additional productive employment and improvement of their skills so as to improve their level of earning. So, the Government encouraged small scale industries wherever possible.

The Sixth Plan also aimed at development of existing as well as new viable small industries. As the village and small scale industries constitute an important segment of our economy in terms of output, employment and export, the Seventh Plan provided for appropriate infrastructure, introduction of modern management techniques, etc.

Table 1 shows outlays under Central and State Plans in Small Scale industries sector.

TABLE 1 : Outlays under Central and State Plans in Small Scale Industries Sector

Plan	Years	Rs. (in crores)
First Plan	1951 — 56	5.20*
Second Plan	1956 — 61	56.00*
Third Plan	1961 — 66	113.06
Annual Plan	1966 — 67	53.48
Fourth Plan	1969 — 74	96.19
Fifth Plan	1974 — 79	199.66
Annual Plan	1979 — 80	104.81
Sixth Plan	1980 — 85	616.10
Seventh Plan	1985 — 90	1120.51

*Excluding the investment in Industrial Estates.

Source : The Role of SSI Sector in the Changing Industrial and Economic Scenario (Seminar volume), FASSI, Madras, 1992.

Apart from increased allocation in the Plan, the Government of India is assisting small scale industries sector through its policy measures.

Definition of Small Scale Sector

During 1955, the Government of India had defined small scale industry as a unit employing less than 50 persons if using power and less than 100 persons without use of power and with capital assets not exceeding Rs. 5 lakhs. The industries covered by other Boards and factories registered under the Industries Development and Regulation Act 1951 were excluded.

In 1960 employment criteria was dropped and then onwards only investment criteria was adopted; but there was difference in investment limit between small scale industrial units and ancillary units. As on date the definition of small scale industry is as follows:

- An industrial undertaking in which the investment in fixed assets in plant and machinery, whether held on ownership terms, or on lease, or by hire purchase, does not exceed Rs. sixty lakhs.
- In case of an industrial undertaking

referred to in (a) above, the limit of investment in fixed assets in plant and machinery shall be Rs. 75 lakhs provided the unit undertakes to export at least 30 per cent of the annual production by the end of third year from the date of its commencing production.

The number of items exclusively reserved for small scale sector has been enlarged from time to time taking the present number to about 840. The wide range of products includes agro-based products, chemicals, drugs, electrical and electronic goods, ceramics, sanitaryware, handicrafts, automobile ancillaries and fasteners.

Achievement of the Small Scale Sector in India

In the 38 years since the launching of the Small Industries Movement in India in 1955, the small scale sector has developed considerably despite odds. Table 2 shows the performance of this sector in the country as a whole.

Table 2 : Performance of the Small Scale Industries Sector

Details	1973-74	1983-84	1987-88	1991-92
No. of SSI units (in lakhs) including unregistered	4.16	11.58	15.92	22.00
Production (crores of Rs.)	7,200	41,620	85,700	155,340
Employment generation (million)	3.97	8.42	10.70	12.43

Source : The Role of SSI Sector in the Changing Industrial and Economic Scenario (Seminar volume), FASSI, Madras, 1992.

The growth in numbers of India's small scale industries is from a mere 1.78 lakhs at the end of the Fourth Plan to 22 lakhs

in 1991-92. The number is expected to exceed 35 lakhs by the end of the Eighth Plan. Small Scale Industries production

which was worth Rs. 7,200 crores at the end of the Fourth Plan has now touched Rs. 106,875 crores and is expected to exceed Rs. 150,000 crores at the end of the Eighth Plan. Small scale industries have stepped up their export fifteen-fold from Rs. 400 crores at the end of the Fourth Plan to Rs. 6,000 crores presently. Exports are expected to exceed Rs. 20,000 crores by the end of the Eighth Plan. The small scale sector employs as much as 40 per cent of the nation's industrial work force, 12 million self-employed entrepreneurs, technicians, skilled and unskilled workers and supervisors are provided gainful employment in the small scale sector and as a result a total of 60 million have been raised above the poverty line.

Small Scale Industries in Tamil Nadu

The small scale sector in Tamil Nadu has made rapid strides and its growth has been one of the most significant features

during the last four decades. Tamil Nadu has been one of the important States to spear-head the small industry movement in our country. Beginning from a modest level of 7386 units in the mid-fifties the sector has grown considerably in size. At the beginning of 1993 about 1,60,000 small scale units are permanently registered and almost an equal number are provisionally registered with the State Directorate of Industries and Commerce. A considerable number of small units, almost equal to 50 per cent of the registered units, remain unregistered, and most of such units are tiny sector units and artisan units.

Group-wise data on small scale industries from the year 1955 are not available from published sources. So data have been taken from the Census Frame List. Table 3 gives the number of small scale industries registered with the Directorate of Industries and Commerce from the year 1955 onwards.

Table 3 : Groupwise Growth of Small Scale Industries

Sl no.	Item	1955	1965	1975	1980	1985	1991
1	Food Industries	579	889	1741	1761	7756	7836
2	Beverages, tobacco, tobacco products	50	76	141	220	563	1358
3	Cotton textiles	19	40	125	196	3956	9377
4	Wool, silk, synthetic fibre textiles	5	14	43	70	953	1532
5	Jute Hemp and Textiles	0	—	—	6	58	169
6	Hosiery and Garments	617	673	1042	1742	3292	10956
7	Wood products	377	468	746	1183	2141	4986
8	Paper products and printing	701	867	1540	2538	5039	10420
9	Leather products	213	256	424	773	1260	3296
10	Rubber and Plastic products	499	540	943	1515	2953	6761

11	Chemical and chemical products	1044	1261	2419	5675	7998	13152
12	Non-metallic mineral products	537	648	1247	2217	3404	6852
13	Basic metal industries	272	295	549	1032	1855	3038
14	Metal products	1749	1945	3333	5606	7158	13745
15	Machinery and parts (except electricals)	413	464	912	1666	6392	14435
16	Electrical machinery and apparatus	194	218	440	849	1599	5642
17	Transport equipment and parts	33	66	289	534	1505	4588
18	Misc. manufacturing industries	47	74	242	427	2375	5775
19	Repairing and servicing	37	132	566	1001	NA	NA
	Total	7386	8924	16742	30011	60254	134496

Note : NA = Not Available

Source : Directorate of Industries and Commerce, Madras.

The number of industries registered had grown from 7386 in 1955 to 60,259 in 1985. The simple growth rate in the decade was 87.7 per cent. In the number of units registered, metal products which occupied first place during 1955, 1965 and 1975 was relegated to second and third place respectively during 1980 and 1985. Chemical and chemical products which occupied second place till the seventies have come to first place in eighties. Food products holding third place, have come to the second place.

The total number of permanent units registered with small scale industries as on April 1, 1977 was 18,824 with a total investment of Rs. 10,978.41 lakhs, production of about Rs. 83,955.04 lakhs, providing employment to 1,70,555 persons. Investment per unit works out to Rs. 0.58 lakhs. Investment production ratio works out to 9, rate of employment created per Rs. 1,000 on investment works out to 0.15.

After a decade, that is, as on April 1, 1987, the number of units registered with the Directorate of Industries and Commerce was 81,769. In a decade, the number of units registered has grown by 334 per cent. This sudden spurt in registration can be attributed to the introduction of self-employment scheme.

The second All India Census of Small Industries was conducted by Small Industries Development Organisation in association with the State Directorate of Industries. This Census covered permanently registered SIDO units as on March 31, 1988. The Census reveals certain very interesting factors about the small scale sector. As on this date, there were 83,267 units permanently registered with State Directorate of Industries in Tamil Nadu as against 9.87 lakh units in the country. The State ranked fifth among all the States/Union Territories in terms of number of units. During investigation, it was

found out that 57,592 units (69.2%) were working, 24,825 (29.8%) units were closed, 318 (0.41%) units were non-traceable and 532 (0.6%) units were either double registered or falling outside the purview of Small Industries Development Organisation. Out of the 57,592 working units, 379 were non-responding; data collected were from 57,213 working units and 24,825 closed units.

The working units totalling 57,213 recorded a total production of the order of Rs. 4,51,302 lakhs (Rs. 32,178 lakhs in 1972-73), utilising 72.69 per cent of installed capacity during 1987-88 in the State.

Among the working units, 47 per cent were involved in manufacturing/assembly alone, 22 per cent in proceeding alone, 16 per cent in job work alone, and 7 per cent in repairing/servicing activities alone. Units undertaking combination of activities were only 7 per cent.

Around 98 per cent of the units were of SSI category. Ancillary units were more (0.22%), while SSE category units were just 1.42 per cent.

Around 79 per cent of the units were proprietary, 18 per cent partnership, 2 per cent limited companies, and less than 1 per cent cooperatives.

Around 13 per cent of the units had women entrepreneurs in the ownership/management team with women entrepreneurs numbering 2,387.

Between 1 and 2 per cent of the units were owned/managed exclusively by entrepreneurs belonging to Scheduled Castes/Scheduled Tribes.

Around 58 per cent registered SIDO units were in urban areas, 13 per cent in the metropolitan city of Madras and 29 per cent in rural areas.

49 per cent units were located in industrially backward areas and the rest in non-backward areas.

The industry group jute hemp and mesta textiles was having the maximum level of average per unit fixed investment followed by basic metal industries. Repairing and services had the least average per unit fixed investment. But food products group had the maximum investment.

The industry group beverages, tobacco and tobacco products had the maximum average per unit employment followed by chemical and chemical products.

But chemical and chemical products group had the highest employment generation.

Average capacity utilisation was 72.69 per cent in the small scale SIDO sector.

Only 1.55 per cent of units were exporting goods worth Rs. 49,662 lakhs during 1987-88.

Though average per unit export for exporting unit was the highest for rubber and plastic products, the major exports were from hosiery garments, leather and leather products and food products.

The raw materials mainly consumed by 48 per cent of the units were printing ink, printing paper, paddy, potassium chlorate, splints for safety matches, waxes, M S angles, bar strips, sheets and card board.

459 out of 846 reserved items were manufactured in the State i.e., 31 per cent of units were engaged in manufacturing reserve items.

Annual compound growth rate in production from 1972-73 to 1987-88 was 10.41 per cent.

95.4 per cent of small scale units in the State fell within the plant and machinery investment slab of Rs. 0-5 lakhs contributing 62 per cent of production in the small scale sector and 82 per cent of employment generated in it. There were only 4 small scale units with the fixed investment of Rs. 1 crore and above in Tamil Nadu.

93 per cent of small scale units were in the fixed investment range of Rs 0-5 lakhs. These units contributed 51 per cent gross value addition of small scale sector, while 7 per cent of small scale units in the fixed investment slab of above Rs. 5 lakhs contributed 49 per cent of gross value addition.

Why small Scale Industries?

The above analysis reveals the growth of small scale sector due to the policy measures taken by the Central and State governments in the last four decades. Still certain diverse measures are needed

due to rampant unemployment problem in the country as a whole and Tamil Nadu in particular.

In the absence of employment statistics in the organized sector, the Employment Market Information Programme (EMIP) is the only official source providing a systematic and continuous data base relating to employment in the organised sector. The EMIP collects information from public sector and non-agricultural establishments in the private sector which employ ten or more persons.

By the end of March 1990 the overall employment level in the organised sector of Tamil Nadu was 2251.5 thousand persons, registering a growth of only 0.99 per cent growth in 1989-90 over 1988-89.

Table 4 will reveal the declining trend in employment generation both in private and public sectors.

Table 4 : Growth Trend in Organised Sector Employment in Tamil Nadu

Year as on 31st March	Public sector	Percentage change over previous year	Private sector	Percentage change over previous year	Total	Percentage change over previous year
1981	1218.9	1.27	684.6	3.40	1903.5	2.03
1982	1266.9	3.94	701.6	2.48	1968.5	3.41
1983	1336.4	5.49	701.1	(-) 0.07	2037.5	3.51
1984	1402.6	4.95	685.2	(-) 2.27	2087.8	2.47
1985	1418.2	1.11	706.6	3.12	2124.8	1.77
1986	1443.4	1.78	697.1	(-) 1.34	2140.5	0.74
1987	1476.5	2.29	693.3	(-) 0.98	2166.8	1.23
1988	1514.4	2.57	683.1	(-) 1.04	2197.5	1.42
1989	1540.8	1.74	688.6	0.81	2229.4	1.43
1990	1545.7	0.32	705.8	2.50	2251.5	0.99
Annual average growth rate (%)		1.74		(-) 0.01		

Note : Employment in '000 persons.

Source : *Tamil Nadu : An Economic Appraisal, 1990*, Government of Tamil Nadu.

It is evident from the Table that the overall employment growth had declined between the two periods, the public sector experiencing slow down in the pace of growth and the private sector a declining rate.

While the growth in the organised sector is almost negligible, educated job seekers are growing in size every year.

The employment exchanges in the State had on their rolls 663,000 persons, that is, nearly 21 per cent higher than the previous year. Out of these only 7.1 per cent were placed in employment which was lower than the previous year percentage. The sharp increase in the rate of registration added with decline in placement has swelled the unemployed persons to 3028,000 at the end of March 1990 from 2659,000 in 1989.

The only solution for this unemployment problem is creation of self-employment opportunities. The recent census results on employment support the argument. There are many agencies at the Central and State level for giving guidance to new entrepreneurs. Entrepreneurial Development Cells are also functioning in technical institutions.

Government agencies both Central and State, banks, and Small Industries Associations are regularly conducting Entrepreneurial Development Programmes. In these programmes the success rate is estimated only at 5 per cent and below. In order to make the Entrepreneurial Development Programmes more successful, the number of programmes could be reduced. But specific product oriented training programme may be conducted for particular target group.

The following measures are to be adopted while conducting programmes:

- 1 Entrepreneurship Development Programmes may be conducted for a duration of at least three months for specific group of industries.
- 2 In each group, products can be identified and market survey conducted for finding out the demand.
- 3 The EDP students should be given exposure in their particular field by arranging as many factory visits as possible.
- 4 The course lectures should be drawn as far as possible from the concerned field.
- 5 The agencies conducting the programme should help the candidates in preparing the project report and then in forwarding the reports to the financial agencies.
- 6 Market Survey Report should form part of project report.
- 7 The agencies should assist the entrepreneurs till they commence their production.
- 8 Review meeting can also be conducted till the entrepreneurs establish themselves.

The Government of Tamil Nadu has identified the following industries as thrust areas. Institutions and agencies can concentrate in identifying individual items in each group and train the target group so as to achieve success in EDPs.

- 1 Leather
- 2 Textiles and Hosiery
- 3 Electronics and Software
- 4 Auto components
- 5 Drugs and pharmaceuticals

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- 6 Petro chemicals including downstream projects in Manali and Thanjavur
- 7 Industrial alcohol based organic chemicals
- 8 Agro based industries and food processing industries
- 9 Salt and marine base industries
- 10 Gem and jewellery (especially studied jewellery)
- 11 Engineering goods
- 12 Sea food

13 Export-oriented units.

The liberalized new Industrial Policy would give a jolt to the small scale sector inasmuch as greater competition and consumer awareness will dictate economic decisions in the years to come. Keeping in view the Eighth Five Year Plan, proposals have been formulated to meet the requirements of the small scale sector. The agencies and institutions should take this situation into account and try to develop more entrepreneurs in setting up healthy ventures so as to find a solution to the unemployment problem.

References

- Bhattacharya, S. N. 1986. *Development of Small Scale and Cottage Industries*, Metropolitan Book Co. (P) Ltd., New Delhi.
- Government of India, 1992. *Report of the Second All India Census on SSI in Tamil Nadu*.
- Ram K. Vepa, 1983. *Small Industry: The Challenge of the Eighties*, Vikas Publishing House Pvt. Ltd., New Delhi.

A NOTE ON THE ECONOMIC OUTLOOK FOR 1993*

Malcolm S. Adiseshiah

The Impact of Ayodhya

IT is too short a time to assess the impact on the various facets of the Ayodhya disaster - the destruction of business, the loss of life, violence of all kinds and its impact on the share market, the factories, the farms, the movement of foodgrains and trade generally. One thing is clear that it has a negative effect on the economy. It is slowing down the reform process, which is needed urgently, because both the authorities and some sections of people are concerned with repairing the damage caused by Ayodhya rather than with increasing trade, building up foreign exchange, raising productivity of industry to create an export surplus, expanding foodgrain production to avoid the import of wheat and rice that has been done this year, etc. The preliminary assessment by businessmen is that on the first day after the Ayodhya events that is, December 7, some 60 crores of rupees worth of actual damage to business occurred in Bombay. The first week's damage has been calculated to be around Rs. 2000 crores all over India, which includes the

loss of work in industry, in trade, and even agriculture as a result of various bandhs, such as the Bharat Bandh. I am concerned myself with the short term (one to two years) impact of the Ayodhya event on the economy which could be repaired in the next five years, which should mean that we have lost five years of lead time for our onward economic development. Its impact on society, on people, on the various religious and cultural groups is serious and in some cases not repairable.

Stability and Economy

The development of the economy and its turn around after the very serious set backs, political as well as economic, that we have had in 1990-92 point to the essential need for government stability. Only on this basis can the share market function, the banks get back their dues, and the confidence necessary for the business climate be developed. There is no need for any instability in government as a result of Ayodhya. It will be an act of folly to move in that direction, as that will cause a further serious set-back in our economy.

The Economy and the Official Structure

The development of the economy, the formulation of the five year plans and the annual plans, their implementation, the development of the infrastructure needed for industrial development and agricultural progress, the building up of export surpluses so that the trade imbalances could be gradually corrected, all these require as an infrastructure a sound, hard working and honest bureaucracy. Governments change but the economy goes on and requires the officers to provide it with the modicum of continuity. But the bureaucracy also needs monitoring, pruning, and disciplinary control. It needs monitoring because while the technical implications of the economic advances are important for which the officers should be given a free hand, the broad direction in which each sector and sub-sector of the economy moves and the balancing of meeting the needs of the poor majority of the country with the needs of middle class is something which the political leadership should take responsibility for and should use to monitor what the officers are doing. The pruning of the bureaucracy is also needed for several reasons. Efficient working requires that we have a minimum or optimum group in government offices and not as at present the over manned bureaucracy which keeps multiplying every year. We are looking for savings and economies and one important means of saving would be through pruning our bureaucracy. The bureaucracy also needs disciplinary control. First because from the top to bottom the climate of corruption in the country has also entered it and it needs to be checked and controlled; if necessary by dismissing those with proven records of accepting bribes and jailing those who commit illegal acts. This discipline should run from the

bottom to the top. But it also argues that society's base should also gradually become corruption free, and not accept it as a general world wide phenomenon.

Inflation and the Economy

The short term priority problem in the economy is inflation. This is a priority because with about 40 per cent of people living on the margin of poverty, which means they spend about 80 per cent of whatever resources they have in purchasing their food, their clothing and their housing, every one point rise in the rate of inflation bears very hardly on them and forces them to further cut their sub-human living levels. The inflation also encourages speculation in the share market and the commodity market and gives rise to profiteering. It is not true that inflation has come under control or is declining because we are today running at an annual rate of inflation of 8-9 per cent which is on top of last year's inflation of 16 per cent so that our total inflation rate is 25 per cent. The source of inflation is the food articles prices, which therefore, bears heavily on the poor and whose real inflation is shown by the consumer price index and not the wholesale price index, which is the base for governments' calculations of inflation.

Convertibility and Its Impact

It would be helpful particularly to our foreign trade, both for exporters and importers, for the rupee to become convertible. But it will increase further the burden of our \$80 billion foreign debt and we are not ready for it. What foreign exchange reserves we have of about \$5 billion is the result of the loans made to us by the World Bank, IMF and ADB. They are not resources that we have earned through exports, so I think we cannot have convertibility of the rupee

*Article prepared for the January 13, 1993 issue of *Dalal Street Investment Journal*.

till we are able to earn our foreign exchange which may be towards the end of the VIII Plan.

The Next Budget and the Economy

The priority for the next budget is to help the economy keep on with the very difficult reform programme, and not go in for further reduction in dues, taxes, subsidies which will only add to our deficit, because our direct taxes are low and the government is not able to collect its dues even at the present rates. The main function of the budget should be to increase and expand investments, both public and private, and capital formation and not reduce government revenues.

Foreign Direct Investment (FDI) and Economy

The foreign direct investment is slowly picking up. It is now at around \$300 million a year. If we maintain our economic and political stability and push on with our economic reform processes, FDI should gather momentum and we should move towards a target of half a billion

dollar in the next budget. This foreign investment should be in strategic areas including industrial and agricultural technology and not in financial services. The improvement of India's credit rating will depend only on one factor, on how well our economy is doing.

The Stock Market and Manufactures in 1993

The stock market, both the primary and secondary, will in 1993 continue its upward movement as measured by the SENSEX. In fact our problem with the stock market has been, that the stock market trends are far ahead of the performance of business firms and the trends in the economy. So, it is the economy which has to catch up with the stock and share market and not the other way about. In this area, I believe in 1993 the industries that will do well are petro-chemicals, electronic industries, and the automobiles which have been passing through the recession in 1992. 1993 also will see industries developing more on the basis of their performance and not because they carry certain well known names.

Book Review

MUSINGS ON AN UNEVEN NOTE

Padmini Swaminathan

Reflections on the Women's Movement in India: Religion, Ecology Development, by Gabriele Dietrich, Horizon India Books, New Delhi, 1992, pp. 145, Rs. 150.

THE book under discussion consists of an important set of essays but of uneven quality. The author has not bothered to provide an introduction; nor has any attempt been made to contextualise each essay. This lacuna notwithstanding, the book discusses issues very crucial for consideration by the Indian Women's movement at this juncture.

The essays dealing with Women and Religion, Sexuality, Dalit Movements, and Ecology and Culture, are particularly interesting for the theoretical insights that they provide. Based on her own background and experiences of working in the area of religion, the author has put forth certain methodological principles on the question of how to deal with religious tradition. To quote the author :

1 It is necessary to analyse religious sources as far as possible with methods of materialist history writing, i.e., connecting any statement on women with their actual position within the mode of production of the time in which the statement is made. It has also to be taken into account that most religious sources, and most history books, have been

written by men and that this has ideological implications of its own.

2 Research on the position of women in religions cannot focus primarily on religious laws and ethical norms which ascribe women a certain fixed position... On the other hand, most religious sources also know of women who have lived lives in their own rights, be they unmarried or widowed, and our attention has to focus on such women's roles which allows us to develop a wider perspective.

3 ...Religion has been one of the strongest forces to uphold the institution of the patriarchal family. Religious family laws mainly serve this supreme purpose. Likewise, patriarchal family has strengthened institutionalized religion. To break through this alliance is a major task which the women's movement has not even tried to tackle (p 23-26).

The author makes a plea to the women's movement to attempt to appropriate religious history from below rather than take an anti-religious stand. "Instead of allowing communalist forces to hijack women's issues, we can as well try to discover our own religious history as

women, across communal barriers, and on this ground dismantle the communalist claims of religious and political leaders" (p 32).

A discussion of the ideological assumption underlining sexuality (making the latter 'dirty' and therefore taboo) forms the subject matter of the essay on Sexuality. Dietrich laments the fact that in India hardly any discussion on sexuality takes place. If at all, it is mostly as part of the discussion on obscenity, media policy or rape. She also brings out very clearly the fact that sexuality in India acquires legitimacy only as an instrument of fertility. Further the moral superiority of women is located in their supposed sexlessness: "Men are born sexual beings, women are born for motherhood. This dichotomy is expressed in cultural values which go back to ancient literature" (p 41). What has, therefore, become obvious is that sexual stereotypes are connected in a very direct way with social roles, and that sexual subjugation is at the root of all other subjugations. "The whole concept of a woman having control over her own body is virtually unthinkable" (p 49).

In the essay on Dalit Movements, and Women's Movements, the author attempts an interface between patriarchy, the caste system and untouchability based on concrete case studies from Tamil Nadu. She alludes to the tendency in the women's movement to play down the caste factor and to emphasize the unity among women as victims of violence. Some of Dietrich's concluding observations on this issue are worth reproducing:

1 Without endogamy, caste cannot be maintained. However, even if inter-marriage takes place, patriarchy needs to be abolished since otherwise the woman will be subsumed under the husband's caste.

2 ...In the discourse on the women's movement (monocausal explanation for the origin of caste and patriarchy) have led to a preoccupation with Brahminic sexual controls over women and an idealisation of low caste and tribal sexual freedom, while the collective rape of Dalit and Adivasi women, though a well-known phenomenon, remains very difficult to tackle. In the Dalit movement racial theory has led to an externalization of the enemy so that patriarchy and casteism among Dalits cannot sufficiently be tackled. Facing patriarchy and casteism within is an essential exercise for both the women's movement and the Dalits in order to overcome these phenomena.

3 ...Transition from matrilineal to patrilineal systems is an important aspect. However, even matrilineal system have forms of patriarchy authority which is vested in maternal uncles and male cousins. It is important to see how the system operates. Some of the backward castes who today are involved in gang rape of Dalit women, practise uncle and maternal cousin marriage which originates from matrilineal customs. They have also taken to female infanticide among their own families. Thus abstract notions about patriliney and matriliney may not be too helpful here.

4 ... We in the women's movement need to acknowledge that the anti-Brahmin movements, though shaking Brahminism and strengthening the backward castes, have not tackled untouchability. In general, anti-Brahminism does not deliver the goods. We need to spell out what is our contribution to the struggles of Dalit women (p 91-92).

In the essay on Women, Ecology and Culture, Dietrich provides among other things a feminist critique and interpretation of Vandana Shiva's book *Staying Alive*. Dietrich's argument is that, as long as the religious connotation of *prakriti shakti*, etc., (spiritual values projected by Vandana Shiva) is safely in the hands of the Chipko

women, they may indeed express a feminist ecological perspective and the concept of sacredness of life. Picked up by the cross currents of caste and middle class ideology, such concepts are open to communal manipulation and can even be used to manipulate women and ecological issue from a middle class perspective. "The communalist manipulation of the feminine principle is an area which needs more exploration" (p 104).

The theme that the author repeatedly stresses in the above essays is that, despite being oppressive structures in many of their organized forms, religion have also given inner spaces to women and ecological spaces to larger communities. These aspects need to be rediscovered and weighed against potential communal manipulation.

The essays entitle *The Secular State, Freedom of Religion and Women's Rights, Women and Work, and the Development Debate and Gender Implications* are the ones which impart an uneven quality to the book (an allusion we

made in the beginning). The first of the above mentioned essays is more in the nature of a journalistic piece and need not detain us. The second piece dealing with a Marxist perspective on women and work is very dated in the coverage of issues. The lucidity of language that one finds in other essays is conspicuous by its absence here; the essay makes very tedious reading. It is also difficult to decipher the central argument of the whole piece. The third of the essays, namely, the one dealing with the gender implications of development debate, puts together, albeit in a hotch-potch manner, several seemingly disparate elements. There is not just a lack of cogency in the organization of the material; more important, the case for spelling out the gender implications of any pattern of development undertaken, has not been coherently argued.

But for these three essays (which require extensive reworking in our view), the book is an important addition to the growing literature on women's studies in India.

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