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# Mid Year Review of the Economy 1986-87

by

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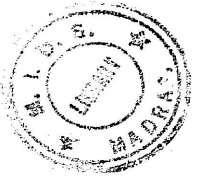


## Prolegomena

The year under review, 1986-87, is the second year of the Seventh Plan and the second operational year of the government which came to power in early 1985. The first fact has implications for the Seventh Plan and the realisation of its objectives and targets. It also brings together on a fairly firm basis, the record and achievements of the Sixth Plan, on which the current Plan is based. The second fact is important because there has been some important policy changes introduced by the government, in economic policy and outlook, in fiscal policy, in industrial policy, trade policy etc, and it will be of interest to see the extent to which the changes have or have not affected the course of development in the area concerned.

The data for this review is as usual wide, varied and not always upto date or complete. The wide range of data refers to the statistical material emanating from the National Sample Surveys and the Central Statistical Organisation, the Planning Commission, the Reserve Bank and the ministries of government, about which there is a continuing problem of attempting to reconcile the differing data being reported on the same event, because of the differences in base years, methodology or purpose. The varied nature of the sources is a reference to the reports emanating from individual scholarly studies, from the National Council of Applied Economic Research, the Indian Institute of Public Opinion Research, the Centre for Monitoring Indian Economy, the Economic and Political Weekly on the one hand, the annual reports of the departments and ministries of government, the Reserve Bank, the Planning Commission and the official and academic assessments of programmes conducted by them. The incomplete nature of the data refers to the fact that the official statistics and/or

analysis is available with a serious time lag, as in the case of the Annual Survey of Industries for 1985-86 which will not be available till near the end of the Seventh Plan, or foreign trade statistics which appear with a 2 year time lag. Some of this material and/or the technique of their collection is unsatisfactory. In the agricultural area, for instance, there is still no reliable means of estimating the annual cotton crop production or even such a basic commodity as foodgrain production, which has had to be revised for the year 1984-85 towards the beginning 1986. There are important areas in which there are serious statistical gaps, as in the rural and unorganised sector employment field. With all these limitations, an analysis of the developments of the economy in 1985-86 and a forecast of likely trends in 1986-87 is needed and attempted in this note.

An Esquisse The Sixth Plan, which we no can assess, ended with the various targets - overall, agriculture, savings and investment and export growth - being achieved. It was not an outstanding record, but was one which moved the economy forward and provided a sound base for the Seventh Plan. Here it should be noted that Seventh Plan is started on a slightly easier base, at 3.5 per cent rather the 5 per cent growth for the terminal year of the Sixth Plan, 1984-85, posited by the Seventh Plan.

The first year of the Seventh Plan, 1985-86 has however, not done well, both in regard to agriculture when the aggregate production was not much above that of the previous year, which means agriculture recorded 0 growth. Manufactures did poorly at 6.3 per cent, not because of infrastructural constraints, because the infrastructural industries did well but because of poor management and a certain slackness in

productivity, and capacity utilisation. This was particularly regrettable because inflation during the year was well under control at 3.8 per cent. The savings and investment for the year were higher than that for the previous year. The most disturbing facet of the first year was the record foreign trade gap of near Rs.8000 crores, not because imports rose very high but because exports decelerated. The balance on current accounts is likely to be ahigh Rs.4000 crores which could exhaust our credit and reserves.

For the current year, the prospects look much better. As a result of the good monsoon, agricultural production could record a growth of 6 per cent, with food grains rising to 155 million tonnes - a good 10 million tonnes above that of the previous year, 1985-86. This means that the buffer stock could move towards 40 million tonnes calling for two actions by the government. First the use of the foodgrains to launch a massive programme of poverty alleviation. Second to divert some of the lands now growing rice and wheat to growing pulses, oil seeds and coarse grains. Manufactures should make up from the slack of the previous year, and with the modernisation, and increased capacity used to meet the demand of the scale of production, should record a 7 per cent growth. The infra-structure industries could move forward to 10-12 per cent growth. Savings and investment should continue at 24 per cent. The overall growth of the economy for the year could be between 5 to 5.50 per cent.

There are, however two areas where there will be a squeeze. First the inflation rate which was a low 3.8 per cent will be much higher between 8-9 per cent. Already in the first five months of the year the inflationary pressures are building. The second pressure point is the foreign trade and

balance of payments. Here not only is it necessary for the large firms to enter the export field which they are not now doing to push up our exports, but also there is need to review around 8-10 items of our imports to replace them by domestic production for which we have the capacity, or cut them somewhat drastically. Then we can meet our foreign trade and balance of current payments obligation.

1986-87 should be on the whole a good year. What it will mean for employment and poverty alleviation depends on structural changes, on which I have little hope, and the use of our foodgrains reserve which can provide some relief.

Overall Growth and Structural Changes

With the Quick Estimates of the Central Statistical Organisation (CSO) published of the growth rate for 1984/85 at 3.15 per cent[1], it is possible to estimate the growth rate of the economy for he Sixth Plan, which was 7.6 per cent for the first year 1980-81, 5.1 per cent for the second year 1981-82, 2.4 per cent for the third year 1982-83 and 7.8 per cent for the fourth year 1983-84. This means that the Sixth Plan attained its target rate of growth of 5.2 per cent. However as the base year for the Plan, 1979-80, recorded -5.2 per cent, the real growth rate which is the trend rate for the five years 1980-81 to 1984-85 was 4.4 per cent.

It is now possible also to look at the structural changes that have taken place in the economy over the past 25 years when planning was begun. The sectoral break up of the National income is as follows in percentage terms:

| Sector | 1950-51 | 1984-85 |
|---|---|---|
| Agriculture | 51.2 | 34.5 |
| Mining & Manufactures | 16.0 | 25.9 |
| Transport & Trade | 17.0 | 21.4 |
| Services | 15.8 | 18.2 |

The sizeable shift in the decelerating proportion of agriculture's contribution and the increase in the percentage contribution of the secondary sector stand out. A further analysis of the table during the Sixth Plan shows that the first two and half sectors - the commodity producing sectors of agriculture, mining and manufacturing and construction - increased by 4.3 per cent per annuam while the last one and half sectors, the non commodity sectors of trade, transport, hotel etc increased at near double that annual rate at 7.1 per cent. Within this 7.1 per cent, public administration and defence increased at treble the commodity sector rate at 12.1 per cent per annum.

CSO also reports that per capita income at 1970-71 prices at the end of the Sixth Plan, 1984-85 was Rs.771.5 which was / an increase of 3 per cent between 1979-80 (when it was Rs.663.9) and 1984-85. This should be seen along side of the private final consumption expenditure having increased by 5.6 per cent during the Sixth Plan period which was near half the rate at which government final consumption expenditure increased during the same period at 10.5 per cent. The structure of private final consumption expenditure during the Plan shows a marginal decline, food expenditure from 56.5 per cent to 56.4 per cent, and an increasing one in transport and communication from 7.1 per cent to 8.8 per cent and clothing and footwear from 10.2 to 10.7 per cent. This is the beginning of the trend in national development and the extent to which it was shared by the people will be discussed at the end of the paper.

The growth rate for 1985-86 is set by government and official documents - Economic Survey 1985-86, Annual Report of the Ministry of Finance 1985-86, Annual Plan 1985-86, Annual Report of the Reserve Bank of India 1985-86[2] at 4.5 to 5 per cent. The available evidence at this stage on the performance

of agriculture and manufactures during the year including infrastructural items indicate that the growth rate for 1985-86 is likely to be 3.5 to 4 per cent, with evidence pointing to the lower rate. This conclusion derives from widely varying estimates of the agricultural performance in 1985-86 which the government - in the same documents referred to earlier-sets at 3 per cent, the Reserve Bank at 1 per cent and in this review is estimated at between -1 per cent to 0. On manufactures, there is general agreement that the growth rate was 6.3 per cent.

With regard to the current year 1986-87, it is too early to draw even tentative estimates of growth. What can be done is to forecast the possibilities. On the assumption that the monsoons - both South West and North East - will be a little more than normal, agriculture could exceed the Plan target rate of 4 per cent, and industry (mining, manufactures, electricity and construction), record 7 to 7.5 per cent growth. Under these conditions the current year's growth rate could be 5 per cent to 5.5 per cent. At this stage three conclusions can be drawn. First for the balance of the three years of the Seventh Plan, the overall annual growth rate will have to be 5.5 per cent, if the Plan target of 5 per cent is to be achieved. Second and for this the industrial growth rate will have to be the 8 per cent which is also the Seventh Plan target. In this connection, it might be recalled that the 1981-82 industrial growth rate was 8.6 per cent (though since then it has never reached even 7 per cent). Third when the 5 per cent target for the Seventh Plan was established, the base year 1984-85 growth rate was assumed to be 5 per cent. With the reduced growth rate for 1984-85 at 3.5 per cent, there is a bonus for the Seventh Plan (as there was the Sixth Plan) in attaining its 5 per cent target.

A recent study of the Seventh Plan Perspectives[3], while positing industrial growth at 8 per cent, estimates agricultural growth at 3 per cent which will result in the Plan growth of 4.5 per cent and not 5 per cent. (It forecasts rising inflation at 10 per cent at the end of the Plan period averaging an annual 8 per cent, growing trade deficit and balance of payment difficulties, and a rise in domestic savings).

Plan

With the closing of the Sixth Plan accounts, the following picture for the Sixth Plan, 1980-81 to 1984-85, emerges. A target outlay for the Plan, Rs.97,500 crores (with Rs.47,200 crores for the Union, Rs.48,600 crores for the States and Rs.1,650 crores for the union territories). Approved outlay Rs.109,111 crores(Rs.58,280 crores for the union, Rs.48,816 crores for the states and Rs.2,015 crores for the union territories) and actual expenditure Rs.109,649 crores (Rs.58,669 crores for the union, Rs.48,957 crores for the states and Rs.2,019 crores for the union territories). The excess of over Rs.12,000 crores between the planned outlay and actual expenditure is disturbing, as the programmes and priorities financed by the excess have obviously not been planned as meticulously as those of the original approved outlay. The biggest jump was in the last year, 1984-85, where the actual results are yet to be evaluated.

For 1985-86, the Plan outlay is Rs.32,239 crores which was a 6.86 per cent increase over the 1984-85 Plan, with Rs.18,500 crores for the Union and Rs.13,738.56 crores for the state and union territories. The increase of the union Plan was 6.62 per cent and those of the state and union territories 7.18 per cent. The maximum increases in 1985-86 were for

Science & Technology at 28.35 per cent, followed by agriculture at 27.29 per ent, communications and information at 10.94 per cent, transport at 10.5 per cent, while industry and minerals had a low 1.47 per cent increase and Rural Development a -8.39 decline. It is to be hoped that imbalance in these allocations will be corrected in subsequent years.

For 1986-87 the union plan is Rs.22,300 crores, (which was budgeted at Rs. 18,000 crores in 1984-85 prices and became Rs.20,000 crores at 1986-87 prices), a 20.5 per cent increase, and the states and union territories Plan is Rs. 15,800 crores, a 21 per cent increase. Rural Development in this second year received some compensation for the low allocation in the previous plan, with increased allotment for NREP, RLEGP, & IRDP. Agriculture accounts for 29 per cent of the outlay and human resources a 40 per cent lift.

Already in the first two years, the financing of the Plan has involved rather heavy contributions from the public sector enterprises of around Rs.11,000 crores, most of it from retained profits plus depreciation. The other source which has exceeded 12 per cent of the two years finances is deficit financing whose quantum has well exceeded the Rs.14,000 crores provided for the entire plan period.

One general issue that is raised is that the two Plan years have witnessed a series of important and far reaching changes in economic and industrial policy, generally subsumed under the terms liberalisation and modernisation. These cover licensing, reservations, MRTP, small and ancillary enterprise ceilings, broad banding, authorisation to FERA and MRTP firms to operate in certain areas etc, which have little to do with the budget or the finance ministry and which are decided and announced without any relation to the Plan. This

calls in question the relevance of the Plan and planning process in regard to major issues of economic policy. The Plan should surely be the occasion and frame for discussion and decision of these issues.

Fiscal Policy

The budget for 1986-87 continued the process of lowering the levels of direct taxes and increasing the proportionate revenue contribution from indirect taxes that was intensified in the previous year's budget. The government claims both in introducing the year's budget and in subsequent statements and documents[4] that tax collections have increased (by 22.3 per cent over the previous year and 36 per cent over the budget estimates comprising 22 per cent for corporate tax, 24.3 per cent for income tax, 32 per cent for customs and 15.9 per cent for union excise) because of the lowering of the tax rates and stricter collections of taxes. The second factor, if true is an admission of slackness in tax administration in past years and should be quantified so that the amount of avoidable revenue losses can be known. Otherwise the increased tax payments may have little to do with lowered rates. In fact lowering of income tax rates go back to the early seventies when year after year tax rates where lowered from the then existing 97.5 per cent with little effect on increasing revenue collections. In fact the share of income tax in total revenue declined from 9.9 per cent in 1975-76 to 4.3 per cent in 1984-85[5]. Rather the increase in tax collections in 1985-86 can be traced to the results of the one time voluntary disclosure scheme, to the results of the tax raids, to the enlarged tax base seen in the increased non agricultural personal income which recorded for that year a 6.8 per cent increase in the contribution of the secondary and tertiary sectors to GDP, and to the efficiency in tax collections.

In fact it is a little difficult to compute the real tax effort of the union budget, which is supplemented by the rise in administered prices (coal, wheat, rice, sugarcane, petroleum products, steel) on the one hand, and the almost continuous changes being announced in tax rates. In fact the tax concessions announced on June 11 of over Rs.100 crores are larger than the traditional concessions amounting to Rs.82 crores announced at the time of the passing of the Finance Bill by Parliament and seem to have the wrong distributional consequences.

The major tax change for 1986-87 was the introduction of MODVAT over 37 chapters of the Central Excise Tariff Act which, because of the lack of prior preparation and training of the tax officers and the trade, involved a good deal of initial confusion. The governments first reaction was that MODVAT will result in direct benefit to the manufacturers to the extent of Rs.700 crores through reduced production costs. Later this estimate was varied to a profit of Rs.100 crores, then to a loss of Rs. 200 crores during 1986-87, applying the scheme in particular to the automobile industry. There were strikes and work stoppages by the small scale producers who were confused by the scheme, and who had to face banning of movements of their products by tax inspectors, who were awaiting orders from the department. The government has gradually modified the regulations and procedures of MODVAT, replacing the license by a declaration permitting self assessment upto Rs.50 lakhs, and restraining the visit of excise inspectors and superintendents to one in a year. The expectation that MODVAT will stop in appropriate cases the cascading of taxes and reduce prices is yet to take effect, but the movement is in the right direction justifying the decision of the government to extend it to a wider group of commodities.

The Long Term Fiscal Policy, one of the innovations covering the income and expenditure profile of the Seventh Plan introduced during the year shows[6] a continuing decrease in (a) total tax receipts from 8.2 per cent of GDP in the Fifth Plan to 7.9 per cent of GDP in the Sixth Plan, (b) direct tax from 27.2 per cent of total tax receipts during 1970-71 to 1974-75 to 22.6 per cent in 1980-81 1984-85, and (c) personal income tax from 14.2 per cent to 9.1 per cent and from 3.2 per cent of GDP in 1975-76 to 1.5 per cent in 1983-84 on the one hand, and a continuing increase in fact in deficit financing, on the other, where the revenue deficit increased from Rs.5,601 crores to Rs.5,940 crores in 1985-86 and the larger Rs.6,875 crores for 1986-87, in contradiction with Long Term Fiscal Policy's promise to reduce the deficit in 1986-87, balance it in 1987-88, and earn a surplus in the last 2 years of the Plan.

On the effects of the use of market borrowing as an instrument of fiscal policy, last year's mid year review provided an dequate analysis[7]. The Long Term Fiscal Policy document also envisages a reduction in market borrowing, which may in part account for the apparently small increase in market borrowing from Rs.5,100 crores in 1985-86 to 5300 crores in 1986-87: but to this should be added the 33 per cent increase in borrowings from small savings from Rs.39,00 crores to Rs.5,300 crores, the increase from 30 per cent to 85 per cent of the provident fund accretion in special deposits, plus the Rs.1,380 crores bond issues by the public sector enterprises and railways. This means the borrowing instrumentality continues to be a major one in plan financing.

The weakness of the long Term Fiscal Policy is that there is no plan to curb the mounting non plan expenditure, which makes it a tax policy document rather than a fiscal

policy document. The document states that three items, defence, interest payments and subsidies comprise over 70 per cent of non plan expenditure and together with other non plan items use up the entire revenue receipts of the government. For the Sixth Plan the total tax and non tax revenue was an annual average 10.5 per cent of the GDP, and the non Plan expenditure was 9.8 per cent of GDP which shot up to 10.9 per cent in 1985-85, the Balance from Current Revenue being -0.3 per cent. In one sense the situation worsens in the Seventh Plan with total revenue averaging an annual 11.5 per cent of GDP and non Plan expenditure averaging also 11.5 per cent,with the Balance from Current Revenue averaging 0.

Several issues of this situation need attention. For one, there is need to curb subsidies - food and fertilisers and foreign trade - which have shot up from Rs.337 crores in 1970-71 to Rs.3,700 crores in 1985-86, and at this rate of growth will exceed Rs.41,000 crores for the Plan period, according to the Finance minister. The possibility of dropping the fertiliser subsidy, which in the main assists the well to do farmer, should be seriously considered. Similarly the interest payments need attention and review which will be referred to later, but which depends on the rate of borrowing. Defence expenditures need to be scrutinised and reviewed as all other expenditures. And 'the others' which include the expenditure on the burgeoning administrative staff can and should be pruned.

What is needed is to get out of the situation where the Revenue receipts are not available for financing plan expenditures. The financing of the Plan has now nothing to do with tax collections and receipts in the Seventh Plan as the Balance from Current Revenue, which till then had been positive, has now become zero, as the table below shows:

Table:1

| | Sixth Plan | As percent of GDP Seventh Plan |
|---|---|---|
| 1. Union government resources for the union Plan and union territories Plan and assistance for state Plans | 9.2 | 10.1 |
| Financed by | | |
| 2. Net Capital inflow from abroad, including external commercial borrowing | 1.2 | 1.4 |
| 3. Domestic borrowings | 5.2 | 5.1 |
| (a) Market borrowing | 2.1 | 1.6 |
| (b) Budgetary Deficit | 1.3 | 1.1 |
| (c) Others | 2.8 | 2.3 |
| 4. Public Savings | 2.8 | 3.6 |
| (a) Balance from current revenue | 0.7 | 0 |
| (b) Internal and Extra budgetary resources of public sector undertakings | 2.1 | 3.6 |

Source: Tables 1 & 3 of the Long Term Fiscal Policy document.

The above table summarising the sources of financing of the Seventh Plan shows some further disturbing features. The dependence on foreign savings keeps increasing from 1.2 per cent of GDP in 1985-86 to 1.4 per cent in 1989-90. Incidentally the presentation in terms of GDP does not bring out the fact that if GDP increases annually between 5 and 5.5 per cent the absolute amounts borrowed will increase sizeably. Similarly the domestic borrowings, including the two key components, markets borrowings and budgetary deficit, will in absolute terms be larger in the Seventh Plan over the Sixth.

In this connection the government expresses a preference for raising Plan resources by increase in administered prices rather than through deficit financing because while the rise in the administered price is a once for all effort, the increase in deficit financing will "result in extra money flow which would generally raise the wholesale price index"[8] But the rise of administered prices is also not a one shot effort, as it will mean other units have to pay the higher price, which will reduce their investment resources, or raise the price of their product, or call for additional budgetary support, as when the rise in petroleum prices led to price rise in transport, construction etc, as 40 per cent of the petrol production is consumed by the public sector, or as the most recent rise in coal prices reduced railway investment by Rs.40 crores. Infact in some cases a rise in administered prices will raise the price of intermediates which deficit financing, which has to work the longer demand pull route, will not do. Hence there may be a preference for deficit financing over raising administered prices for plan finance purposes, when there is a question of choice between these two instrumentalities.

The report on Black Money issued by the Institute of Public Finance and Policy and released by the government in June 1985[9] seemed to support the major directions of its fiscal policy, namely the lowering of the tax rates. Following the fiscal approach in preference to the monetarist, national accounts or physical inputs methodology, the report comes to the conclusion that some 30 per cent of GDP amounting in 1980-81 to Rs.36,780 crores is the black income of the country. This restricted fiscal approach does not take account of the agricultural sector being tax exempt, and of course the black incomes from smuggling, under invoicing, and other illegal activities are excluded. Further there is the problem of under

estimation of national income statistics as well as the illegal incomes below the tax exemption limit being left out. Thus if a monetarist approach is used to compute black money as comprising all transactions in which cash is used for evading taxes or undertaking an illegal activity, then the black income is nearer 40 per cent of GDP, which using CSO latest quick estimate for 1984-85 at Rs.2,12,208 crores would be of the order of Rs.80,000 crores, which is nearly double the Institute's estimate. The annual loss to the government in tax evaded would be Rs.30,000 crores.

During the year, there was also a review of monetary policy by the Sukhamoy Chakravarty report set up by the Reserve Bank of India[10]. Apart from a comprehensive study of the demand for money, and the relationship between savings, in particular time deposits and interest rates, there are three issues raised by the report which directly impinge on fiscal policy. First there is a broader definition of deficit financing to include not only the deficit shown in the annual budget but also the RBI credit to government. The RBI credit to government comprises movements in holding by the Reserve Bank of India (a) ad hoc treasury bills, (b) treasury bills purchased nd rediscounted, (c) other securities of the union government and (d) rupee coins and notes adjusted by the Union governments deposits with the Reserve Bank. So defined the RBIs net credit to the government on March 31,1985 was Rs.31,858 crores, compared to the revised budget deficit as at March 31,1985 at Rs.3,985 crores[11]. The government has agreed in future budgets to show both the budget deficit as usually computed and the net RBI credit to the government. A second issue which seems to have been accepted by government is to institute market related interest rates on government borrowing. This is defined as allowing for the long term inflation rate and adding to it plus 2 per cent. This has been followed in the first market loans of the government as will be

noted later. This decision will further increase the burden of interest, which has not been taken into account in the Long Term Fiscal policy referred to earlier. Incidentally this will also increase further the savings of the household sector. The third issue relates to the recommendation of the committee that the government and the Reserve Bank should join in establishing monetary and credit targets for each year. One result will be that the target will act as a curb on inflationary pressure. The government has accepted this recommendation and even if it is not strictly adhered to, the effort is worthwhile. The report also brings out some gaps which need further study and research. There is the perennial question of the relationship between money and prices, whether or not mediated by output. Without some agreement on his basic issue, the fiscal policy in relation to RBI credit to government and deficit financing will only by partially dealt with. Similarly there is need for further work on the elasticity of savings and interest rates and that between interest rates and time deposits.

Stock market

The stock market during 1985-86 and since April 1986 has recorded very high levels of its equity prices. Its high points were: December 16,1984 to January 1985 when the index went up by 87.5 per cent, February 1,1985 a further rise of 15.9 per cent, July 16,1985 a further 8 per cent, by mid August 1985 share prices had risen by 104 per cent (all India). November 29,1985 86 per cent above the January 1985 mark; so that by June 1986 share prices index was 13 per cent higher than June 1986, and 91 per cent above June 1984. In this whole two year period, June 1984-86, the only market set backs were (a) between August 7 and October 1 1985 when the share price index lost 48.4 per cent of its gains because the term lending institutions stepped in and sold part of their holdings and (b) between February 28 which was the budget day

and March 21 1986 the index fell by 21 per cent, as a first reaction to 1986-87 budget. The two year continuing and continuous boom in stock market shares could not be explained in the normal manner - the performance of the companies, as some companies which were not doing well had their share prices boosted, and (as the President of the Bombay Stock Exchange pointed out) some share price increases were taking place in the case of companies which had not even started operation. The one constant factor which could explain this rather extraordinary (and seemingly irrational) boom in the stock market was belief of the market in policies of the new government announced from its 1984-85 budget - the delicensing, the capacity increase, automatic expansion, direct tax reduction, the import-export pass book scheme, the raising of the ceiling and exemption of MRTP & FERA companies on their export obligations on to the Finance Minister's open house and continuing concessions leading to MRTP companies investment in the 27 exempted industries amounting to Rs. 2,900 crores, and the non MRTP companies in 25 delicensed industries being Rs. 3,000 crores, the relaxing of FERA rules leading to record foreign collaborationsin 1985 etc - all pointing to the market oriented approach of the government's economic decisions.

In terms of resources, between June 1984 to June 1985 Rs. 1,194 crores of capital was raised in the market. Between June 1985 and June 1986 Rs. 2,658 crores were raised. In fact in past 2 months April & May 1986 Rs. 319 crores were raised. This means that the finances needed by the private corporate sector during the Seventh Plan estimated at Rs. 52,000 crores will be met, with a continuing increase in the number of share holders, now numbering 12 million who could be quadrupled by the end of the entury.

These finances raised from the market during the Seventh Plan compare with Rs.17,647 crores provided by union and states term lending institutions - IDBI, ICICI, IFCI, UTI, LIC, GIC, SFC, SDICs. Similarly the Unit Trust records all round expansion - with sales increasing by 127 per cent from Rs.330.16 crores to Rs.750.010 crores, unit holders by 13.3 per cent from 1.5 million to 1.7 million, investible resources by 73.6 per cent from Rs.1,261.33 crores to Rs.2,190 crores due to the change in the savings and investment behaviour of the people, improved and efficient marketing, and judicious investment. This heavy reliance on external resources by the private corporate sector together with 64 per cent of the funds raised referred to earlier through non convertible debentures means that the debt part of the debt equity ratio is rising fast. With equities being in strong demand and over subscribed, there is need to restore a balance in the debt equity ratio at the time when companies are being incorporated. The Patel Committee's final report recommendation that 50 per cent of the total funds raised by public limited companies from the market should be in the form of fresh equity, not by preventing debenture issues but by encouraging well managed companies to raise funds by equities, and its further recommendation that the norms of debt equity ratio in project financing be reviewed by development institutions to facilitate larger issue of equity capital will move the debt equity ratio in the right direction.

On the equity side, part of the increased investment resources, particularly those of the Unit Trust which were meant to mobilise small savings are, because of the various tax concessions, coming from wealth and higher income tax payees. In this context, the intervention of the term lending institutions in the market should take account of this equity factor and not only the speculative element.

Public Debt

There are several aspects of the country's public debt which are disquieting.

First the volume. In March 1951, India's public debt was Rs.2,022 crores, in March 1985 it was Rs.58,537 crores, and in March 1986 Rs.80,642 crores. In the last 7 years, it has been rising particularly fast at Rs.61,620 crores compared to the increase of Rs.17,000 crores during the previous 27 years, ending March 1978. Internal debt as a proportion of NNP at current prices in 1984-85 was 33 per cent against 25.1 per cent in 1977-78 and 22.9 per cent in 1950-51.

Second are the serious consequences, starting with the steep increase in interest liability which for the current year is Rs.4,745 crores. If to this is added the interest on provident funds, reserve funds, small savings, the interest will total Rs.8,174 crores, which is 28 per cent of total revenue receipts.

Third, while the size is bad enough, it could be justified if the distinction, which was maintained till recently to use borrowed money only for creating assets, is followed. What is really disturbing is that the galloping public debt is financing the consumption expenditures of the government, the borrowing pool now being further enlarged because the government is able to borrow cheaply from the captive CRR and SLR funds, which are periodically raised for the alleged purpose of containing inflation. Further the Reserve Bank taking up the loans, which others do not touch, simply fuels inflation, which the public borrowing is supposed to dampen. What adds to this situation is that the public sector enterprises which were meant to provide resources to the government (on which basis the Long Term Fiscal Policy

has been formulated), have become a drain on it and part of the massive borrowing is to fund their losses. The only way to cut this alarming increase in public debt is to reduce unproductive government expenditure and for the public sector to pay its way and generate resources. The Sukhumoy Chakravarty committee recommendation which shows the true nature of the annual deficit should help in this regard.

But there is another part of its recommendation, that relating to interest rates, that is disturbing. In the first group of market borrowing for 1986-87, the 20 year loan, following the Sukhumoy Chakravarty recommendation, has offered a 11.5 per cent interest, which for a 30 year loan would be 12.5 per cent, which is a near doubling of the 6.5 per cent rate offered in 1977-78. There are two issues here. First this 11.5 per cent rate breaks down into, 9 per cent the long term inflation rate, plus 2.5 per cent. But the 1980-81 to 1984-85 inflation rate was only 7.1 per cent. Does the offer of 11.5 per cent interest mean that we expect the inflation rate to rise? Second the justification for offering anything above 9 per cent in relation to the cost of bank deposits is in question. In effect, higher interest rate means that while net borrowing increases from Rs.5,100 crores in 1985-86 to Rs.5,300 crores in the 1986-87 budget, the interest payable rises from Rs.3,856 crores to Rs.4,795 crores which means that the net addition to government funds from market borrowing declines sharply from Rs.1,241 crores in 1985-86 to Rs.855 crores in 1986-87, and will in the future become negative. The interest policy needs review, also bearing in mind the need to rely on interest free tax revenues for its welfare and social infrastructure functions.

There is also the country's external debt of Rs.24,004 crores, involving a total debt servicing of Rs.1,370.3 crores

in 1985-86, which the Economic Survey for 1985-86 states will rise rather quickly in the coming years because of IMF repayments.[12]

Prices

The Sixth Plan recorded an average rise of 8.4 per cent in whole sale prices and 9.5 per cent in consumer prices on a point to point basis, and 9.3 per cent and 10.1 per cent respectively on an average basis.[13]

For 1985-86 the wholesale price index recorded a rise of 3.8 per cent compared to the rise of 7.6 per cent in 1984-85. Consumer prices rose by 8 per cent during this period compared to 5 per cent in 1984-85. There are a number of features of this relatively small rise in wholesale prices in 1985-86 that needs attention.

First there is the Ratchet effect of prices which is that once prices go up, they do not come down to the original level: they keep going up at varying levels. For instance the 3.8 per cent and 8 per cent rise in 1985-86 is on top of the average annual price rise of 9.1 per cent for wholesale and 8.5 per cent for consumer prices between 1970-71 to 1984-85. Or again wholesale prices rose by 6.1 per cent compound per annuam between 1955-65, on top which they rose by 8.7 per cent compound per annum between 1965-75 and at a further 8.1 per cent compound per annum between 1975-85.

Second there are the usual 3 phases in the 1985-86 price movements: (a) April-July 1985 when there was a continuous and fairly steep increase by 5.4 per cent compared to the 7.2 per cent rise in April-July 1984: (b) August-November 1985 when there was a decline by 2.5 per cent compared to the rise of 1.1 per cent in that period in 1984: and (c) December

1985-March 1986 when there was a decline by 1 per cent compared to the decline by 0.5 per cent in December 1984-March 1985.

Third the low rate of whole sale price is almost wholly due to the fall in prices of industrial raw materials by -9.6 per cent. The prices of raw cotton which had two bumper harvests, as will be seen later fell by -28.9 per cent: the price of raw jute which also had a bumper harvest fell by -71.6 per cent, involving a decline during the year of 36.9 per cent fibre prices. Following the good coconut crop, prices of oil seeds fell by -4.3 per cent.

Fourth the prices of cereals rose by 11.8 per cent, pulses by 6 per cent, fruits & vegetables by 19.2 per cent, sugar by 4.8 per cent, with only edible oils in this group of wage goods declining by -0.1 per cent as the table below shows:

Table:II

| | Weight | Point to point Movement in whole sale prices | | |
|---|---|---|---|---|
| | | 1983-84 | 1984-85 | 1985-86 |
| All commodities | 1000 | 8.9 | 7.6 | 3.7 |
| Wage goods | 431.31 | 10.9 | 6.5 | 6.6 |
| Cereals | 107.43 | 5.3 | 0.2 | 11.8 |
| Rice | | 0.7 | 0.8 | 4.4 |
| Wheat | | 12.5 | 1.6 | 16.9 |
| Jowar | | 2.0 | -0.4 | 10 |
| Bajra | | 7.7 | 2.2 | 39.1 |
| Pulses | 21.79 | 28.0 | 14.9 | 6.0 |
| Fruits & vegetables | 61.33 | 2.5 | 11.1 | 19.2 |
| Sugar | 21.91 | 4.8 | 7.0 | 23.1 |
| Edible oils | 37.16 | 14.5 | -2.0 | -0.1 |
| Industrial raw materials | 112.66 | 20.1 | 2.0 | -9.6 |
| Fibres | | 25.2 | 14.6 | -36.9 |

(contd...)

Table:II(contd)

| | | | | |
|---|---|---|---|---|
| Oil seeds | | 25.6 | -5.7 | -4.3 |
| Administered prices (coal, crude, minerals oil, electricity, fertilisers, cement, iron and steel and non ferrous metals) | 156.67 | 4.4 | 11.6 | 5.3 |
| Cotton textiles | 81.02 | 3.5 | 4.9 | -0.4 |
| Jute Textiles | 12.14 | 58.7 | 20.17 | -43.4 |

Source: Office of the Economic Affairs, Ministry of Labour, Labour Bureau.

A further study of the table shows that the prices of the group of commodities which are consumed by the mass of the people, including the poor majority, rose in 1985-86 compared to the previous year, with sharp rise in the poor man's cereals, bajra and jowar. Further as the Reserve Bank's annual report points out the sharp rise in the prices of rice was not due to the rise in its issue price which was made in October 1985, while the 12.4 price rise took place between March and September 1985. Similarly the continuous rise in the price of wheat since July 1985 by 10.5 per cent was before the rise in its issue price in February 1986. In fact the annual report of the Reserve Bank constructs a price index of 24 essential commodities with a weightage of 57.5 in the whole sale price index which shows a rise of 7.7 per cent in 1985-86 compared to 6.5 per ent in 1984-85.[14] These cereals prices rise is puzzling and cannot really be explained, given the bursting buffer stock which, as will be seen later, was touching 30 million tonnes. Was it due to some serious snag in distribution? Was it because of the high cost of storage etc of the Food Corporation? Was it due to railways malfunctioning? There are no real firm explanations available. The only thing clear is that while the low wholesale price index may give satisfaction to the Finance minister and the statistician, the people have been hit by a rise in the price of the goods used by them.

Fifth the consumer price index for 1985-86 caught up and surpassed the whole sale price index rising from +5 per cent in 1984-85 to +8 per cent in 1985-86. The sharp rise in consumer prices was caused by rises in the prices of cereals including coarse grains, pulses and vegetables.

Sixth the administered prices which rose by 5.3 per cent in 1985-86, with electricity jumping to 24.1 per cent, coal 13.2 per cent, fertilisers 10.1 per cent, had a cascading effect as seen in the September 27 rise in kharif oil seeds and sugar prices, the October 8 rise in the procurement prices of paddy and coarse grains, the January 1986 rise in the procurement price of wheat, the November rise in the minimum support price of cotton, November rise in sugar cane price, November 15 rise in the issue of price of edible oils, the December 20 rise in the retention price of aluminium, the January 31 rise in the statutory retail price of fertilisers, the January 9 rise in the pithead price of coal, the January 31 rise in the prices of petroleum products, and the periodical rise of the prices of non ferrous metals. These cascading administered prices rises covered a multitude of purposes among which the cover they provided for cost escalation of the product, the possibility of reducing or atleast not further raising subsidies, the need to mobilise resources for the Plan, and rather rarely the objective of curbing consumption may be noted.

The low overall rate of increase in wholesale prices in 1985-86 when set against a rather poor agricultural record and indifferent industrial performance for the year as well as a hangover from the past year's liquidity leads to an examination of the demand management factors, which the Reserve Bank in its Annual Report for the year characterises as 'prudent'. In any case the basic objective of credit policy for 1985-86

(and continuing into 1986-87) has been and is to moderate the rate of growth of $M_3$ in contrast to the objective of raising reserve requirements which characterised monetary management during the years 1982-83, 1983-84 and 1984-85. Hence in 1985-86 the rate of growth of Money supply slackened in the case of $M_1$ from 19.9 per cent (Rs.4,583 crores) in 1984-85 to 9.5 per cent (Rs.3,760 crores), and in the case of $M_3$ from 18.7 per cent (Rs.16,058 crores) in 1984-85 to 15.5 per cent (Rs.15,840 crores) in 1985-86. The major component of $M_3$ which is total deposits similarly declined from 19.2 per cent to 17.5 per cent between the two years, along with a sharp decline in the absolute amount of demand deposits from Rs.3,187 crores in 1984-85 to Rs.1,693 crores in 1985-86. The Reserve Bank atrributes the rather steep decline in currency and demand deposits in 1985-86 to the fall in food credit for the year, the relative price stability, the greater attractiveness of financial assets to the household sector, some curbs on black money, the smaller accruals to the foreign exchange assets and lower credit made available to the commercial sector. Reserve money, however, rose from 9.2 per cent in 1984-85 to 20 per cent in 1985-86 (Rs.6,290 crores), due to the increased RBI credit to government by Rs.9,527 crores.

The possible price increase in the current year 1986-87 is difficult to forecast. One thing can be stated quite clearly. The inflation rate in 1986-87 will be higher than the 3.8 per cent recorded in 1985-86. During the first two months of 1986-87 the whole sale price index shows a rise of 2.8 per cent compared to the 2.4 per cent rise in April-May 1985. And for the 2 months of the current year the price of wage goods rise was 5.5 per cent compared to the 4 per cent rise in April-May 1985. This also is reflected in the 2.9 per cent rise in consumer prices between October 1984 to 1 April 1985 due to sharp rise in the prices of vegetables,

wheat, edible oil and sugar. The survey by the Delhi group referred to earlier also forecasts a rising rate of inflation during the remaining three years of the Seventh Plan. On the basis of the supply prospects for agriculture and industry, the continuance of the demand (M3) restraints and the price movements to date, the rate of inflation for 1986-87 could be between 8 to 9 per cent.

## Agriculture

Foodgrains production during the Sixth Plan recorded a compound growth rate of 3 per cent per annum against the targeted 3.9 per cent, involving an annual average of 138.38 million tonnes as the table below shows:

Table:III

| Commodities | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 |
|---|---|---|---|---|---|
| Rice (million tonnes) | 53.6 | 53.2 | 47.1 | 59.8 | 59.5 |
| Wheat (million tonnes) | 36.3 | 37.5 | 42.8 | 45.1 | 45.0 |
| Coarse grains (million tonnes) | 29.1 | 31.1 | 27.7 | 33.9 | 31.0 |
| Pulses (million tonnes) | 10.6 | 11.5 | 11.9 | 12.7 | 12.5 |
| Total foodgrains (million tonnes) | 129.6 | 133.3 | 129.5 | 151.5 | 148.0 |

Source: Ministry of Agriculture.

On foodgrain production for 1985-86, there is a rather wide variety estimates, which will be definitely settled in October-November 1986 when the official data on the production of 42 crops will become available. The Economic Survey places the 1985-86 foodgrains production at 150 million tonnes (+2.6 per cent) with agriculture recording a growth rate of 3 per cent. The Annual Plan 1985-86 places foodgrains at 148.06 million tonnes to 150 million tonnes (1.2 to 2.61 per cent). The Ministry of agriculture in a statement in Parliament in May 1986 (and the RBI Annual report 1985-86)

reduced the estimate to 146-148.5 million tonnes (-0.2 to 1.5).[15] The Centre for Monitoring Indian Economy estimates the 1985-86 foodgrain output at 145 million tonnes which involves a -0.8 per cent growth. This estimate is based on the official rain fall data in 35 meteorological subdivisions, which show 26 sub division in excess/normal and 9 deficant/ scanty. This data is however refined by it using the area under kharif crops in each sub division to arrive at an area weighted rainfall index.[16] On that basis, the following estimate of foodgrains and cash crops (leaving out plantations crops)is arrived at:

Table:IV

million tonnes

| Weight | Crop | 1984-85 (official) | 1985-86 (estimation) | Percentage change |
|---|---|---|---|---|
| 33.98 | Rice | 58.64 | 57.20 | -2.5 |
| 12.16 | Wheat | 44.23 | 46.50 | 5.1 |
| 4.86 | Jowar | 11.25 | 10.50 | -6.7 |
| 3.38 | Pulses | 4.55 | 5.00 | 9.9 |
| 68.12 | Foodgrains | 146.22 | 145.00 | -0.8 |
| 4.82 | Groundnut | 6.74 | 5.50 | -18.4 |
| 1.73 | Rape seed & mustard | 3.03 | 3.10 | 2.3 |
| 3.01 | Cotton (lakh bales of 170 kg) | 84.65 | 80.00 | -5.5 |
| 0.96 | Jute & mesta (lakh bales of 180 kg) | 79.78 | 90.00 | 12.8 |
| 1.41 | Potatoes | 12.64 | 13.50 | 6.8 |
| 7.01 | Sugarcane | 173.57 | 169.00 | -2.6 |
| Index: Triennium ending 1969-70 = 100 | | | | |
| 68.12 | Foodgrains | 155.1 | 154.0 | -0.8 |
| 31.88 | Nonfoodgrain | 154.7 | 152.3 | -1.5 |
| 100 | All commodities | 155 | 153.5 | -1.0 |

Source: Ministry of Agriculture for 1984/85 CMIE for 1985-86.

On the evidence at hand the 1985-86 foodgrains production is likely to be similar to that of 1984-85 at around 145-146 million tonnes.

Looking at foodgrains and agricultural production from a long range point of view, it may be noted that while production increased at 3.1 per cent compound per annuam between 1949-50 and 1964-65, it declined to 2.6 per cent in the next seventeen years between 1967-68 to 1984-85, indicating a certain slow down in growth in the post green revolution period (which is contrary to the popular and official views on that period). Further the growth in the second period is too close to the population growth of 2.24 per cent, in relation to the poverty status of the mass of the people.

During the period 1970-71 to 1984-85 the input-output relations in the foodgrains sector continued to cause disquiet. There was a continuous annual increase in the inputs - in irrigation by 3.2 per cent, pumpsets by 10.12 per cent, power consumption by 12 per cent, HYV varieties by 10 per cent and fertiliser consumption by 10 per cent. This meant that the inputs increased annually by 4.9 per cent, while the output increase was only 2.3 per cent.

This rising incremental capital output ratio is one reason why from the Seventh Plan the imbalances in regions and crops are aimed at being corrected. Dry farming which covers 72 per cent of all cropped land and produces less than 40 per cent of foodgrains, and the low paddy growing areas of Bihar, West Bengal, Orissa and Assam are now being given special attention both in micro water shed development and seeds and fertilisers. Similarly the crop imbalances can be seen in the case of coarse cereals, jowar, bajra, ragi, barley, maize which are grown over 30 per cent of the cultivated area, producing less than 20 per cent of total foodgrains. In particular, the area under jowar is stagnant at 16.1 million hectares, with a production increase of 1.8 per cent, similarly

the area under bajra is stagnant, but the use of HYV seeds has increased its annual yield by 2.1 per cent, the area under maize has increased by 1.7 per cent, the area under ragi is stagnant and the yield increase 1.8 per cent and in the case of barley there has been an actual decline from 3.2 million hectares 1.4 million hectares because of its diversion to wheat. There is also a problem in regard to the area under cotton which is coming up, as we face three years of bumper harvests and production far in excess of domestic and export demand at domestic prices. As far as the stagnation and decline in coarse grains are concerned, the new emphasis on dry farming and improved marketing should arrest the decline in area and the low yield.

Among other general problems facing agriculture, a recent study calls attention to the country "losing 30 to 50 million tonnes of foodgrains every year on account of the loss of top soil from around 85 million hectares of degraded agricultural lands" representing a loss of Rs.6,000 crores per annum. The means of correcting this drain through differentiated action on lands irrigated by major and medium projects, small surface storing groundwater, as well as unirrigated lands and flood prone lands have been set forth and should be acted upon by the states and union government.[17]

With the additional irrigation potential of 2.28 million hectares, the total irrigation potential created todate is 67.29 million hectares and its uses 60.47 million hectares. Apart from the problem of the top soil losses referred to above, field studies[18] show that output does not always increase with the size of the farm, as the small farmer can gain acre for acre as much benefits from irrigation as the large farmer if there is equality in fertiliser use. Where such equality is absent as it is in large parts of UP &

Maharashtra, the benefits from each unit of irrigated area are dependent on the size of the farm. Small farmers are restricted in their use of fertilisers because credit facilities, fertiliser price and knowhow are tilted against them. Merely ensuring equal distribution of fertilisers pro rata will not help, as there are problems of credit access, fertiliser prices and extension services. This is one of the grounds for land reform. Because further, in privately owned tube wells as well as in public canals, utilisation is constrained by land distribution. Small holders with fragmented holdings cannot use these irrigation facilities as for them they mean high investment, idle capacity and high percentage cost of irrigation. Consolidation of holdings should thus be an essential part of land reform.[19] In the case of the extent of utilisation of the irrigation potential as percentage of area irrigated to potential created, there are errors because in the planning assumptions of a project, land development may be taken as complete and for the cropping pattern may be different from what is the actual pattern. Hence it is better to estimate utilisation by comparing the water released with what was planned and so eliminate underutilisation. One important reason for low utilisation thrown up by irrigation studies is the disproportionate importance given to engineering fecets of the projects in comparison with its agricultural marketing aspects, which need emphasis.[20]

In the use of ground water irrigation, a frequent complaint of farmers is power shortage, which results in special arrangements being made for power supply to farmers at the cost of other users. But an NCAER study[21] shows the wide difference between the agronomic norms for water use for each crop and the actual water used as set forth in the following table:

Table:V (Water use per hectare continuities)

| States | Wheat | Rice | Sugarcane |
|---|---|---|---|
| Northern region | | | |
| Punjab | 94 | 231 | 130 |
| Haryana | 66 | 177 | 283 |
| Uttar Pradesh | 96 | 164 | 178 |
| Rajasthan | 35 | - | 264 |
| Southern Region | | | |
| Andhra Pradesh | - | 151 | 200 |
| Karnataka | 37 | 109 | 454 |
| Kerala | - | 121 | - |
| Tamil Nadu | - | 155 | 272 |
| Eastern Region | | | |
| Bihar | 35 | 120 | - |
| Orissa | 85 | 151 | 171 |
| West Bengal | 63 | 186 | 134 |
| Western Region | | | |
| Gujarat | 80 | 84 | 194 |
| Maharashtra | 94 | - | 131 |
| Madhya Pradesh | 109 | 198 | 124 |

Source: NCAER Table 6 Focus.

Comparing the water used as st forth in the above table with the agronomic norms which for wheat vary between 40 to 60 (Punjab and UP use 50 per cent more and MP over 100 per cent); for rice they are 120 to 168 (with Punjab, MP, and West Bengal using excessive amounts, while S outh is in line with the norms): for sugarcane the norms are 100 to 130 (Karnataka, Haryana, Tamil Nadu, Rajasthan and most states exceed the norm). There is in addition some rain water available to all farmers and water pumped by diesel sets. In view of the agronomic norms for water use, for irrigation there was no power shortage in terms of the water lifted. There was inefficient management by the farmer of the irrigation water.

The link between irrigation and farm income seems to vary with the extent of drought proneness of the area in question.

Studies[22] show that in Punjab, Haryana and to some extent in Gujarat which are drought prone, the protective role of irrigation in assuring farm incomes stands out. In Tamil Nadu and Andhra Pradesh, the link is half and half. That is, the dimunition in farm incomes during drought is the same for irrigated and dry farming areas. In Bihar and Madhya Pradesh, the high rainfall areas, the irrigated segment suffers more from reduced farm incomes than the dry farms during the droughts.

Empirical studies[23] also show that technology and population growth operate against negative growth regions in the sense that increase in yield through technological factors is affected by population growth in such areas. Per contra technology and demographic forces are operating in favour of high growth regions, making rich regions richer in terms of output per capita and output per area. The poor regions have stagnated in terms of output per area.

Similarly the factor of agricultural productivity, which is one of the thrust areas of the Seventh Plan, is a function of the scale of operations and the size and total value of inputs, the intensity of input use defined as the value of inputs per unit of land, the size of farms and varying prices of inputs and farm products. On this basis studies show[24] (a) a negative relation between operated area and value of output in wet areas, (b) this inverse relation disappears at class and crop level, at which level crop intensity determines productivity, and (c) the large farmers in both wet and dry areas have class advantages and those of productivity.

There is finally the general question of the buffer stock which raises several issues. First the quantum as at

July 1985 amounts to 29.2 million tonnes comprising 21 million tonnes of wheat and 8 million tonnes of rice. At this rate, by the end of the Seventh Plan it could reach 40 million tonnes. Even at 29.2 million tonnes it is far in excess of both operational needs and buffer stock requirements. Second there is the rate of procurement and offtake. Procurement of rice has been at 9.3 million tonnes and wheat at 8.4 million tonnes. The government has tried to increase offtake by lowering the price of wheat to flour mills and by increased foodgrains allocations to NREP, resulting in wheat offtake rising by 44 per cent to 9.8 million tonnes and rice offtake to 7.2 million tonnes. This means that the wheat stock is in excess of buffer stock needs by 7.8 million tonnes and rice by 1 million tonnes. Third there is the question of storage capacity which is completely inadequate. Already nearly 10 million tonnes are being stored in the open. The question of the increase in foodgrains production was not unexpected. It was planned to increase at an annual 3.9 per cent in the Sixth Plan and at 4 per cent in the Seventh Plan. Why was storage not built to stock this increased production and procurement? Fourth there is the question of cost of storage which is Rs. 240 per quintal for one year rising to Rs.540 per quintal for 2 years. In fact foodgrains procurement and distribution is reported by the government to involve an annual loss of Rs.1,650 crores. How this arises is not clear. In the case of wheat, the cost to the Food Corporation is reported at Rs. 262.03 per quintal, the procurement price is Rs.157 per quintal, the distribution cost is Rs.50.59 per quintal, and the balance of Rs.54 is put down to "procurement incidentals".[25] Even though its sales are at Rs. 200 per quintal, and the farmer paid only Rs.157 per quintal, there is a reported loss of Rs.62 per quintal, which becomes in the government's report to parliament a subsidy of 62 paise per kg.[26] Finally given the fact that the wheat price and production was stagnant at 104.5 to 104.9 million tonnes for

the two years 1984-85 and 1985-86, the increase in the foodgrain stock means there has been no increase in consumption. This means that increase in foodgrain production does not increase the income of the poor and of those who produce it. Surely instead of piling up foodgrains which involve serious losses from spoilage, it could be used to make a dent on poverty by being made available on a massive scale to NREP & IRDP efforts, and to that extent make up for the lack of purchasing power of the majority of the people, which gives rise to the buffer stocks in the first place.

For 1986-87 the foodgrain target has been established at 165.5 million tonnes. On the basis of the existing monsoon, the kharif crop could be 89 to 90 million tonnes and rabi output 63-64 million tonnes yielding a total of 152 to 154 million tonnes.

Wheat

Wheat is the major rabi crop. Its output is estimated at 47 to 48 million tonnes in 1985-86, which maintains its growth rate of 5.6 per cent over the past two decades (falling slightly to 5.1 per cent in 1985-86). The rise in the wholesale price of wheat was 18 per cent on March 22, 1986 compared to March 1984, despite its large production. Was this a part of the government view set forth in the Economic Survey 1985-86, that one means of correcting the growing imbalance among crops is through changing the relative prices of different crops. Apart from the fact that the rise in wheat prices gives the wrong signal to the farmer, what will bring about the desired mix of agricultural crops is the net revenue which the farmer receives. This means that as it will be impossible to lower the prices of crops that it is desired to reduce, the prices of crops desired to be increased like pulses and oil seeds will have to be raised sufficiently to

give the farmer of these crops a higher net revenue than that of the farmers growing cereals.

Rice

Rice production has been on a declining trend since the 1983-84 high of 60.10 million tonnes. For 1984-85 it declined to 58.64 million tonnes and is estimated at 57.20 million tonnes for 1985-86. This falling output has taken place despite the continuing increase in the paddy area under high yielding variety which was 5.6 million hectares ( 15 per cent of the total paddy cultivated area) in 1970-71 rising to 22.2 million hectares (55 per cent) in 1983-84, to 25 million hectares in 1984-85 (61 per cent) and 26.5 million hectares in 1985-86 (64 per cent), which is part of the problem of the increase in inputs not leading to increase in output. A part explanation is that both 1984-85 and 1985-86 were years of poor rainfall in the paddy growing regions, with the result that only Punjab, Haryana, UP, Maharashtra, Gujarat and AP were able to surpass the all India average of paddy output increase. This also means that the Seventh Plan's effort to move the agricultural effort to the Eastern and Southern region has not yet taken hold.

Coarse grains

The stagnation and in some case decline in both the area under cultivation and yield in the case of coarse grains have been earlier noted. The major reason for this is the neglect of dry farming which is the area over which 95 per cent of coarse cereals are grown. The case of Bajra is an important pointer. The result of the use of HYV seeds have been pointed out earlier. In the case of Jowar production, the Sixth Plan annual average has been 11.3 million tonnes, with a decline to 10.50 million tonnes during the first year of the Seventh Plan, 1985-86. Bajra which averaged 5.98 million tonnes in the

Sixth Plan has also slipped to 5.50 million tonnes in 1985-86. Maize which averaged 7.33 million tonnes in the Sixth Plan has recorded about the same 7.50 million tonnes in 1985-86. Ragi which averaged 2.59 million tonnes slipped to 2.2 million tonnes in 1985-86. There is a lesson here for the Seventh Plan, which must be acted upon.

Pulses

Pulses production has been stagnant over the past 20 years (1964-65 to 1984-85) at around 11-13 million tonnes, including a 0.1 per cent growth rate. In 1985-86 production is estimated at 12.8 million tonnes. With population increasing in this period by over 250 per cent, the per capita availability of this major source of protein for the people declined. It was 61 grammes a day in 1951, rising to 75 grammes in 1959, falling to a low 40 grammes today. There is no more urgent task facing the country than to increase this foodgrain. This will involve raising their procurement price and reducing the price of inputs to make the growing of pulses as revenue earning for the farmer as the growing of wheat or cotton. Further the R&D effort in pulses needs to be concentrated to improve the quality of seeds suited to the dry lands on which they are grown.

Cotton

The cotton production and market present a series of baffling issues. First there is no means of establishing the cotton output for the year so that widely varying estimates are provided by the government, the Cotton Advisory Board (CAB) which brings together government, users and trade, and the trade. For 1984-85 the government production estimate was 76-78 lakh bales, later revised to 85 lakh bales, the CAB estimate and the trade estimate was 101.5 lakh bales. Even the CAB estimate keeps changing: in October 1984 it was 79.80

lakh bales at its February 2,1985 meeting it became 84.75 lakh bales, at its third meeting in May 10,1985 it was raised to 92 lakh bales and at its August 1985 meeting it became 101.5 lakh bales, which was 27.2 per cent over the first estimate. This situation becomes tragic when the minister of Agriculture speaking to the cotton production meeting on July 15,1985 refers to the 1984-85 cotton crop as being 77.78 lakh bales, which should be raised to 95 lakh bales, at the very time when the Cotton Advisory Board has placed the cotton crop at 92 lakh bales. As for the 1985-86 crop (in April 1986, which means the cotton year is already passed its half way mark), the estimates again vary, with the government placing it at 84 lakh bales, in February 1986 CAB at 107 lakh bales, and traders at 121 lakh bales, with similar variation as to the volume of carry over from 1984-85 to 1985-86 at 20, 24, 41 and 31 lakh bales. The carry over is likely to be 30 to 54 lakh bales. Second this uncertainty about the quantum of the cotton crop gives rise to wrong decisions in the import export field. In 1985 the government decided to import 1 lakh bales of short and medium staple variety from Pakistan which is still to be marketed. Third the demand for cotton was far below the output. The monthly mill consumption in 1984.85 was 7.38 lakh bales and taking exfactory and all uses the demand was 80-85 lakh bales for the year. This gap between production and demand led to various rather hasty measures such as (a) increasing the cotton inventory of the mills, (this increased demand by about 3 lakh bales), announcing a record export quota of 10 lakh bales in which private trade is to participate (the actual export was less than 2 lakh bales) (b) the progressive reduction of the Minimum Export Price and its abolition for private trade, (which was not of much help as Indian cotton prices were well above international prices), (c) the proposal for a buffer stock. Fourth what was done in this situation was massive purchases of cotton by the Cotton Corporation of India (CCI) which by April 25,1986

bought 13.84 lakh bales and sold only 5.56 lakh bales, the Maharashtra State Cooperative Cotton Growers Federation (MSCOGF) purchased 27 lakh bales (Maharashtra itself produces only 17-18 lakh bales, so that there was massive inflow of cotton into Maharashtra from other states) and sold 7.5 lakh bales, with another 12 lakh bales with Gujarat and other state bodies. This means that there is already in effect a buffer stock in cotton carried by CCI and MSCOGF. The Maharashtra Federation which has been purchasing cotton at what it calls "guaranteed price", which is well above the official price, which in turn is above the market price, has incurred a loss of Rs.400 crores in 1985-86, and is pressing CCI and the union government to come to its rescue. **Fifth** in this situation cotton prices have been falling rather sharply. Its index fell from 296 in September 1984 to 185.2 in December 7, 1984, the market price being Rs.415 a quintal, while the official support price was Rs.550. The gap between the market price and support price has involved CCI in a loss of Rs.70 crores, and the Maharashtra Federation in Rs.700 crores. The tragedy is that in the absence of regulated markets it is not the cotton farmers who get this price, (they sell at low, distress prices) but the traders and the middle men. The question should be faced as to whether the Maharashtra Federation should not be shut down- as it does not benefit the farmer, and even if it does there is no need for the cotton farmer to be treated specially. **Sixth** the mills who were able to buy their cotton at 14-15 per cent less because of the falling prices were able to sell their cotton cloth at prices which were 3.6 to 4.5 per cent higher. These higher returns are at a time when per capita cloth consumption has dropped from 16.4 metres in 1968 to 16.07 metres in 1985, the share of cotton cloth having fallen from 14.34 metres to 12.02 metres. Finally there is the question of Seventh Plan, after many careful exercises, having established

the Plan target at 95 lakh bales, on the basis of the demand for cotton in 1989-1990. If in 1984-85 and 1985-86 we have produced 101.5 lakh bales and 107 lakh bales, and 1986-87 looks like being a similar bumper year, then the need to cut back cotton production and divert the lands used for growing cotton to growing the more urgently needed pulses and oil seeds demands urgent attention. There is need for a clear cotton policy which must begin with this cut back in cotton production. The new textile policy has not been able to keep its promise of providing cloth to the people at reasonable prices nor remunerative cotton prices to growers. The cotton production situation is one factor in this worrisome situation.

Jute

Jute and maesta production which was 79.82 lakh bales in 1984-85 increased to 90.05 lakh bales in 1985-86 leading to a sharp fall in prices and intervention of the Jute Corporation of India in purchasing jute. But a crisis faces this industry, as a result of the union government asking the West Bengal government to cut back on jute cultivation, which at present feeds 106 mills, employs 2 lakh workers, and 40 lakh jute cultivators. In addition to the decline in the export demand for jute goods, because of synthetic and other substitutes and cheaper production by Bangladesh, the Railway ministry has decided to discontinue the movement of salt in gunny bags. The acreage under jute has been on the decline for sometime and despite the purchase by the Jute Corporation, jute prices have been falling, and so there is a demand to raise the price of jute to help the jute farmers. The Seventh Plan notes the declining demand of jute goods, particularly carpet backing in the export market, the high cost of inputs, and the competition from synthetic substitutes, resulting in widespread sickness in the industry. The West Bengal government has been pleading for nationalising the jute mills industry,

which must be resisted, as the really sick and absolete mills need to be closed. There is a certain contradiction between the union government's directive to reduce jute cultivation and its Seventh Plan estimates of the demand for jute goods at 16.25 lakh tonnes in 1989-90, calling for higher productivity in raw jute cultivation, and in jute goods manufacture, and the product mix. Here again there is need for a national jute policy which will give a clear signal to the jute farmer as to his future in this crop in relation to alternatives, and to the jute mill industry which faces a declining domestic and export market.

Sugarcane

Sugarcane production which was 173.57 million tonnes in 1984-85 is estimated at 169 million tonnes for 1985-86. The government fixed the price of sugar cane at Rs.14 a quintal linked to a recovery of 8.5 per cent for the 1984-85 season, while the state governments have advised the payment of much higher prices ranging from Rs.20 to Rs.25 per quintal. This confusion between the union price (which seems to have force only as far as the levy price of sugar is concerned) and the state advised prices needs to be ended and a single price enforced as in the case of foodgrains. The area under sugarcane has increased at the average rate of 2 per cent per annum and sugarcane production, which seems to follow a rather erratic up and down series of cycles, averages 2.4 per cent. The per hectare yield of 56 tonnes is about 50 per cent lower than that of other developing countries like Indonesia, Iran and Morocco, and nearly half of that of Peru. This is one reason why Indian sugar is non competitive in the external market. The wastage of the scarce input, water, in growing sugarcane has been vividly brought out in table V. The need to raise output per hectare is emphasised.

Oilseeds

Oil seeds production was 13.5 million tonnes in 1984-85 due to the increased rabi and minor oil seeds - soya bean, safflower, sunflower and niger seed, which raises the total to 17.01 million tonnes. In 1985-86 the major oil seeds production declined to 11.6 million tonnes due to the drought in Gujarat and Andhra Pradesh. When minor and other oil seeds are taken into account, the total is 15.86 million tonnes as the table below shows.

Table:VI

| Weights in the Index of agricultural production | Oil seeds | 1983-84 | 1984-85 Official | 1985-86 Estimate |
|---|---|---|---|---|
| 4.82 | Groundnuts | 7.09 | 6.74 | 5.50 |
| 0.62 | Seasamum | 0.56 | 0.53 | 0.55 |
| 1.73 | Rapeseed & Mustard | 2.61 | 3.03 | 3.10 |
| 0.43 | Linseed | 0.44 | 0.39 | 0.40 |
| 0.11 | Castor seed | 0.40 | 0.47 | 0.40 |
| 0.09 | Safflower | 0.50 | 0.50 | 0.50 |
| 0.10 | Nigerseed | 0.18 | 0.15 | 0.16 |
| 1.87 | Coconut copra | 0.86 | 1.02 | 1.03 |
| 1.19 | Cotton seed | 2.17 | 2.88 | 2.72 |
| - | Soyabean | 0.61 | 0.93 | 1.10 |
| - | Sunflower | 0.30 | 0.37 | 0.40 |

Source: Ministry of Agriculture.

One of the features of oilseeds production is that the major part - over 85 per cent, is grown on unirrigated lands which explains both the fluctuating nature and its low annual growth rate of 1.9 per cent, whereas the demand for its product, edible oils, grows at 4 per cent per annum. In 1985-86, both the kharif and rabi crops faced a prolonged dry spell and scanty rains, resulting in rising prices. In

the Seventh Plan, the oil seeds target of 170 lakh tonnes will be short of the demand and so the unconventional oil seeds as referred to in my Mid Year Review for 1984[27] will have to be fully exploited. For this, RBI has reduced the minimum margin on bank advances on oil seeds and has dropped credit controls. But it warns that as long as procurement agencies intervene in the market only when there are distress sales, the farmers will not be receiving remunerative returns as a function of market and support prices. An empirical study of groundnut production shows that in the three decades 1950-1980, area and output of groundnut declined because of the greater risk associated with groundnut farming compared to other crops; but the most interesting finding is that imports of edible oils have had a destabilising impact on domestic prices, because when domestic production was high imports were high, and when domestic production was low imports were low, the correlation co-efficient between imports and domestic groundnut production being a high +0.71.[28] The Seventh Plan also plans to increase oil cake exports from 1.5 million tonnes to 2.35 million tonnes, but the precise export figures for each of the 4 major oil seeds and the 8 minor ones need to be further worked out, which on the basis of the existing potential and past performances could mean more than a doubling of the target. Further the export of deoiled meals should go hand in hand with developing the domestic market for extraction which should divert the expeller oil cakes now being used as cattle feed to augment our solvent extracted oils. This will increase the domestic supply of vegetable oils, reduce edible oil imports and call for a long range programme to popularise deoiled meals as cattle and poultry feed.

Plantation crops

Tea production in 1985 was 657 million kg against the

year's target of 685 million kg. Against the export target of 220 million kg, 222.4 million kg. were exported earning Rs.709 crores, which was good, considering the sharp fall in world tea prices, and which led the government to remove all controls and restrictions. Of the year's export earnings, about a third was earned from the increased sale of packaged tea, in which increased competition both from the West Asian buyers and producers in Sri Lanka is intensifying. Anywhy this situation is somewhat different from the mid year predictions of India having to import tea, if the banning of CTC teas, fixed exports ceiling, and minimum export prices were to continue. The 1986 tea output is expected to be 665-670 million kg, with the exports being a repeat 222 million kg. The Seventh Plan target of 716 million kg must take account of the fact that the jump in tea production from 1984 was due to producers investing their profits in the plantations. With prices falling and/or flattening out, there must be supplementary sources of investment to attain the Plan target.

Coffee output in 1984-85 was a record 1,95,248 tonnes which came down to 1,20,000 in 1985-86. It is usual for a bumper crop to be followed by a lower normal one. With the serious drought in Brazil, the world supply of coffee has become limited and the export quotas fixed by the International Coffee Organisation have been given up. This is the time for India which exported 68,896 tonnes valued at Rs.209.69 crores to expand its exports. During 1985-86, between April 1985 and January 1986 coffee exports to quota and non quota countries have been 88,476 tonnes valued at Rs.227,69 crores. There are some problems facing the coffee industry. First the industry is very heavily export based, with a very small domestic market. The domestic consumption is less than the exports: this must be corrected by expanding the domestic market by

10-15 per cent every year during the Seventh Plan. Without this domestic base, the industry will be subject to instability, reflecting the international coffee market. Second there is need for the Coffee Board to widen the non quota countries market. At present the major non quota country customer is the Soviet Union which offers the lowest export price (a 50 per cent discount). There are 64 non quota countries and these should be surveyed by the Board. Among them GDR and Algeria have important prospects which have not been explored.

Rubber production in 1984-85 was 1,86,450 tonnes and consumption 2,17,500 involving imports of 40,211 tonnes. In 1985-86 production is estimated by the Rubber Board at 2,01,000 tonnes and consumption at 2,35,000. In 1986-87 the Board production estimate is 2,15,000 tonnes and demand 2,50,000 tonnes, calling for imports of 36,000 tonnes. The Rubber goods industry however estimates production at 2,60,000 tonnes and demand at 3,25,000 tonnes, calling for import of 65,000 tonnes. Three issues in this situation stand out. First the widening gap between production and consumption is a constant source of friction between consumers of rubber and producers, with the government being called on to arbitrate, which is unsound. Second the gap between supply and demand is now permanent and growing every year, with imports becoming a part of the rubber industry: in 1982-83 it was 32,500 tonnes, in 1983-84 it was 35,900 and for the following 3 years the figures are given above. Self reliance seems to be receding as far as the rubber industry is concerned. Finally the rubber strategy needs urgent revision. For one thing the expansion of its cultivation to Assam, Tripura, Arunachal Pradesh, Maharastra and Goa will remain a paper plan as long as the needed investment (Rs.153 crores) is not forth coming. The other sensitive issue which needs to be brought

into the open is the production of synthetic rubber. At present only 50 per cent of the capacity of the firms involved is being used. There is here a choice of continuing the import of natural rubber or the increase of domestically produced synthetic rubber.

Cardamom production, which India shares with 6 other countries was 29,000 tonnes in 1984-85 and exports 2,367 tonnes. In 1985-86, when the season began in September 1985 production is estimated ± 4200 tonnes and exports at 3000 tonnes. There is need to update our plantations which produce 60 kg per hectare compared to 250 kg per hectare by Gautemala. In addition to the age of our plantation, there is little research on how to adapt to changes in rainfall, climate etc. With the formation of the Cardamom Board, there should be some attention to these issues.

Tobacco production has been on the decline from 490,000 tonnes in 1983-84 to 470,000 in 1984-85 and further down to 420,000 in 1985-86. India is one of the countries producing Virginia tobacco on a large scale, about 50 per cent of the tobacco that is produced being exported to the Soviet Union on a Rupee payment basis, to the tobacco state monopolies of Japan and Egypt and to the private trade in the UK. Before 1974, tobacco growers brought their produce to the market where they obtained low prices from the growers. Hence the Tobacco Board was set up to streamline and coordinate production, marketing and exports. The Estimate Committee of Parliament reviewing the functioning of the Board points out its many short comings, including not carrying out its statutory function of registration of Virginia tobacco farmers and its slackness in R&D work. Of the R&D allotment of Rs.5 lakhs in 1979-81, the committee points out that the Board spent only Rs.37,737.10. Further it has not graded tobacco at the field level properly, and so has not obtained the right

prices. Above all it reports that after 10 years of functioning, only 10 per cent of the cultivation of Virginia tobacco is undertaken scientifically, which is inexplicable because over 80 per cent of tobacco growers are large farmers, who can use the latest and most modern methods. In this situation, extension has an important role.

Fisheries Fish production, according to the Ministry's annual report, has registered a growth of 3.1 per cent in the Sixth Plan, from 2.34 million tonnes in 1979-80 to 2.85 million tonnes in 1984-85. For the Seventh Plan the target is 4 million tonnes, with inland fish catch increasing by 0.70 million tonnes and marine landings by 0.45 million tonnes. During the Fish Farmers' Development Decade, culture cum captive fisheries in small and medium reservoirs and increase in fish seed production are helping inland fisheries to grow faster than marine fisheries. To increase the quality of fish seeds, five commercial fish seed farms in Madhya Pradesh, Orissa, West Bengal, Bihar and UP have been commissioned and are under development. The Department has also recommended to the Shipping Development Fund Committee, the grant of soft loans to 52 companies to acquire 75 deep sea fishing trawlers at Rs.56.21 crores as a means of further developing deep sea fishing. Marine exports are an important foreign exchange earner at Rs.40 crores in 1985-86 and could be developed further.

Dairy Milk production has been steadily increasing during the Sixth Plan and for 1985-86 is reported at 39.80 million tonnes. The dairy industry in the country has been surrounded by the continuing controversy of Operation Flood I & II and the preparation now under way for launching Operation Flood III. The evaluation of the programme has involved: (a) assessment of Operation Flood I by the World Food Programme in 1971, 1972 and in 1981; (b) assessment of

Phase I and feasibility of Phase II by the World Bank in 1977; (c) the government of India which appointed the LK Jha Committee in 1984; (d) among non official assessment are those by Patel in 1975, Singh and Das in 1984, Shanti George in 1985 and 1986, the Administrative Staff College in 1985.[29] On the one hand the assessments by the international agencies, the government and those by Patel, Singh and the Administrative Staff College maintain that Operation Flood has led to dairy development in India, that it has met the increasing demand for milk and its products, that it has increased the number of milch cattle and the protein intake of the rural areas, that it has increased the quantitity of milk in rural areas. The critique of the programme centres around the charge that it makes the country dependent on imported milk powder, (which itself results from India's export of concentrated residues to EEC which reduces India's under nourished milch stock, while sustaining over production in Europe's dairy farms) and the import of dairy machinery, that it has benefited mainly the urban and rural rich, that it is expensive, that it has produced milk at the cost of more urgently needed coarse cereals, pulses and oil seeds, and that it has not increased milk production in the country but has built dairies and milk factories which are languishing for lack of milk. The issues raised are serious and require data for their clarification - which is not as yet available.

Manufactures

Industrial growth in the Sixth Plan averaged 5.6 per cent per annum, which was lower than the Fifth Plan annual average of 5.7 per cent and the Sixth Plan target of 8 per cent. For the five years, the growth was 4 per cent, 8.6 per cent, 3.9 per cent, 5.5 per cent and 5.6 per cent.[30]

In 1985-86 industrial growth according to CSO was 6.3 per cent. The first two quarters recorded low rates at 5 per cent in April-June compared to 6.2 in 1984-85, at 6.6 per cent in July-September compared to 8.4 per cent in 1984-85: but the second two quarters recorded rising rates at 8.3 per cent between October-December 1985-86 compared to 3.9 per cent in 1984-85 and 5.6 per cent in January-March 1985-86 compared to 4.2 per cent in January-March 1984-85.

For 1985-86 there was a change in the computation of the index involving two issues. First as the Economic Survey points out there are/[a]number of industries on which fresh annual data does not become available, and so the index was repeating year after year the old data for such items. Now CSO has decided to drop these items from the table, and redistribute their weights on the remaining items. On this basis the 1984-85 industrial growth which was earlier reported as 5.6 per cent becomes 6.8 per cent under the adjusted index. The second issue is that as the index is constructed on the base year 1970-71, it does not include many new industries which have since come up. Hence it is proposed to shift the base to 1980-81, which would reflect these industrial items.

The year 1985-86 saw a continuation of the industrial policy changes initiated in the previous year 1984-85 and commented on in the Mid Year Review 1985.[31] During 1985-86 the further measures introduced were:

a) 25 broad categories of industries and 82 bulk drugs and formulations were delicensed for non MRTP and non FERA companies,

b) MRTP companies were exempted from the provision of sections 21 and 21 of the MRTP Act,

c) Delicensing was extended to MRTP & FERA companies in respect of 22 out of 27 industries exempted under section 22A of the MRTP Act, if they are located in centrally declared backward areas,

d) The broad banding scheme was extended to cover 25 industry groups,

e) Capacity reindorsement to all units which have achieved a capacity use of 80 per cent during any of the previous 5 years preceding 31 March 1985, the reindorsement being the highest production achieved during any of the previous years plus one third,

f) A revised and expanded list of Appendix I industries covering 30 broad groups in which MRTP & FERA companies are permitted to set up capacities,

g) Outside the Appendix I industries, MRTP & FERA companies can invest in any area if 60 per cent of the product is for export, or 75 per cent, if the item is reserved for the small scale sector,

h) MRTP licenses are to be considered along with other applications under the Industries (Development and Regulation) Act: to expedite matters in this regard, the department of Company Affairs has been brought into the Ministry of Industry,

i) In the case of telecommunication equipment industry which is reserved for the public sector, manufacture of switching and telecommunication equipment for installation at subscribers' premises has been

opened to the private sector,

j) Foreign exchange limits for the import of raw material/components has been raised to 15 per cent of annual production or Rs75 lakhs.

This process continued in 1986-87. 33 items have been de-canalised and small industry freed from licensing and its reservations reduced. In April, it has been decided to permit expansion to the maximum possible economic size for which the minimum economic size has been prescribed for 65 industries, to start with. In these 65 industries new units will not be allowed to set up capacities below the prescribed level. This automatic capacity expansion is available to MRTP companies also. This opening raises some problems as in the case of polyester fibre industry, where the minimum scale has been set at 30,000 tonnes. Of the 7 firms in this field, only 2 are at this level. The other five who are 15,000 tonnes and below can expand their capacity to this level which will make total capacity over 3 lakhs tonnes against a Seventh Plan estimated demand at less than 2 lakh tonnes.

As a result of the policy changes, (a) by December 1986 7 MRTP companies and 27 non MRTP companies took advantage of broad banding - mainly in the automobile field, (b) as a result of raising the MRTP ceiling by August 1986, of 1720 companies, 559 applied for deregistration, and 295 have been deregistered. (Reply to Rajya Sabha question August 4 1986) (c) In 1985 1457 letters of Intent were issued, of which 291 were to MRTP & FERA companies, and 985 Industrial licenses issued, of which 109 were to MRTP & FERA companies. (d) 621 foreign collaboration agreements were approved in 1985. for a total investment of Rs.12,586.698 lakhs.

On the performance of the industries in 1985-86, using use based classification, intermediate and consumption good industries recorded high growth at 2.8 per cent compared to the previous year's 1.9 per cent, while basic industries decelerated at -6.2 per cent compared to 17.4 per cent in the previous year. On input classification, agro based industries registered a growth of 1.2 per cent compared to the previous year's -0.1 per cent, metal based industries rose to 9.1 per cent compared to the previous 5.9 per cent, but chemical based industries recorded a lower 5.8 per cent compared to the previous year's 10 per cent. On capacity use, the results were mixed. There was 100 per cent capacity use in Jeeps, 3 wheelers, cement machinery, boilers, electric fans etc. there was 80 to 90 per cent capacity use in material handling equipment, food processing machinery, power transformers etc, but there was a serious decline in aluminium, non ferrous metals, zip fasteners, penicillin etc. There was improvement in infrastructure industries, broad banding, availability of raw materials, which increased capacity use. But the high cost of inputs, sluggish demand, growth of substitutes, higher duty on imports led to lower capacity use.

There is a problem of recession starting with parts of the automobile industry. In commercial vehicles whose production increased by 5.6 per cent in 1985-86 compared to 6.7 per cent in the previous year, sales decelerated to 0.4 per cent in 1985-86 compared to the previous year's increase of 4.4 per cent. A further analysis shows that in this sub group medium and heavy vehicles sales declined in part because of the better performance of the railways. The production of medium and heavy vehicle increased from 2.5 per cent in 1984-85 to 2.7 per cent in 1985-86, while

the sales declined by 5.1 per cent in 1985-86 against a rise of 1.3 per cent in 1984-85. In January 1986 slack demand is reported also by steel, paper, refreigerators, textile machinery and battery industries.

On industrial finance, the IDBI's report on Development Banking 1984-85 shows some gaps. It states that I) finances were adequate and did not constrain industrial growth, II) till March 1985 Rs.18,502 crores were sanctioned and 71 per cent of cumulative sanctions disbursed, which was only 66.6 per cent during the Sixth Plan, III) there were wide annual variations in the rate of disbursement at 2.4 per cent in 1975-76, 45.3 per cent in 1979-80 and in the Sixth Plan 18.8 per cent, 28.8 per cent, 14.2 per cent 27.7 per cent and 17.8 per cent in each of the five years. There is no explanation offered for these fluctuations. Further there is no information on industrial performance and the record at the level of the 22 states.

In this connection, the Reserve Bank points out that though credit to the industrial sector fell from 60.6 per cent of gross bank credit in March 1968 to 37 per cent in March 1984 due to the credit reserved for the priority sector, there was no constraint of credit to the industries. In absolute terms, their credit increased eight fold from Rs.1857 crores to Rs.15,000 crores during this period, and if small industry is included to Rs.20,336 crores. To this, the credit made available by the term lending institutions should be added as well as equities and debentures sold on the capital market.[32]

In regard to industrial pollution and hazards, the government announced in 1985 that legislation is being drafted to control 21 hazardous industries, for which purpose a Hazardous Substances Central Board is being set up. The

wisdom of this kind of legislation is raised in view of the fact that there are over 200 union and state laws on water and air pollution which are not being enforced and which have no funds behind them. One way forward would be to obtain the participation of local citizens and voluntary bodies which will put teeth into the acts. The most hazardous industry is the nuclear industry, but it is surrounded by secrecy that it appears in no Act - not even when this hazardous industry is located in a hazardous area.

For 1986-87, manufacturing growth should, on the basis of the performance in the first quarter and its potential following the various changes made in capacity, technology and management, record a 7 per cent growth.

Public Sector

The Public sector enterprises performance for 1984-85 as reported by the Bureau of Public Enterprises (which really covers only 25 per cent of all public sector units in the union and states) shows a 21 per cent growth in public sector investment (from Rs.35,394 crores in 1983-84 to Rs.42,811 crores in 1984-85), the number of enterprises increasing from 214 to 221, gross profits by 30 per cent from Rs.3536 crores in 1983-84 to Rs.4637 crores in 1984-85, the profit before tax increasing by 43.2 per cent from Rs.1480 crores to Rs.2119 crores, the net internal generation of resources increasing from Rs.2828 crores to Rs.3554 crores. The Bureau also reports that in the first 6 months April-September of 1985-86 there is a lower loss of Rs.14.85 crores compared to the loss of Rs.248.98 crores in April-September 1984-85. The public sector enterprises on any criteria present a sorry picture. Their contribution to the Public Sector plan outlay has been below 7 per cent of the total Plan outlay as the table below indicates:

Table:VI

Rs. crores

| Plan | Target | Actual | % to Plan outlay |
|---|---|---|---|
| Third Plan | 550 | 435 | 5 |
| Annual Plan | 587 | 409 | 6.2 |
| Fourth Plan | 2029 | 1135 | 7 |
| Fifth Plan | 849 | 2583 | 6.6 |
| Sixth Plan | 9395 | 6645 | 6.8 |
| Seventh Plan | 35485 | | |

Source: The Plan documents.

Their capacity use is equally poor. Only about half the units are working at 75 per cent of installed capacity. Over 20 per cent are working below 20 per cent capacity. Third in 1984-85 their cost of production was Rs.35,453 crores, while their turn over was Rs.39,521 crores in manufacture and was Rs.16,147 crores (costs) and Rs.15,148 crores (sales) in services. This is a sorry record. Over 25 years, the units earned net profits in 13 years and net losses in 12 years, so that the average ratio of net profits for this period is 0.7 per cent. Even the profits of the 12 petroleum enterprises at Rs.1,117 crores is due to the government's energy policy and not to their efficiency. For the Seventh Plan, the Plan is heavily dependent on the sector which is expected to contribute Rs.35,000 crores, as noted earlier. To ensure the turn around and success of the public sector units, the government has laid down 3 norms: a) their contribution to the Plan outlay: b) foreign exchange earnings: and c) indigenisation. All this is in contrast to the 1984-85 decision to write off the accumulated losses of the chronic public sector unit losses. What is needed is a policy to help the units which are under new and vigorous management and which are burdened by past debts.

These may be given debt relief, and the other chronic losers allowed to die. During the year, this seemed to be the policy when a list of heavy loss making public sector units was published, and the intention to close them down was announced. Then exceptions began to be announced, until finally not one unit was closed. In fact the policy is developing in the opposite direction, when in 1984-85 and 1985-86 49 sick private units were taken over by the public sector. At this time when the public sector is under attack and there is talk of privatising some of them, it needs integrity and courage to apply and adhere to economic principles in their management.

Private Sector

The reports of ICICI, IDBI, and RBI on the performance of the private sector are positive. ICICI reports[33] improved financial performance of the Indian Corporate Sector in 1984-85, where 372 companies recorded sales of Rs.3,670 crores and 417 companies which represented 50 per cent of the capital of public limited companies recorded increased sales of 17.4 per cent, gross profits of 18.3 per cent, gross capital formation of 14.4 per cent. Their capacity use and exports rose. IDBI in its annual report for 1984-85[34] reports record sanctions of Rs.3,617 crores (42 per cent), 13.5 per cent growth in disbursements (Rs.2,212 crores), but with a slow start on the soft loan scheme for modernisation under which only Rs.143.7 crores was sanctioned, increased assistance to backward areas of Rs.1,788 crores (72 per cent) and approved 429 projects of technicians and entrepreneurs for Rs.179.7 crores. The RBI survey[35] of 535 large public limited companies (with paid up capital above Rs.1 crore) for 1984-85 showed a rising trend compared to the last 2 years, with a 16.2 per cent growth in value of production, 15.8 per cent increase in

sales, 15.1 per cent in net value added and 10.4 per cent of investment in physical assets. Gross profits shot upto 20.7 per cent, operating profits to 27.2 per cent and pre tax profits to 29.5 per cent (compared to the previous year). While there was noticeable decline in the debt-equity ratio from 82.5 per cent to 80 per cent, there was higher reliance on external financing for assets formation. One other comment made is that the finances of large public limited companies show that they have failed to change their working capital financing in accordance with the norms of the Chore committee which recommended that industries widen the base of their long term funds through the capital market, and increased plough back rate of profits. In the functioning of the private corporate sector, the MRTP Act has not been a restraint. The Commission's report for 1984 states that in the first 3 cases in which it decided to take action in 1973 and 1974, the companies concerned obtained a stay order from the supreme court which till 1984 is not disposed off. Similarly in June 1975 the Commission took proceedings against a company which took the case to the supreme court, got a stay order, and is still not disposed off. In this rather toothless Act, the size of assets of a company does not tell the MRTP story, as many companies (over 500 of them) belonging to large houses have not registered with the Commission. The raising of the MRTP ceiling has only made it more toothless.

Industrial Sickness

The number of sick units is growing from 23,740 in 1980, to 60,173 in 1982, 92,282 in December 1984, of which 91,450 are small scale units and 1,832 medium and large ones. (In 1985 the total number increased to 99,648). 17 per cent of outstanding credit, Rs.3,600 crores, are locked up in them,

(the latest figure is Rs.3,800 crores being the overdues, constituting 8 per cent of total bank credit). Sickness is serious because it locks up scarce financial resources as seen above, involves wastage of capital assets, and production losses, creates unemployment and revenue losses to the exchequer. On the basis of the Tiwari Committee report, the Reserve Bank's finding in 1984 was that the Companies Act, the MRTP Act, and the Industrial (Development and Regulation) Act are inadequate to prevent and deal with sickness, and so it recommended special legislation. Thus Parliament enacted in 1985 the Sick Industrial Companies Act under which (a) public sector enterprises and small scale units were kept outside the Act: (b) it defined a sick unit, as one registered for not less than 7 years and has at the end of the financial year accumulated losses equal to its net worth and has suffered cash losses for that year and the preceding year: and (c) a Board for Industrial and Financial Reconstruction (BFIR) is set up to enquire whether a sick unit can be rehabilitated or should be liquidated. But the Industrial Reconstruction Bank of India has been reconstructed for this precise purpose, of identification and rehabilitation of sick units. Why are guidelines not provided to banks to report sickness directly to BFIR? Under the Act, the Board of Directors of a company have to notify BIFR about the onset of sickness, that is if accumulated losses at the end of the year are 80 per cent of net worth, and the Act provides for their being jailed on non compliance. If directors have misappropriated the company funds, they are required to repay it and are to be black listed. But BIFR is too large and unwieldy a body to apply these sanctions effectively. The basic purpose of the legislation is timely detection of sickness, speedy decision on preventive, ameliorative and remedial measures, and their expenditious enforcement.

Where sickness is chronic, it can ask an operating agency to prepare a rehabilitation scheme, involving take over of management, reconstitution of its board, amalgamation, lease or sale to any other company. If the rehabilitation package is refused, BIFR may wind up the agency. There are many questions about the legislation on how effective it can be in dealing with the fast spreading industrial sickness. To start with, the Board could issue guidelines to the banks to coordinate with term lending institutions in assessing the viability of sick units, and frame a suitable rehabilitation package in which all concessions and reliefs should be incorporated. In the case of units which cannot be rehabilitated, they should be liquidated, through sale or merger, if there is any taker. On this there should not be any compromise. BIFR will have to work closely with IRBI to bring some health and sanity to the industrial scene.

It is now possible to review briefly some of the major industries.

Steel

The steel scene presents many disturbing aspects. First the limited production prospects. In fact the Seventh Plan present a barrenness as far as steel policy is concerned. There is to be no fresh capacity addition, either new green field plants or expansion of existing capacities: also there is to be no modernisation of Durgapur, Rourkela or IISCO. This meant that the 6 integrated steel plants with a capacity of 12 million tonnes which should produce 8 million tonnes, produced 5.85 million tonnes in 1985-86, to which mini steel plants' production of 1.5 million tonnes (against a capacity of 4 million tonnes) should be added. This under utilisation of capacity lead to shortages, resulting in a roaring black market in steel prices. While

SAIL projects a production of 9.2 million tonnes in 1986-87 and 10 million tonnes in 1988-89, increasing subsequently by 1 million tonnes per annum, the ministry in its report says SAIL production will be 7 million tonnes in 1986-87, 7.9 million tonnes in 1989-90, 8.9 million tonnes in 1994-95.[36] Taking into consideration the contribution from TISCO, Vishakapatnam (whose first stage of 1.2 million tonnes will be commissioned in 1988-89 and second stage of 3.4 million tonnes in 1991-92), mini steel plants and scrap rerollers, the ministry places aggregate steel supply at 13 million tonnes in 1989-90, 17.2 million tonnes in 1994-95 and also in 1999-2000.

Second there is a widening gap between supply and demand. Basing itself on an NCAER study on the demand for steel, the government established demand at 11.9 million tonnes in 1986-87, 13.9 million tonnes in 1989-90, 17.7 million tonnes in 1994-95 and 22.5 million tonnes, involving the following supply demand profile:

Table:VII

Million tonnes of Finished steel

| Seventh Plan | Demand | Availability | Gap |
|---|---|---|---|
| 1986-87 | 11.9 | 10.7 | -1.2 |
| 1989-90 | 13.9 | 13.0 | -0.9 |
| Eighth Plan | | | |
| 1994-95 | 17.7 | 17.2 | -0.5 |
| Ninth Plan | | | |
| 1999-2000 | 22.5 | 17.2 | -5.3 |

Here two initial comments must be made. One the estimates of the government (through its working group) and that of the Planning Commission vary rather widely. For 1989-90, as the above table shows, the governments supply estimate is

13 million tonnes, while the Planning Commission places it at 12.4 million tonnes. The governments estimate of the gap between demand and availability is 0.5 million tonnes in 1994-95, the Planning Commission's estimate of the gap is 2.5 million tonnes. Similarly for 2000 the government's estimate of the gap is 5.3 million tonnes, while the Planning Commission estimate is 6 million tonnes. Steel availability and demand is a crucial element is the economy and it is necessary that there should be no differences between the government and the planning commission on their estimates. Two, there is an element of uncertainty about the demand projection. The actuals between 1950-65 were an annual increase of 10 per cent falling to an annual 3 per cent between 1965-85.

Third the above discussion shows that the reliance on imports will continue through the next three Plan periods, reaching a high 5-6 million tonnes at the turn of the century. The goal of self reliance as far as steel is concerned is on the retreat.

Fourth on this basis the complete absence of any new projects, and as the Report of the ministry states "at present there are no proposals under active consideration for expanding any of the Public sector Integrated steel plants" follows from allocating less than half of what the sector needs in the Seventh Plan, Rs.6,420 crores against the need of Rs.14,224. This is short sighted. Even the suggestions for using the alternative steel production - scrap/DRI - route is tied in with foreign knowhow, which as the RBI's Fourth Survey of foreign collaborations during 1977-78 to 1980-81[37] shows do not make for efficient use of resources as ratio of value added to total production, and tend to promote imports rather than exports.

Engineering and machine tools

In the case of engineering industries there is something of a seeming contradiction. While domestic production is increasing steadily from 256.2 in 1983-84 to 272.6 in 1984-85 and to 297.7 in 1985-86, representing a growth of 6.4 per cent and 9.2 per cent in the last two years, exports of engineering goods are declining. Against a target of Rs.1,750 crores for 1985-86, actual exports declined to Rs.1,100 crores. This declining export trend has started in 1981-82 when an ambitious target of Rs.9,000 crores were set. The Seventh Plan established a lower target at Rs.5,700 crores which also looks unattainable. The reasons given by the Reserve Bank are (a) slow down in gulf countries constructions, (b) payment problems of African countries, (c) the Iran-Iraq war, (d) Sri Lanka disturbances as well as (e) disturbances in some parts of the country, (f) Bombay dock workers strike, and (g) power famine in certain parts of the country.[38] But these domestic factors should have reduced domestic production which, as noted earlier, has been on the contrary, expanded. Similarly the Engineering Export Promotion Corporation explains the export decline in 1985-86 as being due to (a) stiff competition from China, South Korea, Taiwan and Mexico, (b) protectionism, (c) recession in the developed countries markets, and (d) poor infrastructure. If this is meant to extract more concessions from the government for the engineering industries, it is understandable, though it looks as if the industry is at the end of the concessions route, as in obtaining 90 per cent of its raw material at international prices, the increased CCS and market development assistance, the liberalisation of technology imports and the leeway given to MRTP & FERA companies. The real reason is that the large engineering units see on reason to go beyond the attractive domestic market, and this is what the minister

of Finance had in mind in stating recently[39] that the large firms are not interested in exports, are not even earning their way on their foreign exchange outgo. 50 large engineering firms producing goods worth Rs.3,200 crores are not exporting even 1 per cent of their product. 80 per cent of the engineering exports are from 300 small and medium units. This needs correction.

In 1985-86, 148 machine tool units with an installed capacity of Rs.390 crores produced tools worth Rs.200 crores. They have begun the manufacture of sophisticated high tech computerised - numerically - controlled machine tools, producing CNC turning centres, CNC milling machines, CNC coordinate tables needed by the engineering industry. The Seventh Plan target is Rs.765 crores: broad banding has been permitted to make production meet demand. And that is the problem. The demand for sophisticated tools is increasing much faster than indigenous supply capabilities, so that imports of the tools which were Rs.21 crores in 1960 has shot upto Rs.170 crores in 1984-85, being 37 per cent of total consumption. The three year Import Policy and placing machine tools in OGL have strengthened imports and lowered exports from Rs.26 crores in 1983-84 to Rs.20 crores in 1984-85. There is need to change the indigenous machine tools technology, as with growing automation, CNC tools are needed, for which the indigenous production base needs critical components and sub systems. These have to be imported, but customs duty on them is 85-100 per cent, whereas whole tools are on OGL and have to pay only 35 per cent customs. The latest budget has given the industry some relief, which however, is inadequate and needs strengthening.

Mettallurgical, Non ferrous and capital goodsindustries

In the metallurgical field, there are 27 units with the Hindustan Engineering Corporation in the lead. With an installed capacity of Rs.86 crores, HEC production in 1984-85, was Rs.75 crores. The target for 1985-86 was Rs.80 crores which was reached. In the area of mining machinery, there are 17 units with an installed capacity of Rs.110 crores, MAMC and Jessop being in the lead. The problem faced by this sector is that though it meets the needs of the mining industry, it is operating at 60 per cent capacity due to the lack of orders from the coal sector. Similarly oil drilling equipment, particularly onshore drilling rigs, are adequately produced and for the Seventh Plan 60-70 numbers are targeted. On Down Hole equipment, reliance is still on imports. The 18 units producing earth moving equipment, as the 143 units producing heavy, medium and light structurals, those producing large and medium wagons, cranes, transmission line towers, jute and textile machinery, paper, cement, sugar, leather and dairy machinery face various and varying problems of low capacity utilisation, limited demand, and in the case leather machinery, however, not being able to keep up with demand.

The aluminium industry records a production of 2,76,492 tonnes in 1984-85 and in 1985-86 upto December reports 1,98,240. With NALCO coming up at the end of the Seventh Plan, all imports of aluminium (averaging 50,000 tonnes per annum) will be replaced by surplus domestic availability, if the demand increased by 9 per cent, to assure which licenses for manufacturing aluminium semis, alloys and extrusions are liberalised so that they can be used in place of steel in electricity, transportation, railways, marine application and building construction.

The two problems facing NALCO are power supply for which adequate provision should be made, and the State Electricity Boards being short of finds are cutting their demand for cables which use EC grade metal. This financial shortage should be provided for. Copper production has increased from 44,321 tonnes in 1984-85 to 52,000 tonnes in 1985-86. Here there is a problem of increased 17,000 tonnes copper stocks due to massive imports under REP and advance licensing scheme to take advantage of the low market price against the price fixed by the committee. This unnecessary drain on our foreign exchange resources should be stopped. Zinc production increased in 1985-86 by 8 per cent to 50,796 tonnes and lead to 14,160 tonnes. The Geological survey reports locating copper in Midnapore district. This together with the recently discovered zinc and lead deposits in the Rampura and Agucha region will enable imports to be reduced from 60 per cent to 40 per cent of the demand.

The capital goods industry faces several problems. First is its low rate of growth. While the industrial sector's growth was 6.3 per cent in 1985-86, as noted earlier, the growth rate of the capital goods industry is about half of that at 3.3 per cent, with the following break up of some of the components:

Table:VIII

| Sector | Growth rate in 1985-86 |
|---|---|
| Power transformers | 7.3 |
| Electric motors | 6.3 |
| Boilers | 13.1 |
| Machine tools | -16.4 |
| Diesel engine | 8.0 |
| Boiler & roller bearings | 27.4 |

(contd...)

Table: VIII(contd)

| | |
|---|---|
| Agricultural tractors | -10.0 |
| Motor starters and contractors | 2.7 |
| Railway wagons | 0.8 |
| Commercial vehicles | 6.4 |

Source: Ministry of Industry.

Second, due to the 3 year liberal import policy under which the capital goods committee gave approvals for import of capital goods of Rs.745 crores in 1984-85 and Rs.871 crores in 1985-86, (particularly in electricals, electronics, metals, cement, ceramics, manmade fibres, and textiles) and the 1985-86 budget reducing the customs duty on imports from 65 to 45 per cent and for power machinery to 25 per cent and for fertiliser machinery to nil, the domestic capital goods industry faces empty order books and a sharp rise in idle plant capacity. The Planning Commission also is of the view that the serious damage done to the industry in 1985-86 cannot be repaired, and the budget sops given in 1986-87 (raising customs on project imports from 45 to 55 per cent and on 35 machine tools from 65 to 110 per cent) is a case of doing too little and too late. The lesson is clear. Before the government rushes forward with its liberalisation schemes or innovations like conferring deemed export status on some firms in the industry, there should be studies made of the proposed measures and their consequences to the economy and its development along self reliant and productive lines - and then and only then should decisions be announced.

Iron Ore, silicon and pastics

Iron ore production in 1985-86 was 44 million tonnes (in lumps and fines) which was a 4 per cent increase. The ore is used to export mainly to Japan where there is a

problem. While exports to Japan increased from 11.5 million tonnes in 1984-85 to 13 million tonnes in 1985-86 including 2.5 million tonnes from Kudrumukh, and in addition 10 million tonnes were exported from Goa, making aggregate exports 23 million tonnes, the industry faced 4 problems. First there is a pricing problem. In return for the increased exports to it, Japan demanded and got a 5 per cent reduction in price. Second production costs are increasing, mineral costs, transportation costs and port fees. Third the heavy dependence of the industry on a single customer - Japan which has already begun using some 25 to 30 per cent less of steel in its production of automobiles is not healthy and clouds the future. Finally there is the question as to whether the country should be exporting this potentially important value added item in this raw form.

Silicon production in India is just starting. 1985-86 represented a break through for India in silicon technology. Metkem silicon of Mettur Chemicals was ready to produce the first 25 tonnes per annum of polysilicon and conversion of a sizeable portion into mono crystalline ingots and wafers. It is an essential raw material for the fast growing electrionics industry in the country as well as solar power industries, when they are commissioned. The problem is whether the price will be equal to the landed cost of the equivalent imported material, not immediately but in 4 or 5 years. At present the price difference is 3 times. There is also a controversy over the viability of this 100 per cent Indian effort with that of a tie up with a US company, Hemlock, which is to be located in Baroda.

Plastics production is dependent on low density polythylene (LDPE) whose production in 1985-86 is around 1 lakh tonnes, with about 90 per cent contributed by 3 major producers,

Indian Petro Chemicals Corporation (IPCL), Union Carbide and ICI. The industry faces several problems. First the demand for low density polythlene (LPDE) is about 50 per cent above production at 1.6 lakh tonnes. Second the wide gap between supply and demand has resulted in unrestricted black marketing, the unofficial premium being about Rs.7,000 per tonne in the open market price of LPDE over IPCL's delivery price of Rs.20,500 per tonne. Third the acute scarcity of LPDE has led many of the 6,000 small units to stop production and the remaining to produce at 25 to 30 per capacity. Fourth LDPE has in the export import policy been placed in OGL but the import duty of 226 per cent makes it costly. There is a demand from the industry to reduce the duty to the same level as that on HDPE and other plastic raw materials at 156 per cent. This should be done both to make LDPE available to small units and counter the black market and the unofficial price ruling there. LDPE supplies will increase by the end of the Plan period when the authorised new plants begin production. For the balance of the Plan period, imports should be encouraged to meet both the increasing demand of the industry and exports prospects.

Automobiles

The problem of recession faced by one section of the automobile industry, heavy commercial vehicles, was earlier referred to. In 1986-87 they faced a 6 to 20% pre budget hike in petroleum prices to which MODVAT added further increases. Despite the proforma credit that MODVAT gave manufactures, the increase in excise was so high that prices increased. This was particularly so for these cars dependent on imported components, which the hardening Japanese Yen pushed up further. To start with, fuel efficient cars did not benefit from MODVAT as they already had low rates. Another problem faced by the industry was that as the result of broad

banding, there was a spurt both in new and expansion of existing 4 wheeler production, with a consequent possibility of supply exceeding demand very sharply. Agsinst the seven new brands of passenger cars together with the existing ones, the licensed capacity crosses 3 lakh cars against demand assessed by the Planning Commission at 1.45 lakh cars by the end of the Seventh Plan. There is also the large increase in collaboration agreements, mostly with Japan, which could cost by the end of the Plan period Rs.15,000 crores in foreign exchange outgo. This large drain in the name of technology transfer will benefit Indian industry little, because like the computer collaborations, the Japanese automobile collaborations are for scraw driver technology. Another issue confronting the industry is in regard to the ancillary components industry which is facing a serious threat as a result of liberal imports of components from Japan. Here the concessional tariffs on automobile ancillary items and spares will block the growth of domestic industry, which has developed a high degree of skill and which requires imported raw materials or balancing equipment for some marginal expansion, not covered by the current definition of project imports. Finally the spectacular growth of this industry is indicated by the fact that the different vehicles, passenger cars, jeeps, commercial vehicles, scooters, mopeds three wheelers, tractors and motor cycles increased from 4112 in 1950 to 71,391 in 1960, to 2,22,775 in 1970 and to 1,022,072 in 1985, with 75 per cent being 2 wheelers. The big thrust is for commercial vehicles and the broad banding from January 21, 1985 give 4 wheeler manufacturesa range from passenger cars to LCV and HCV, with no limit on engineering. The industry ministry's projection is to increase from the current 80,000 units to 1.4 lakh units by 1989-90, which is a bit of an over estimate, which can be controlled by not licensing new units but expanding existing firms. In the industry, unlike

the case of heavy commercial vehicles, there is a boom in the production of 2 wheelers which increased by 13.7 per cent in 1984-85 and 32.4 per cent in 1985-86, with sales in the 2 years rising by 13.5 per cent and 30.2 per cent. There was, however, deceleration in tractor production by 10.4 per cent and an 8 per cent reduction in sales.

Tyres

Tyres production in 1985-86 was 127 lakh numbers and tubes 137 lakh numbers. Between July 1984 and January 1986 the government allowed two increases in bus and truck tyres prices and yet in January they were selling at a premium of Rs.1,800 per tyre over the government fixed price. The tyre users associations point out that the 1982-83 5.5 per cent excise duty relief as well as the 1985-86 excise duty relief were not passed on to consumers, and that the tyre manufacturers are acting as a cartel in pushing up prices. Tyre manufactures on their side state that all their costs have gone up and that the government decision to license new tyre units goes against the industry, which faces large unused capacity. The Bureau of Industrial Costs and Prices which was asked to study the cost structure of the industry concluded that while the cost of natural rubber, nylon tyre cord and carbon black rose by 10.4 per cent between August 81 and April 1985, tyre prices have increased by 37 to 73 per cent during the period. It points out that the 1985 March increase in prices was well above production costs and has recommended that MRTP study the industry. The MRTP commission has issued injunctions against price agreements till its enquiry is completed. The industry's claim that there is excess capacity is not true, as the ministry's working group estimates that by 1989-90 the demand will be for 21.27 million tyres (compared to the current 10 million), which on the assumption of 80 per cent capacity use will call

for 26.89 million tyre capacity (compared to the current 13.65 million). In the mean while, a government committee has recommended that a monitoring cell be established in the Industry ministry to monitor capacity, production, product mix, costs, prices, quality and distribution. It has also recommended that the existing units be given preference in capacity expansion. If these recommendations are given effect to, there is a possibility also of a rather important increase in exports.

Electronics

The Electronics industry which grew by 20 per cent annually, recorded a production of Rs.300 crores in 1983 and Rs.410 crores in 1984. In 1985-86 the growth rate was 41 per cent, with consumer electronics increasing by 75.5 per cent, communications and broadcasting 18 per cent, aerospace and defence electronics by 31.5 per cent, computer systems by 68.5 per cent, and electronic components by 35.3 per cent. Despite this record growth, it must be noted that the quality of production is poor, costs high, the technology used obsolete, amounting in effect to screw driver technology, the value added is little because the sub assemblies are imported. Of the 3 components, active, passive and electro magnetic, only in the passive type is the Indian electronics industry efficient. In the case of consumer electronics in which Indian producers act as the assembly point, it was till recently the major part of the industry. To start with, in view of the simple technology involved, the government reserved TV manufacture to the small scale sector, which flourished but only as assembly points. Hence in the second stage, TV was thrown open to large firms including FERA and subsidiaries of foreign companies, which has resulted in expanded foreign investment, enlarged dividend remittances and technology payments, import of plant and machinery, along with transfer

pricing between multinationals and their Indian subsidiaries. Here there is a conscious trade off between self reliance and fast industrial growth. In the new electronics policy, which goes a long way in pushing the industry forward, it is important to decide on the right priorities for technology imports. Instead of importing main frames for which we are nowhere ready, the plicy should be to manufacture mini computers, on which a start has been made in manufacture of disk drives as the much in demand personal computers. There is one area where India is developing fast and that is in computer software, in which exports have expanded from Rs.35 lakhs in 1975 to Rs.10.2 crores in 1981 on to Rs.35 crores in 1985. It covers business, engineering, and management and is being sold to the US, USSR, Japan and EEC. It is expected to increase from the current 0.1 per cent of world trade in computer software to 1.5 per cent by the end of the Seventh Plan. India imports computers from the US, the latest agreement is for the import of super computers, but exports to it software in which India has a comparative advantage. While the Seventh Plan target is Rs.300 crores, industry feels it could well be double that amount.

Chemicals, fertilisersand paper

The progress of the Chemical industry will be (pharmaceuticals, fibres, fertilisers) and have been (LDPE) dealt with under a number of heads. Chemical products which carry a weight of 8.73 in the industrial production index recorded 244.1 in 1983-84, 262.8 in 1984-85, and 278.6 in 1985-86, being a 7.7 per cent and 6.0 per cent increase in the last two years. Its high growth components were industrial alcohol, sulphuric acid and detergents.

The Fertiliser industry presents many problems. First there is an over estimation of demand, resulting in unneeded

imports and a glut. For instance in December 1985 there were unsold stocks of 2.4 million tonnes which led to blocking the Fertiliser Corporation's working capital, rising production costs and distress sales. The 6 million tonnes import in 1985-86 involved the spending of Rs.1,450 crores of foreign exchange. This import was on top of a 12.7 per cent increase in domestic consumption. The Sixth Plan assumption of a 25 per cent increase in fertiliser consumption was way off the mark as the actual increase was 9.4 per cent. 1983-84 was on all accounts an exceptional year when because of good weather, increased HYV, reduced fertilisers prices, fertiliser consumption went up by 20.4 per cent, but in 1984-85 it came down to 6.5 per cent and in 1985-86 to 10 per cent. The key here in relation to demand is to forecast it realistically and reduce imports to the minimum necessary. The problem facing the Seventh Plan is the delay in the completion of the 6 new fertiliser plants which may lead to increased imports. Second there are regional variations in the growth of fertiliser consumption. Between 1976-77 to 1984-85 the eastern and western regions near doubled their fertiliser consumption, while the southern and central regions maintained a stability and the north region recorded a sharp decline. Fertiliser distribution must take account of these variations. Third there is also variation in use. 70 per cent of fertiliser consumption is in some 125 out of he 500 districts of the country, and whereas Nagaland uses 2 kg. per hectare, Punjab uses 154 kgs per hectare. Fourth it should be noted that the compaign to boost fertiliser use in highly irrigated areas results in skewed distribution of resources, the 70 per cent of dry lands getting little or no fertilisers. To this should be added the fertiliser subsidy which not only heightens the disparity between farmers in irrigated and dry land areas, but provides no incentives to the farmer who uses it to reduce his production cost.

In the paper and paper boards industry, during the Sixth Plan installed capacity increased from 12.65 lakh tonnes to 23.49 lakh tonnes against the target of 20.5 lakh tonnes. The capacity further increased in 1985-86 to 24.50 lakh tonnes, while the target for the Seventh Plan is 24 lakh tonnes. The major part of the new capacity is the 226 small paper mills which came up in the Sixth Plan with the second hand machines which they were permitted to import. As far as production is concerned, there has been a lag in 10.60 lakh tonnes in 1979-80, 13.50 lakh tonnes in 1984-85 and 15 lakh tonnes in 1985-86, so that capacity use has declined steadily from 84 per cent in 1979-80 to 64 per cent in 1985-86. The reasons for this decline as brought out in the IDBI study are (a) inadequate bagasse and other forest produce availability, (b) equipment bottlenecks, (c) the rise in the price of coal to which reference will be made later, and (d) power shortage. This has led the units to offer price discounts to the users, ranging from 2 to 3 per cent by large mills and Rs600-800 per tonne by small units. Hence on the one hand there is mounting unsold stock, on the other hand the paper control order is violated. Between 1983-84 to 1985-86 the large mills should have delivered 4,11,700 tonnes to the iministry of education, but have delivered only about half of that. This is despite the fact that the government has been raising the price of the 25 per cent white printing paper which the large mills have to deliver to it, from Rs6400 per tonne to Rs7200 per tonne, to Rs30,000 per tonne in 1979. There is a case for the order, which is being violated and isallowed to be violated, to be replaced by an additional excise which can subsidise paper for educational purposes. The industry keeps saying why does not the government buy its paper from the open market, as the controlled price is so near the open market price. The government turns the argument around and asks why the industry cannot supply the paper when the price is so near what it can get in the market. This argument must stop, as what needs attention is the spreading sickness in the industry - particularly the small units with their obsolete second hand machines.

Pharmaceuticals and Drugs

Drugs and pharmaceutical production increased from Rs353 crores for bulk drugs to Rs377 crores, but declined from Rs1760 crores for formulations to Rs1527 crores in 1985-86. The problem in this area is the lack of a policy. This traces back to over a decade, when the Hathi Committee made its recommendations, and in 1974, when the government declared the acceptance of the report, involving self reliance in technology (which meant promoting the production of 117 basic drugs), self sufficiency in production (which meant doubling drug production), independence from imports (which meant per contra encouraging foreign companies to go basic and produce essential basic drugs) and building up an export front. Looking at the drug and pharmaceutical industry today, it will be seen that none of this four point strategy has been given effect to and there is no national policy. First the most basic issue is to ensure that the drugs needed for the people's health and well being are available. The World Health Organisation has on this basis drawn up a list of such essential drugs for any country as 250, which makes 70 per cent of the existing drugs superflous. Our Hathi Committee has listed 117 drugs, as against the 40,000 to 60,000 formulations now in use, most of which is unnecessary. Second, the Hathi Committee has recommended and several consumers groups have reiterated that generic rather than brand names should be used. This is also the practice in the UK and US, where generic substitution of brand names in prescriptions is the rule, and there is no sense in saying that the doctor's clinical freedom being restricted by this. It is not. Third irrational and harmful drugs should be banned. On the other hand, the government in the Lok Sabha states[40] that 7 of the 33 drugs banned in other countries are used in India, "because these drugs are considered essential for the country". Fourth there is need for a system of fairly tight licensing of the drug industry to ensure the pattern of production that is decided

and quality control. Of course this is not possible with only two testing laboratories, for the 6000 operating pharmaceutical units, and the 600 drug inspectors deployed. Finally there is need to counter the commercial approach to pharamaceuticals and drugs of the ministry of chemicals and fertilisers which has responsibility for this sector and which naturally decides on the number and quality of drugs and their prices on the basis of current market conditions. This is reflected in the Seventh Plan projection of Rs1038 crores of drugs and Rs3774 crores of formulation as the need, based simply on current sales. Here one immediate reform to counter this commercial approach and make the drug policy reflect the health needs of the people and the country's disease pattern is to take drugs and pharmaceuticals out of the ministry of fertilisers and chemicals and place them with the ministry of health. This will enable consumers and the consumer movements to move the government to act against the high drug prices, expose and control specious formulations, make available the presently unavailable life saving drugs, and stop the sales of medicines banned in other countries. What is happening now is the opposite. The drug industry - both the foreign multinationals and the large Indian firms - pointing to the 50-75 per cent of drugs and formulation targets of the Sixth Plan only being attained, because of what it calls uneconomic pricing and too many controls, wants in the Seventh Plan only selective price controls. This will not, however, ensure essential drugs at affordable prices for the people. We have seen that between 1978-1980 essential drugs production declined from a small 4.5 per cent to a smaller 3.6 per cent, while non essential drugs increased in production from 67.1 per cent to 86 per cent. The dangers are increasing, with countries like the United States legislating the export of drugs which are not cleared for use in the country US. Against this background, the decision of the government to set up a National Development Council for the Drug Industry to consider "growth, production, capacity use, pricing, R&D and

availability of drugs" should be welcomed, if this means that a National Drug Policy (based on the Hathi Committee recommendations) will at last be established.

Textiles Textiles - cotton, jute and silk - did well in 1985-86. Cotton textiles production in 1985-86 was 1450.3 million kgs of cotton yarn (representing an increase of 4.9 per cent over that of 1984-85) and 3377.2 million metres of cloth (which was a -1.6 per cent decline over the production in 1984-85). There were several features of the cotton textiles sector calling for attention. First, as noted earlier, while between September 1984 and August 1985 the price of cotton fell from 296 to 229.3, which was a fall of -22.5 per cent, during that period cloth prices rose from 256.1 to 269.6, a rise of 5.3 per cent. This means that the fiscal concessions granted to a small part of the industry (about 1/8 of the industry) were not passed on to the consumer. Second the use of manmade fibres is still very limited in the industry covering about 1/3 of composite and 1/12 of spinning mills. Here the new textile policy which reduces controls and gives full flexibility in the use of fibres will see an increase of manmade fibres by the mills. Third, and relatedly the 1985-86 budget reduced the excise duty on polyester blended cotton fabrics, which was followed by further concessions in August in regard to the excise on polyester fibre and acrylic fibre which will and has increased the demand elasticity of the fibre, yarn and blended cloth and their production volumes. Thus the 1985-86 fiscal policy aimed at increasing capacity and lowering the price of synthetic fabric. But what has happened is to raise the prices of polyester staple fibre (PSF) and polyester filament yarn (PFY) by as much as 88 per cent, so that the lower excise on these have been appropriated by the producers and not passed on to the consumers. This has led to imports as a means of disciplining the producers, which has given rise to other problems concerning the anti dumping regulations etc. There is also in this a bias against cotton in general, which is serious given the three bumper

cotton crops that have been and are experienced, and the handloom industry in particular. Fourth the textile policy has had a deleterious effect on the handloom industry. The government's claim that its production at 3680 million metres in 1985-86 was higher than the 3510 million metres in 1984-85 and its exports at Rs368.59 crores compared to the previous year's Rs348.86 crores[41] does not take account of the fact that (a) the share of the handloom sector in total textiles production declined to 29 per cent from the previous two years 30-31per cent, and b) the loss suffered by the sector as a result of the transfer of Janatha cloth. If the production of Janatha cloth made the mill sector sick, its transfer to the handloom sector is a transfer of sickness to it. The government has made matters worse by increasing the target for Janatha cloth production from 360 million square metres to 500 million square metres in 1986-87. Unless this low value production is subsidised by government, there will be losses and unemployment in the sector. The 1985 textile policy accorded the handloom sector a smaller role. That cannot be glossed by over/statements by like those made in parliament this year. Finally the effect of the textile policy on powerlooms is yet to be worked out. They produce 45 per cent of the total textile output and the new policy recognises and will be licensing all the unregistered and unlicensed looms. They have a decided advantage over the mills, which represent a high cost structure due to their outdated machinery and obsolescent technology - which is one reason why India is relatively silent on the question of the renewal of GATT's multifibre agreement. One result is that the production costs of powerlooms are lower for weaving at 51.9 paise per metre - against 59 paise for mills, and adding power and overheads is 100.9 paise against 120 paise.[42] One effect of this cost advantage of the power looms and the difficulty of enforcing reservation is that the handloom sector will shrink vis a vis the powerloom sector. Handloom weavers are switching over to powerlooms as a consequence,

which is the right development. Jute textiles production in 1985-86 declined by -2.5 per cent to 1,108,200 tonnes. There is the question of the future of jute farming and the jute industry raised earlier. The Seventh Plan jute goods target is placed at 1.625 million tonnes, with domestic demand at 1.355 million tonnes and exports at 2,70,000 tonnes. The Ministry of Commerce reports[43] that the export of jute goods declined from 4,10,000 tonnes valued at Rs250.09 crores in 1981-82 to 3,00,000 tonnes and Rs164.26 crores in 1983-84, going up exceptionally to Rs341.07 crores in 1984-85, due to the world shortage of jute. In the first 6 months of 1985-86 jute exports were lower at 1,10,000 tonnes, earning Rs129.26 crores, which is attributed to the competition from Bangladesh, low productivity, obsolescence of the India jute mills and the fast increase in synthetic substitutes. In order to increase exports, it is reported that the government has provided a higher CCS for jute carpet backing, promoted the formulation of an STC - JCI consortium on a 50-50 loss sharing basis for export of carpet backing to North America, and will be promoting R&D in exportable products and for this constitute a new JMDC and jute fund out of the proceeds of a jute cess. Silk Production, mainly in handlooms, is increasing, with the increase in raw silk production at 7600 tonnes in 1984-85 and a target of 12500 tonnes for the Seventh Plan. This demands that sericulture output be developed to produce 1200-1600 kg per hectare as it does in China, as against about one third to one half of that in India. Silk exports which were Rs135 crores in 1985-86 is targeted at Rs1000 crores in the Seventh Plan/if the product mix is modernised and export countries which can be attained diversified.

Edible oils The edible oils scene presents many features, following from the fact that the demand for edible oils has over the last 10 years been increasing at an annual compound rate of 4 per cent, while domestic production has been about half that rate.

The short fall has been met by imports rather than by increasing domestic production. Thus over the Sixth Plan 60.7 lakh tonnes were imported at a cost of Rs3635 crores, and the Seventh Plan which ends 1989-90 with an estimated import of Rs909 crores provides Rs4545 crores for imports during the Plan period. There is no doubt that if ever half this sum is used to increase the production of both major and minor oil seeds by moving them out of the marginal rainfed lands (90 percent are grown in dry lands) to areas which can be provided minor irrigation facilities, this supply-demand gap can be closed. That is a first feature. Second the government seems to be realising this as may be seen in the 1986-87 budget which provided several incentives to increase the supply of vegetable oils, the supply of non conventional and minor oils, namely cotton seed oil, rice bran oil, scya bean oil, Mahua oil, need oil, karani oil, kusum oil, sal oil, mango seed oil and kokum oil, as well as to the solvent extraction industry. In particular vanaspati industry was given excise reliefs to use these oils, soap firms were given excise relief for use of minor oils, excise exemption was granted to hardened inedible technical oils, fatty acids, acid oil etc, the excise of Rs1080 a tonne on solvents was abolished, and solvent firms' plant and machinery exempted from excise and customs, export of deoiled meals was encouraged by a CCS of 15 per cent, and while Rs1500 a tonne excise was levied on refined oils such as groundnut, kardi and mustard consumed by the rich, refined oils from minor seeds, rice bran, soya bean, cotton seed, sunflower seed etc consumed by the poor are relieved of this duty. So vegetable oil prices responded immediately to this action by an increase of Rs250 to Rs500 a tonne on the very day the announcement was made. During the month, edible oil prices soared by Rs800 to Rs2700 a tonne, and if this action is persisted in, the supply of edible oils will increase because oil seed prices will go up. There is one caveat here: the extra excise of Rs1500 on rape seed and mustard oil will work against the further increase of these oil seeds, and use of these 2 oils which are 20 per cent of the total oil supply. The reduction in these 2 oils/

will not be compensated by increase in minor oil seeds supply. Hence the increased excise on rape and mustard should be rescinded and the minor oil seeds encouraged individually. A third issue is the peculiar relationship between imported edible oils and the vanaspathi industries which earlier mid year reviews have analysed exhaustively.[44] In 1985-86 the government made an honest effort to cut this linkage. In mid November 1985 the government reduced the allocation of imported edible oil to the vanaspathi industry from 60 per cent to 50 per cent which was available to it at a concessional price of Rs11000 a tonne. From January 5 the voluntary price agreement on vanaspathi was abandoned, and the allocation of imported oil was reduced from 50 per cent to 40 per cent. From February end oil prices began rising and by the end of May rose by Rs2100 to Rs4700 a tonne for Mahuva and rice bran oil, due to a sharp decline in oil seeds production in 1985-86 by 25 lakh tonnes compared to the output of 131 lakh tonnes in 1984-85, and the official announcement that edible oil imports will be limited to 10 lakh tonnes. In October 24, 1985 the finance minister urged decreasing edible oil imports, in December government announced in parliament that edible oil imports will be cut, and later the word got around about the limitation to 10 lakh tonnes. With the sharp rise in prices, particularly of edible oil, the government panicked, and reversed its earlier decisions and announced the increase of the allocation to the vanaspathi industry of imported oils from 40 to 50 per cent in June, to 60 per cent for July-September and 70 per cent after that at Rs11,500 a tonne, and any amount at Rs13,000 a tonne, along with a fixed price of Rs180 per tin of 15 kg of vanaspathi. Here several questions should be posed. First why should the vanaspathi industry whose product is patronised by the well to do classes in the Hindi belt be subsidised with cheap imported oil? The reason is political pressures. Second why should not the vanaspathi industry like the groundnut oil industry or the rape/mustard seed oil industry get all its oils in the open market? That will push up oil prices which will lead to

increased growth of oil seeds and oil supply. Third does the government really believe that the vanaspati industry observes the voluntary price agreement? Is it unaware of the high prices at which it is sold in the open market and the high profit made by the industry? In fact the Head of the vanaspati industry Association, in disgust at the changing policy, at its annual meeting in June has said that the government should be told to keep its imported oil, but give the industry freedom from price control, oil utilisation, specification on nutritional needs, on packaging material, capacity, quality, distribution patterns etc. This is a bit of a rhetorical statement, because the industry knows that without the concessional oil half the units will be closed. Fourth the injustice of the whole matter is why when there is no price control on the rest of the 80 per cent of the oil consumed by the poor and others, there should be price control for vanaspati. There is a wider issue on imported oils, and that is its distributional inequity through the public distribution system. The 5 states who are the major oil seeds producers get 60 per cent of the imports and the other poorer states only 9 per cent. Further only 12 per cent of households collected edible oils from the public distribution system, the other 60 per cent of the imported oil supplied to the system finds its way to the black market. The moral of this discussion is the need for a long term edible oils policy in place of the government coming out with a statement that edible oils imports will be stopped, because by the Seventh Plan domestic sources will be adequate. The long term fiscal policy that is needed is to continue the encouragement of increased production of oil seeds - major, minor and unconventional - in all ways, to stop the supply of edible oils to the vanaspati industry and let it be free to decide on its price and production, and to cut back on imports of edible oils because even the public distribution system does not need it and is misusing it.

Sugar Sugar production in the sugar season 1984 (October) to 1985 (September) was a small 61.43 lakh tonnes. The problem with sugar production and consumption is again that there is no long term integrated sugar policy. The new sugar policy announced in November 1985 is really a short term policy which is concerned with sugar prices and means of keeping them low. It changes the levy rate from 60:40 to 55:45, it fixes the minimum price for cane at Rs16.50 per quintal for 1985-86 and Rs17 per quintal for 1986-87, with the state advised prices being Rs22.25 per quintal. Sugar production has been since 1981-82, when it was 84 lakh tonnes, on a declining trend at 82.3 lakh tonnes in 1981-82, 59.2 lakh tonnes in 1983-84 and 61.47 lakh tonnes in 1984-85. Consumption, however has been rising fast being 75.65 lakh tonnes in 1983-84 (a difference of over 16 lakh tonnes with production), and was 80.64 lakh tonnes in 1984-85 (a difference of 19 lakh tonnes). The first thing that the long term sugar policy should deal with is to bring production and consumption into some kind of balance, and not continue the present policy of importing sugar (in 1984-85 17 lakh tonnes were imported) as a long term proposition to close the gap. This involves increase in production of sugarcane, which was dealt with earlier, but also demands some kind of control over the wasteful use of 40-45 per cent of the sugar cane produced annually in gur and khandasari. It also involves modernising our sugar mills, where sickness covering over 20 per cent of the 340 mills is on the increase. Second there is the question of sugar prices where the industry blames the government for fixing levy prices at which its major portion has to be sold at below its cost of production, and not allowing free sale sugar to find its level to make up for the levy losses, through the devise of monthly releases of free sale sugar operated by the government. The government on its side blames the industry and trade for manupulating prices through hoarding and black marketing. In this controversy between the industry and the government, the consumer has to pay the price. The price of sugar is influenced

by the rate of consumption which is presently dealt with and the price of gur. The table blow sets forth the relative mean range of changes in the prices of sugar and gur at rupees per quintal.

Table IX

| Year | Sugar | Gur |
|---|---|---|
| 1980-81 | 563 to 865 | 304 to 331 |
| 1981-82 | 434 to 553 | 251 to 493 |
| 1982-83 | 427 to 452 | 261 to 342 |
| 1983-84 | 485 to 519 | 358 to 386 |

Source: P. Nageswara Rao: Economic Times, July 31.

Sugar prices are about one third above those gur, leading to increased consumption of gur by the poor. Infact the question can be asked whether, if gur production is technically updated, its consumption could not become more general which the movement of sugar prices may promote. One thing is clear, the government must allow the free sale of sugar to find its price. And that is the third issue which is the high rate of annual increase in sugar consumption, which no country can afford. A further examination of sugar consumption shows that the major part of the free sale sugar (nearly 70 per cent) is purchased by bulk consumers like confectionaries, sweet meat producers, soft drinks manufacturers, which means household consumption is around 8 lakh tonnes only. One question raised is whether within the free sale of sugar, bulk consumers should not pay the going rising market price (which they should in part pass on to their consumers), so that households needs are met by the levy sector of sugar sales. The 1985-86 sugar prospects are not assuring and the government must move now in formulating a long term policy.

Soda Ash and Caustic soda Soda Ash production in 1985-86 was 8.49 lakh tonnes against 8.11 lakh tonnes in the previous year.

The demand in 1985-86 was hover, for 9.1 lakh tonnes, due to the ban on tallow imports, limitation in fatty acid supply, and the increase in small detergent units, some 500 of whom demanded 60,000 tonnes of soda ash, causing shortages and price increase. The government responded to this situation by lowering the basic import duty on soda ash from 70 per cent to 15 per cent for the dense variety and 30 per cent for the lighter variety, and as a result over 50,000 tonnes have been imported and a similar amount has been ordered. The soda ash area is one in which there is always black marketing and speculation. Despite there being no demand supply gap, traders have built stocks and pushed up prices by Rs250 a tonne. The black market price is much higher at Rs1000 to Rs1200 a tonne over the official price of Rs3600 a tonne. On top, many users complain that they have not been getting their supplies, So government has instructured the manufacturers to report in detail about the monthly release of the product, along with various specific guidelines for those who withdraw from one market and/or go to a fresh one etc. This monitoring procedure has been of some help only because it is very complex. The small units are not able to import soda ash, though it is on OGL because their individual requirements are small. Hence they wants STC to import the product for them. Caustic soda production in 1985-86 was 4.1 per cent higher at 7.2 lakh tonnes compared to the production of 6.9 lakh tonnes in 1984-85. This is a creditable record because the firms were facing large scale dumping of caustic soda from Saudi Arabia, which is able to do this after paying the customs duty of Rs3500 a tonne. That is the reason why 40 per cent of the capacity of the industry is idle. There was a hope that NALCO will open up a fresh market for caustic soda producers. That hope has not materialised, as NALCO also is importing caustic soda from Saudi Arabia. There is thus a case for placing caustic soda on the restricted list, or alternatively to add countervailing and auxiliary duties to the present customs duty.

Cement In 1985-86 cement production increased by 10 per cent

to 33.1 million tonnes, as a result of 2.5 million tonnes of additional capacity and higher capacity use. The Sixth Plan attained the capacity of 42.5 million tonnes and for the Seventh Plan the target is 60 million tonnes and the production target is 49 million tonnes, which means that the cement industry must grow at one and a half times during the five year period. This is a long way from the increase of capacity creation by 2.5 per cent in the Fifth Plan (compared to 8.1 per cent in the 50s and 60s). It was the partial decontrol introduced in February 1982 which led to the 11.8 growth in the Sixth Plan period. In March 1986 the levy obligation of old units was reduced from 60 per cent to 45 per cent for production above 100 per cent of licensed capacity and for new units from 40 to 30 per cent for production above 100 per cent of capacity use. There has taken place over time a structural change in the industry involving a regional dispersal though somewhat slowly, to the northern and eastern region; the growth of mini cement plants which can exploit smaller quarries, need low capital investment and have relatively short gestation period, and are now producing 27.2 lakh tonnes per annum which can rise to 2 million tonnes by the end of the Seventh Plan. The problem in the industry is the continual raising of free sale cement prices. The reason given is that though the licensed capacity has reached 91 million tonnes and the government plans to freeze it at 100 million tonnes for the Seventh Plan, the installed capacity, as noted earlier, must be raised to 60 million tonnes to meet the estimated demand of 49 to 50 million tonnes at the end of the Plan. This will call for an investment of Rs2500 crores - Rs1600 crores loans and Rs900 crores internally generated. To raise that amount, the industry wants a rise in levy prices in addition to the rise in free sale cement from the agreed Rs64 per bag to Rs69-85 per bag. Their case is, however not clear, because there is a rush for new licenses, which means the profitability in the industry is high, and IDBI has stopped financing new units but is only financing extensions.

Leather India's leather production was Rs585 crores in 1984-85, Rs662.52 crores in 1985-86, and has been set a target of Rs750 crores for 1986-87. This is one industry whose horizons are expanding fast. Another strong point is the increase in the proportion of value added in its exports which is around 50 per cent in 1985-86 and was 40 per cent in the previous year. This is likely to further increase, with the high CCS rates announced for finished leather, leather chemicals,[45] the liberalisation of the imports of crust leather and the purchase of cheap raw hides from the tanneries in Europe which are closing because of pollution legislation, and the expansion of the Australasian markets for footwear as they have abolished licensing of these goods. This will take the industry and the government quite naturally to the question of formulating a long term leather policy, which on the production side will involve further increase and expansion of its large firms and the updating of the small tanneries to meet the production demand facing the country in the export and domestic market. The policy will also have to deal with environmental problem posed by this fast expanding industry. It is somewhat of a shock that the 65 large units registered with DGTD, accounting for 75 per cent of capacity in skins and 25 per cent in hides have no programme for the treatment of tannery effluents. If to this is added the innumerable small units, the effect of the effluents on natural resources, surface water, agricultural land and acquatic life becomes a nightmare. Hence the long term policy must provide that the large firms which are importing technology for improving their leather production should include in the import package anti pollution measures. For small tanneries, the technology developed by the Central Leather Research Institute for individual treatment plants can be used by a consortium of small tanneries, on which there is a pointer with regard to the joint sector plant serving 75 small tanneries run by the Tamil Nadu Leather Development Corporation. The development may counter the decline in employment of this labour intensive industry due to social stigma, difficult

access to capital and skill needed to break into the mandis and traders closed shop. To increase social mobility of leather workers, there is need to reduce the health hazard facing them, which is also the ecology problem.

Small Industry

Small scale industry has a record of high and fast growth - from 2.46 lakh units in 1975-76 to 12.75 lakh units in 1984-85, with the value of output increasing from Rs11,000 crores to Rs50,520 crores during that period, to which the khadi and village industries (KVI) production during 1984-85 of Rs965 crores and handicrafts production of Rs750 crores (for 1983-84) should be included, increasing employment from 44 lakh to 90 lakhs plus 37.89 lakh units employed in KVI, and 35 lakhs in handicrafts. Exports from the small scale sector in 1983-84 aggregated Rs2159 crores, which was 22 per cent of the total exports from the country plus Rs400 crores from handicrafts.[46] A study of the small scale, khadi and village industries and the handicrafts shows that their rapid growth was due to good infrastructure, particularly the development of industrial estates, special institutional and financial support, the reservation of over 500 items for the sector, preferential governmental purchases of its products, encouragement of ancillerisation and excise exemption. The National Small Industries Corporation survey emphasises some of its feature, namely, (a) the rapid increase of the units, as quantified earlier, (b) the production of a limited range of products requiring fairly simple technology, (c) the direct sales relations between the small scale producer and the large and medium scale producer, (fourfifths of metal based industries output being inputs for industrial factories) along with growing ancillerisation and (d) facing of major competition from within the sector, leading to low prices but only 50 per cent capacity use. On the handicrafts side, it is noted that the rate of increase of employment in the sector is declining from 120 lakh

to 87 lakh over the last two and a half decades, women lost a net 14 lakh jobs, craftsmen face problems of poor working and living space, health facilities, raw materials shortage, lack of power and the need to provide training without supplanting the traditional system. The overall conclusions on the small scale sector are: i) registered small units have grown rapidly after mid sixties, particularly in engineering, chemicals, and plastics, ii) they are the major part of the value added of the sector, iii) industries with greater productivity offer greater employment, iv) profitability is inversely related to the size of units and is higher in the small sector than in the private corporate sector because of family labour, low wages and some exploitation of labour in the small sector. In the handicrafts field, one of the major problems is lack of data, making policy formulation difficult. Turning to the negative side of the picture, the big issue in the small scale sector is its large and growing sickness. The government informed parliament on March 7, that Rs3638.39 crores of bank credit are locked up in 93,282 sick industrial units, of which 91,450 are small units, owing 24.1 per cent of the locked up credit. Among the causes for sickness are inadequate project appraisal, indiscriminate sponsoring by government agencies to reach the target, easy bank credit, marketing problems, and shortages of various kinds. A second negative factor is low wages and exploitation of unorganised labour, as referred to earlier. Third there is a skewed distribution of units with bigger firms having a higher share of productive capacity, and larger capital formation and also easier accessability to credit. In fact a study of the distribution of priority sector credit shows that the larger among the small scale units and the branches of the large scale units have around 70 per cent of the small scale credit sector[47]. This does not however affect the fact that the small units profitability is high because of their intensive use of capital, fiscal concessions and low wages. In the Seventh Plan small scale production is targeted at Rs80,220crores

calling for a 8.7 per cent annual growth rate and employment to increase to 119 lakh persons. In order to achieve these targets, the Seventh Plan strategy will aim at removing the major constraints facing the industry, namely i) technological obsolescence, ii) inadequate and irregular supply of raw materials, iii) lack of organised marketing channels, iv) unorganised operations and inadequate credit, and v) power shortage and managerial deficiences and lack of technical skills. Similarly for handicrafts, the strategy is to diversify markets, modernise marketing techniques, improve and increase credit and rationalise and reduce the fiscal burden. In face of the lack of a higher volume of production in the large sector, the excess capacity in the small sector, and the absence of registered contracts which specify obligation of mother units to their ancillaries, MODVAT attempts to correct some of these lacks to an extent. It provides for the compulsory registration of contracts with the small sector to be cleared by a government body for the benefit of MODVAT to be obtained. But there is also the danger of the larger scale units shifting their supply source from one unit to another to share the benefits. The other fiscal incentives for the small scale sector are the compensation for the rise in the costs of plant and machinery which led to the increase of the investment limit of small units to Rs35 lakhs and ancillaries to Rs45 lakhs, graded incremental slabs of excise, the exemption level from excise doubled from Rs7.5 lakhs to Rs15 lakhs, the procedure simplified and self assessment allowed upto Rs50 lakhs. With this mixed picture, 1985-86 targets will be difficult of attainment, the targets being Rs55,225 crores production, 95 lakh persons for employment and Rs2630for exports and the further growth of 5.6 per cent in 1986-87.

Agriculture and manufactures are supported by infrastructural industries which need review.

Infrastructure

Electricity

Power generation in 1985-86 recorded a growth of 8.6 per cent at 170 billion units, due to thermal generation increasing by 15.8 per cent, while in hydel there was a shortfall of 5.3 per cent due to the poor monsoon. The 8 per cent power shortage had its impact in all states except Andhra Pradesh and Kerala, with consequent cuts of varying degrees, and on industry, which as the major consumer of power bore the brunt of the cuts. The highest cuts at 70 per cent and above were enforced in Rajasthan, and Karnataka, 60 per cent in Haryana, Himachal Pradesh, and Punjab and 40 per cent in Tamil Nadu and West Bengal. For 1986-87 the target has been fixed at 190 billion units, involving an increase of 11.8 per cent. The actual prospects for the year are not too gloomy. Power generation in the first two months, April and May 1986, increased by 12.2 per cent against the 2 months generation in 1985. What is heartening is that hydel generation which recorded -5.3 per cent in 1985-86 recorded an increase of 12 per cent. Everything depends on the monsoon, and as the monsoon is predicted in this review to be normal, hydel generation should do well this year.

But there are even at this stage two negative developments to note. First Kerala which has been perpetually a power surplus state, supplying power to its deficit neighbours, Karnataka and Tamil Nadu, for the first time faced a power crisis because the monsoon did not feed its hydel reservoirs at Idukki and for over a month in June/July there was a 100 per cent cut on HT users, which was relieved a little as a result of power supplied by Ramagundam, Maharashtra, Neyveli etc. This crisis is manmade because the savage deforestation around Idukki is responsibile for the monsoon not reaching there. The other negative point was that there was an overall power shortage of 7per cent in the country, with all regions except the western facingdeficits

ranging from 8 per cent to 17 per cent. With the spread of the monsoon and its being normal, the power situation should ease during the year, both for industry and agriculture.

For this, the present bias against hydel generation, seen in the fact that while hydel can provide 40 per cent of the country's electric supply, it now provides only 30 per cent, and even in the Seventh Plan target is to provide 30 per cent must be removed. This must be corrected, if industry is not to be continuously hamstrung for lack of power. There seems to be a thermal lobby holding back hydel schemes. Hydel schemes for generating 4785MW sanctioned by the Planning Commission way back in 1972 are languishing for lack of funds. Similarly a further hydel schemes for 4809 MW have been cleared by the Central Electricity Authority, but are awaiting Planning Commission approval. Out of 472 billion units of hydel potential, only 50 billion units (10 per cent) have been developed. The most serious slippage is in Maharashtra which has a potential for 332 MW against which only 32 MW have been developed, Karnataka has 278 MW undeveloped. This needs decision now.

Another important issue is the transmission and Plant Load Factor. A 10 per cent increase in the plant load factor will save Rs4000 crores in power investment. The latest report from the government in July is encouraging. It shows that the Southern region has attained a Plant Load Factor (PLF) of over 72 per cent. If the technical arrangements are made through the rectifying the defects in the distribution system and capacitors and sub stations and where there is inspection and supervision and tamper proof boxes to prevent unauthorised power tapping, the all India PLF can move up from 50 per cent at which it has been hovering to around 60 per cent. This together with a rise in electricity rates might be a means of preventing the loss of Rs4000 crores to Rs12000 crores by 1989-90 by the State Electricity Boards forecast by the Seventh Plan document.

In this regard, there is also the recommendation of the Advisory Board on Energy that an expert committee should examine all poorly run Electricity Boards and propose corrective action. This should be acted upon, as electricity is a concurrent subject, and the union government by legislation, Electricity (supply) Act of 1948 enabled the creation of State Electricity Boards. Another area to be watched and developed is energy conservation by industry which requires proper maintenance of plant and machinery. Here energy audit can guide optimal use of electricity in the plant, indicating the correction of design deficiencies, the selection of the proper motor rating, voltage, frequency and load management.

In the area of rural energy, the energy generators are still firewood, cowdung, and agricultural wastes. This in part explains the lower per capita energy consumption of the country at 175 kwh compared to 8000 kwh in the United States and 11000 kwh in Switzerland. The increasing rural use of non conventional energy has resulted in deforestation, soil erosion and loss of soil fertility. Despite the reported 64 per cent of the 6 lakh villages that are electrified, less than 10 per cent of the rural households can afford to use electricity, While renewable energy sources, solar energy, biomass, wind and geo thermal energy are available in abundance, the technology for their use is beyond the reach of rural people, and requires heavy governmental subsidies. Further rural energy programmes are each planned separately and not linked with the energy demand at the village level for productive activities. The result is a growing urban-rural gap, with per capita urban energy consumption being 10 times that of the rural. The Integrated Rural Energy Programme (IREP) launched on a pilot basis in the Sixth Plan is being activised in all states during the Seventh Plan around block level institutions, training of personnel and project preparation and execution.

Finally there is one very serious threat facing the economy in the power field. The working group of the Planning Commission on power after a careful study of the demand for power in the Seventh Plan recommended an allocation of Rs65,300 crores for the Plan period. The Seventh Plan allocates a little over half of that at Rs34,273 crores, which will add only 22000MW, leaving a power gap of 7000 MW. This reduction has been calculated on the basis of cutting the targets of the various components of the industrial sector, which reduces their demand for power. This means that the Seventh Plan is starting with reduced rate of growth in industrial production. The Ministry hopes to cover this large gap by better performance of power plants. But in alloting Rs8000 crores for transmission, there seems to be an advance assurance of lower PLF. One way which needs to be acted upon is to allow the private corporate sector to enter the power generation field. There are proposals from several states with the union government which have been hanging fire for 2-3 years. These should be acted upon, with the firm understanding that distribution will be the responsibility of State Boards.

Crude

It will be useful to start the discussion on crude oil production and demand, with the prognosis of energy needs set forth by Advisory Board on Energy.[48] It states that to attain the 5 per cent growth set forth in the Seventh Plan and possibly in the subsequent 3 plans, 3.6 times as much coal, 4 times as much electricity and 2.5 times as much oil as used in 1984-85 would be needed. Energy consumption will increase 3 times from 56 5 million tonnes of coal equivalent (mtce) in 1982-83 to 1985 mtce in 2004-2005. So commercial energy needs will grow 4 times, and while coal and energy needs will be met, a large oil gap estimated between 43 million tonnes in 1984-85 to 94-125 million tonnes in 2004-05 is forecast. Oil supply which was 8.4 million in 1975-76, rose sharply to 29 million tonnes in 1984-85

because of Bombay High,and using the optimistic ONGC estimate, oil production will be 30 million tonnes in the Seventh Plan, 35 million tonnes in Eighth Plán and 50 million tonnes in 2004-05, which can last for a further 3 years at this level. This also means that by 2004-05 crude imports will be 44-73 million tonnes, and if there is extended use of gas, electricity and kerosene, the import could be reduced to 29 to 50 million tonnes.

So the two questions that this oil scenario raises is whether we should increase oil production to a level which will deplete the reserves in the first decade of the next century, and second whether we should not accept the need for economies in oil use, by the use of fuel efficient kerosene stoves, diesel engines, waste heat recovery, to reduce crude consumption by 10-15 per cent, to replace road transport by railways and shipping, and increase the use of coal,electricity and biogas. During the Sixth Plan crude production increased by 20 per cent compared to the 8.1 per cent in the Fifth Plan, and in the Seventh Plan crude production is slated to increase at 3.5 per cent only.

In 1985-86 there was a 4.1 per cent increase to 30.2 million tonnes. In 1986-87 crude production will be the same. New finds are tapering off: in 1985-86 only Gujarat oil fields reported finds and increase, and in the first quarter of 1986-87 Narimanan in the South is the other oil find. With the increase in refining capacity of the country, petroleum products production will be 42 million tonnes against a consumption of 44.40 million tonnes in 1986-87, which means 15 million tonnes of crude and 2.20 million tonnes of petroleum products will be imported. There will be no export of crude in 1986-87, but because of the fall in crude prices to around $10-11 per barrel, there will be a saving of ₨1400 crores on crude import. Finally there is the question of petroleum prices and the rise in them affected by the government in January/February.

Two reasons were given for the price hike. First it was justified on the grounds that the rate of petroleum product consumption had near doubled from 5.3 per cent in the early 80s to 10.5 per cent. Second the need to raise additional resources was later admitted as a reason. There is no doubt that a rise in petroleum product prices is a means of cutting production, though with the large use of 'black money' on cars and petroleum, the demand elasticity for petroleum products is rather small.

It is in this context that the work of the Petroleum Conservation Association becomes important. The government reports[49] that in 1985-86 the Association (a) conducted fuel utilisation studies in 134 industries, (b) monitoring earlier recommendations on conservation made to 1400 industries, saved 3.05 lakh kilo litres of fuel per annum worth Rs100 crores, plus saved Rs1 crore of fuel through the Boiler Modernisation programme, (c) popularised 1000 fuel efficient low air burners, saving Rs1.5 crores per annum, (d) completed 8 model depot projects, saving 10 per cent of diesel, and (e) upto March 1985 sold cumulatively 20 lakh Nutan Kerosene Wick stoves, saving 15-25 per cent fuel. In the Sixth Plan it effected a saving of Rs400 crores, and plans to achieve a target of Rs650 crores in the Seventh Plan.

Coal

Coal production has had a chequered history. In the Sixth Plan the target was first fixed at 166 million tonnes (because demand in the terminal year was estimated at 168 million tonnes): subsequently the production target was scaled down to 152 million tonnes, the demand estimate at that stage being 155.70 million tonnes. The actual production was 147.7 million tonnes, due to delays in land acquisition and equipment and the usual shortage in power supply. While there was no problem of shortage

of coal supply except in Tamil Nadu (thermal, cement and textile plants), there are problems of deteriorating quality due to the preponderance of opencast mining, poor labour and management relations, and the law and order situation in Bihar mines. Pit head stocks mounted to 29.23 million on 31 March 1985, as the major users who had not been able to attain their targets - steel, power, textiles, cement etc - reduced their demand for coal. In 1985-86 coal production picked upto 154.27 million tonnes, and demand on its side increased and pithead stocks declined to 25 million tonnes.

There are two problems in the coal sector. First is the problem of prices. One year after the last price rise, coal prices was raised by Rs27 per tonne from January 8,1986. The Rs400 crores generated from this rise were not to be invested but to be used for meeting annual salary increments (Rs100 crores), revised bonus (Rs65 crores). There is scope of cost control, improved efficiency, better use of capacity and lowering of overheads, which should have been attended to before or simultaneously with the price hike. Coal prices have been increased 6 times in the last decade and a half, when wholesale prices rose only three and a half times. The increased investment in the coal sector since nationalisation has led only marginally to increased productivity. The Seventh Plan talks of an integrated energy pricing structure. There is no sign of such structure. And because of the prevailing cost-price relationship and the tax structure, there is little of the interfuel substitution recommended by Advisory Committee on Energy. Second there is the problem of quality. The Annual Plan promises[50] that the quality of coal will be improved through (1) better mining methods to avoid mixture of over burden, (2) installation of more coal handling plants, (3) reconstruction of existing washeries and (4) work on new washeries, with the provision of Rs41.59 crores made for the washery programme. It is to be fervently hoped that these promises will be kept.

Railways, Shipping and other transport

In 1985-86 (September 1985), an important development was the establishment of the Ministry of Transport encompassing the Railway, Road and Shipping transport, and civil aviation. The justification for this super ministry will be seen in the Seventh Plan development but the task before it is to upgrade this run down set of services. For, taken together, the public sector outlays in them have continuously declined from 23.1 per cent in the Third Plan to 12.1 per cent in the Sixth Plan, going up marginally in the Seventh Plan to 12.8 per cent. Also the annual growth rate of capital formation in transport has fallen from 16.08 per cent in the period, 1951-52 to 1965-66, to 6.89 per cent during 1966-67 to 1982-83, and the ratio of gross capital formation to GDP has fallen from 2.5 per cent in the 60s to 1.4 per cent in the 70s and 80s. Road transport has risen from 12.24 per cent per 100 sq km in 1950-52 to 46 in 1983-84, but that has been at the cost of the railways, and is infinitesimal when compared to 412.8 for Belgium, 142.93 for UK[51].

The Seventh Plan states that railway traffic will be increased from 264.4 million tonnes in 1984-85 to 340 million tonnes in 1989-90. In 1985-86 it carried 258 million tonnes, and for 1986-87 has set itself the target of 267 million tonnes. The railways have set themselves the right goals - modernisation, renewal and rehabilitation of rolling stock and rail tracks. In the Sixth Plan 854 kms of tracks were renewed. For the Seventh Plan it has set itself the target of 20,000 kms of track renewal but the resources are not there. The Seventh Plan outlay is Rs12,334 crores which is less than 2 per cent of the total outlay: industry gets 10.5 per cent. So once more the railways will be limping along, with dated engines, worn out wagons, and outworn tracks, with the effect of dragging the economy down, unable to carry the freight and the passengers that are needed.

In regard to shipping, with a 5000 km coast, 150 major and minor ports and 94 per cent of its foreign trade moved by sea, there is a challenging task facing the shipping services of the country. At present shipping is 6.4 million GRT with 54 per cent in the public sector, and the rest managed by 40 shipping lines. Of the 150 ports, 10 are major ports, equally divided between the East and the West coast. The problems faced by the Shipping industry are lack of berthing capacity, deficiencies in handling facilities, weather conditions leading to congestion, only one port (Madras) geared to handle container traffic, and inland transportation not geared to serve the ports. Once more what is needed is a clear national shipping policy, which will coordinate national tonnage development with export strategy, establish guidelines for national services and freight rates, monitor shipping conferences policies, and regulate the business canvassing practices of Indian and foreign vessels. Indian shipping tonnage which was 6.36 million GRT in January 1985 is 5.95 million GRT in January 1986 due to scrapping tonnages and lack of modernisation, lower volume of trade and world recession. The Seventh Plan target envisages 7.5 million GRT, which involves an increase of 2.28 lakh per annum. With limited Plan resources, the actual achievement is likely to be around half the target. It is important that Indian bottoms which carry 37 per cent of the country's foreign trade, should develop their services to carry 50 per cent of the trade during the Seventh Plan.

In regard to roads, apart from the ongoing programme for construction of 1100 kms of highways in 1986-87 and the development of roads in the state sector,1440 villages are to be covered under the MNP at a cost of Rs293.27 crores in 1986-87 to correct the imbalance of 56 per cent of the villages not being connected by any roads. Air traffic is planned to increase by 16 per cent and air cargo by 8 per cent during the Seventh Plan.

Non conventional Energy sources

Following the Rs16.17 crores expenditure in the Sixth Plan on biogas and biomass, solar thermal energy and solar photo voltaics, wind energy, drought animal power, improved chulas, micro hydel systems, chemical energy, geothermal energy and ocean energy, all of which were mainly a Research and Demonstration effort, with some demonstration projects particularly in bio-gas, solar thermal and photo voltaics and improved chulas areas, the Seventh Plan continues this "R&D for development of indigenous technologies, organisation of a large number of demonstration projects for promotion of awareness, and testing of systems through field conditions, creation of demand through government intervention"[52] and for this provided Rs519.55 crores.

For the first year of the Seventh Plan, 1985-86 Rs90 crores were expended on: (a) solar thermal energy, covering 1 solar power generating system, 100 solar heating systems, and 1 solar pond and the photo voltaic demonstration programme which terminated in September 1985, but with R&D, demonstration street lighting, and pumping water continuing. In this connection, there is some question as to whether the 570 solar water heating systems, 20 solar timber kilns, and 25 solar desalination systems as well as the 1.5 lakh biogas plants which are under the subsidy programme should be transferred to the newly established loan scheme. This would be wrong, because this solar programme and the biogas programme are still at the R&D and demonstration stage, and it is not till they take off as going programmes with commercial backing that they will become attractive and eligible for loans. (b) 1.50 lakh biogas plants which is a smaller number than the 1.80 lakhs built the previous year. In this connection the indepth study on the functioning of the plants bring out elements of inefficiency and inappropriateness. Further as this programme (as well as other parts of renewable energy sources

programme) has become part of the Integrated Rural Energy Programme referred to earlier, the need for specialised cells in each state, with trained professional staff willing to work in rural areas and the involvement of the local community need to be ensured. Such a cell can monitor the programme and ensure that the leaks are plugged or made minimal. For instance, the khadi and village industries commission reports that of 13,216 biogas plants set up in 3 states 826 were not traceable. Intensive R&D can result in cost reductions and improved gas production given the fact that the base material is there, with 15 million rural households with the cattle necessary to feed family size bio gas plants, c) other programmes including the 6 lakh improved chulas and the biomass based power generation in Tamil Nadu, rice husked based power generation in Punjab, the ethanol pilot plants, the urban waste energy programme with the Central Ganga Authority, and the extensive tree planting programme.

In this connection it should be recalled that the Advisory Board on energy in its latest report[53] estimates the demand for fuel wood will be 300 to 330 million tonnes in 2000 against about half that amount (120-170 million tonnes) today with the urban demand at 70 million tonnes and the rural at 250 million tonnes. It refers to the February 1986 meeting of the National Land Use and Wasteland Development Council which noted that out of 123 million hectares of wasteland in the country, 2.4 million hectares will be leased to industries which could be asked to reserve a certain percentage of their produce for fuel wood and fodder for the local population in part compensation of the latter's loss of those common lands. It also estimated that 1.4 million hectares of the plantations would be achieved by 1985-86 and a fixed target of 3.25 million hectares of such plantation during 1986-87 and 5 million hectares during 1987-88. There are two problems facing this programme. The first is financial.

The Rs15 crores allocated is totally inadequate even supplemented by some help from NABARD. The other is the problem raised earlier under forestry, and that is the depriving of the poor mass of the people of their ancestral and traditional common lands under the term, the waste land development programme.

Education and Health

In 1985-86 the Ministry of Human Resources was established (26 September 1985) and though it explains that human resources development comprises science & technology, arts and crafts, humanities and human values (why health is left out of this enumeration is not explained), the ministry is restricted to education, culture, arts, youth, women and sports.[54]

The major event in 1985-86 was the first action taken to formulate a New Education Policy. First a state of the art document, Challenge of Education, was issued in August 1985, which was short and readable and so led to a nationwide debate on the issues raised, resulting in the Resolution on the National Policy on Education adopted by Parliament in May 1986. This has been followed by a programme of Action issued in August 1986 and placed before parliament. The main thrust of the New Policy and the Action Programme is to give priority to Elementary Education and Adult Education, and within this priority to emphasise the role of SC, ST and women in it. This priority includes priority in resource allocation. There is general agreement on this thrust, but in actual practice a rather large sum of money estimated at Rs600 crores during the Seventh Plan is being allocated to what are called model schools, one of which is to be established in each district. This will divert funds from what the programme of action calls 'operation black board', to equip some 40 per cent of the schools which do not have them, with buildings, mats, black boards, drinking water etc. The other provision in the policy is to arrest the expansion of higher

education and concentrate on improving its quality and this again is sound. Higher education faces a series of imbalances and distortions, imbalances between technicism on the one hand and physical and human sciences on the other, distorted and outdated curricula and a moribund and outdated examination system which makes nonsense of the whole system of higher education. It is these imbalances and distortions which have to be righted. The ministry reports in 1984-85 the extension of elementary education in 9 educationally backward areas, non formal education running in 1.65 lakh centres, higher education enrolling 35.39 lakh students, technical education offered to 30,000 degree, 60,000 diplomas and 7000 post graduate students, and adult education covering 70.43 lakh illiterates during the year 1985-86.

In the field of Health,
Annual Report of the Ministry of Health and Family Welfare reports on the ongoing programme for child survival with universal immunisation, the programmes for countering communicable diseases, such as diphtheria, tetanus, TB, Polio, the functioning of the rural health centres in 11,530 PHCs, 84,103 sub centres, using 18 lakh multi purpose health workers, and the progress in the Family Welfare Programme. On the negative side, the health situation continues to be disturbing with 20 per cent of rural deaths being due to respiratory disorders (which is a reflection on the anti -TB campaign), 9 per cent due to digestive disorders (which is due to the limitation of anti cholera and other such programmes), and 9 per cent due to fever. Infant mortality is a high 114 per thousand, and with 4000 children going blind every year due to malnutrition. In fact, the Indian Council of Medical Research reports that more than 7 million new born babies which is 30 per cent of all live births, every year are under weight. The goal of Health for All by 2000 is still far away. ICMR recommends food supplementation as most effective in reducing the prevalence of low birth weight delivery, along with development

programmes like biogas plants, the availability of clean drinking water in the vicinity, which will save the pregnant or lactating mother walking miles for carrying the water, improve birth weight and enhance the chances of survival of new borns. This is supported by WHO which reports that 70 per cent of the 3 lakh infants who died of tetanus in India every year in the rural areas is preventable because the immunisation facilities and trained staff necessary that are now not being used can be made available with a little effort. At bottom, the non realisation of the Health for All objective, and more particularly the failure to deliver health care to the rural poor, as the repeated positive experiences of some rural primary health centres and all voluntary agency programmes show is (a) not due to any lacks in modern medical sciences which has provided both knowledge and tools at low cost whichevery PHC can afford., (b) not due to lack of professionals - doctors and surgeons - because the local village dai has the capacity to absorb this knowledge and use the tools, and (c) not due to lack of interest of the community or people who are waiting to be invited to participate in dealing with their health issues. The sad conclusion is that the failure of rural health care, which is the heart of the Health for all goal, is due to the indifference of the governmental structure, particularly the official medical establishment, supported by the well to do who are only interested in developing further the very expensive urban hospital facilities. Till this human and political problem is tackled, the health programme of the people will face obstacles.

On. family planning, the government claims that since the programme started in 1952, 61 million births were averted, by March 1985 40.2 million couples or 31 per cent of total eligible couples in the reproductive age group have been protected against conception.[55] Despite these claims, population has been inexorably increasing from 361 million in 1951 to 685 million in 1981, the average annual growth rate rising from 1.33 per cent

in the decade 1941-51 to 2.50 per cent in 1961-71 and 1971-81. It came down to 2.2 per cent in the Sixth Plan period, though the absolute number increased by 75 millions against 72 millions in the Fifth Plan. It is estimated that the population will be 837 million by 1991, and 986 million in 2001. This will nullify a great part of the economic growth of the country and might even set the country's development back. This has led the government to set, for the balance of the Seventh Plan, ambitious targets: i) to reduce the population annual growth from 2.2 per cent to 1.9 per cent and the birth rate from 33 to 29 per 1000 between September 1986 and March 1990, ii) to attain which, the percentage of protected couples to be raised from 31 to 42, and the average age of marriage for women to over 20 years, iii) to increase old age pension and lower insurance premium to couples with 2 children, and form a 2 million womens volunteer corp, each volunteer to motivate 60 couples, and iv) to increase sterilisation to 31 million (Sixth Plan achievement 17.4 million), IUDs to 3 million users (7.2 million in the Sixth Plan) and 62.5 million oral pill users (31.8 million in the VI Plan). These are high targets but they must be attempted as the alternative is disastrous.

In achieving these targets there are 2 cautions to be sounded. First the Planning Commission programme evaluation organisation's finding is disturbing, that there is "heavy and practically exclusive emphasis" on the terminal method in the case of lower income groups, while the higher income groups use non-terminal methods. This finding is disturbing because not only is it one mere form of burdensome discrimination against the poor, but the use of a non reversible method by the very people to whom this programme is addressed, will make family planning unpopular. The other point is the finding of the Comptroller and Auditor General in his test check of the programme that

instead of the optimum 100 laparascopic operations a day, an average of more than 300 operations were claimed to have been performed, on some days 500 operations by one doctor in some centres. There is need to monitor this programme carefully to avoid recording unattainable claims.

Science & Technology

The Science & Technology picture is not clear. On the one hand the annual Reports of the Ministry and the Department[56] are clear administrative documents listing the functioning of SACC, NSTEDB, NCSTC and the National Biotechnology Board as policy formulators, the promotion of new areas such as Polymer chemistry, origin of life, laser spectroscopy, and their application to development, the working of the National Laboratories, the Antartica expedition, the rural science forum of CECCRI & RRL, Jorhat's citronella distillation plant. On the other hand, the prime minister, who is also minister of Science & Technology defines the Science & Technology programme as comprising 3 layers: a) mission areas, (b) thrust areas, and (c) the blue sky. There seems to be little or no relation between this classification and the ministry's annual reports referred to. The Annual Plan for 1985-86 seems to use, atleast in part, the language of the prime minister in stating that in 1985-86 the major lines are (a) support to thrust areas resulting from developing new technologies in frontier areas such as micro electronics, bio technology, new materials etc, (b) identification and implementation of missions with high science and technology components, (c) creation of infrastructural capabilities in areas like information systems, etc. (d) integration of S&T efforts with programmes and plans in the major socio economic sectors, (e) strengthening S&T component of the education system and support for basic research (what is called the blue sky), and (f) technology development in accordance with the basic principles of the technology policy statement. Equally confusing is the lack of relation between the 13 mission areas listed in the Seventh Plan,

and the 5 missions referred to by the Prime Minister for immediate attention, which include provision of drinking water, removal of illiteracy and vaccination of children. Missions are areas requiring high technology according to him, but surely the provision of drinking water, removal of illiteracy and vaccination do not need high technology. The technology is known and available. What is lacking is the political will, as noted under the education and health sector. In fact the problem is to use our national laboratories and their technological capabilities instead of importing everything from components to designs from the outside. The National Laboratories need to relate their R&D research to industrial needs and help in the absorption and adaptation of imported technology, which is growing fast as measured by the 8000 foreign collaboration agreements, but as to which there is little assimilation , as seenin the small Rs150 crores being spent on R&D by the private corporate sector in 1982-83. Finally reference should be made to an impressive symposium in one of our journals[57] in which 8 foreign suppliers of technology to India - UK, Benelux, Sweden, Denmark, Japan, France, Italy and Korea, along with two Indian economists set forth their views on the problems and prospects of technology sales to India. The summary analysis shows that the lack of technological dynamism in Indian firms - public and private, large, medium and small is - except for some half a dozen firms - due to poor managerial practices and procedures. Second in contrast to popular opinion in India, the technology suppliers to India are not in a monopolistic or oligopolistic position: but the strength of the Indian firm buying foreign technology depends on its marketing ability and technological capability, on whether or not the technology is in the hands of several or a few firms and on the demand for the latest or next to the latest technology. Third the price depends on both the above factors and the "gimmicks" which make for improved products. Thus for the analysis is useful and neutral, but when it elaborates the general feeling that the policies that control competition -

licensing, MRTP,FERA, preference to public sector enterprises and small industry - as much as the policy that controls technology imports lead to technological dependence and stagnation, it must be stated that this generalisation does not follow from the analysis: it is naturally the view of most foreign technology suppliers. From this also follows the policy conclusion that the government should be neutral as between the public and private sector, as between large and small firms, which is as valid as the causes for Indian technological stagnation as the foreigners see them. On the other policy conclusions there can be agreement, that imports and indigenously generated technology are not rivals, particularly if there was a good R&D sector in the country which can assimilate and diffuse the imports and which can use the imports as necessary supplements. Also that too long have imports been measured by the number of collaboration agreements: they should rather be measured by their content and the quality, by the breadth and depth of their contents.

All these sectoral activities and infrastructure are financed by the country's Savings and Investment, to which attention is now turned.

Savings and Investments

A first task is to update the Savings and Investments table which has been presented in every mid year review of the economy since 1974 as under:

Table: X

| Year | Percentage of GDP Current Prices | | 1970-71 Prices | | Percentage of NNP Current Price | | GNP Growth Percentage 1970-71 prices | Industrial Growth Percentage 1970-71 prices |
|---|---|---|---|---|---|---|---|---|
| | Savings | Investment | Savings | Investment | Savings | Investment | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1970-71 | 16.8 | 17.8 | - | 17.8 | 12.1 | 13.1<br>13.1 | 6 | 4.2 |
| 1971-72 | 17.3 | 18.4 | - | 18.3 | 11.4 | 12.9 | 1.6 | 3 |
| 1972-73 | 16.2 | 16.9 | - | 17.3 | 12.6 | 13.4 | -1.1 | -3 |
| 1973-74 | 19.3 | 20.0 | - | 21.4 | 11.8 | 13.8 | 5 | -3 |
| 1974-75 | 18.2 | 19.1 | - | 19.3 | 14.5 | 15.6 | 1.2 | 2 |
| 1975-76 | 20.0 | 19.9 | - | 18.3 | 15.5 | 15.3<br>13.5 | 9.2 | 9.8 |
| 1976-77 | 22.0 | 20.4<br>20.7 | - | 19.3 | 18.4 | 16.7 | 0.8 | 5.3 |
| 1977-78 | 21.6 | 20.0<br>20.4 | - | 19.1 | 18.3 | 17.7 | 8.9 | 6.9 |
| 1978-79 | 23.9 | 23.7 | - | 21.4 | 19.9 | 20.1<br>18.0 | 5.7 | 7.7 |
| 1979-80 | 22.5 | 23.0<br>23.7 | - | 19.7 | 17.8 | 18.3<br>16.2 | -4.8 | -1.4 |
| 1980-81 | 22.9 | 24.6 | - | - | 17.5 | 19.2<br>16.7 | 7.7 | 4.1 |
| 1981-82 | 23.0 | 23.9 | - | - | 16.6 | 18.5<br>15.4 | 4.6 | 8.2 |

contd

Table:X (contd)

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|
| 1982-83 | 22.8 | 24.4 | - | - | 17.2 | 18.9<br>15.0 | 1.1 | 3.9 |
| 1983-84 | 21.8 | 23.4<br>24 | - | - | 16.1 | 17.8<br>18 | 7.6 | 5.5 |
| 1984-85 | 22.7 | 23.9 | - | - | 16.5 | 17.8<br>17.4 | 3.5 | - |
| 1985-86 | 23.4 | 25.2 | - | - | 17.2 | 23.9 | 3.5-4 | 6.3 |

Source: Columns 2-5 upto 1979-80 are from the Planning Commission's working group on savings, except that from 1976-77 to 1979-80 under column (3) the CSO estimate is also given in the second line of each year. In columns 2 & 3 from 1981-82 RBI estimate are given. Columns 6 & 7 are from the Annual Reports of RBI except in column 3 & 7 CSO estimates are also given in the second line for each year. In general the figures presented for the last two years are different from those presented in the tables of the 1985 mid year review because the data on gross and net savings and investment and Industrial growth rate are revised.

The table shows that in the first year of the Fifth Plan 1985-86 gross domestic savings as percentage of GDP was well below the rate assumed in the Approach Paper of the Seventh Plan at 26 per cent, and even marginally below the lowered 24 per cent of the Seventh Plan document at 23.4 per cent. What is encouraging is that after the decline in 1983-84 the rate has been steadily rising. It will be noted that the Net Domestic Savings as percentage of Net National Product has been rising from 1982-83. In fact savings which were 16.8 per cent of GDP and 12.1 of NNP in 1970-71 have risen to 23.4 per cent and 17.2 per cent respectively.in 1985-86.

The break up of the Net Domestic Savings as between its three main components, namely, the household sector, the public sector and the private corporate sector, as well as the inflow of foreign resources as a percentage of NNP is set forth in the table below:

Table XI:

| Sector | 1983-84 | 1984-85 | 1985-86 |
|---|---|---|---|
| 1. Net household sector's savings of NNP of which | 13.9 | 14.8 | 15 |
| financial assets were | 7.7 | 9.6 | 9.3 |
| 2. Net public sector's savings as percentage of NNP | 1.8 | 1.1 | 1.6 |
| 3. Net Domestic private corporate sectors savings as percentage of NNP | 0.4 | 0.6 | 0.6 |
| 4. Total net domestic savings as percentage of NNP | 16.1 | 16.5 | 17.2 |
| 5. Inflow of foreign resources as percentage of NNP | 1.7 | 1.3 | 2.0 |
| 6. Aggregate net investment as percentage of NNP (4+6) | 17.8 | 17.8 | 19.2 |

Source: Annual Report of Reserve Bank of India 1985-86

It will be seen from the above that net household saving is 87.2 per cent of total domestic savings in 1981-82, and it has maintained this dominant position in the previous two years at 86.3 per cent and 89.6 per cent. In 1985-86 the savings of the household sector in financial terms declined slightly at Rs1454 crores (from Rs21,973 crores in 1984-85 to Rs20,519 crores in 1985-86) due to lower savings in the form of currency holdings from 1.5 to 1.1 per cent, itself the result of the reduced rate of currency expansion during that year, as noted earlier in the prices sector. Similarly the growth rate of deposits declined from 18.8 per cent in 1984-85 to 15.9 per cent in 1985-86, though in absolute terms deposits increased from Rs10,892 crores in 1984-85 to Rs15,916 crores in 1985-86. Hence household savings in bank deposits declined from 43.2 per cent in 1984-85 to 40.9 per cent in 1985-86, due to the attractiveness of non banking media, particularly small savings. Savings of the household sector in bank deposits was 5.2 per cent of NNP in 1984-85 and 4.8 per cent in 1985-86. The table also shows an increase in public sector savings, which is due to the increased profitability of public sector enterprises and higher savings of the ministries of government in 1985-86.

The position of the relative shares of financial assets and physical assets - in the domestic savings pattern of the household sector as set forth in the table demands a comment. In the early 70s, the physical assets formed 60 per cent of the household assets and financial assets the residual 40 per cent. Now the position has been reversed. The financial assets of the household savings formed 64.8 per cent in 1984-85 and 62 per cent in 1985-86. This is an indicator of the larger resources base of the top deciles of society. There are no data on the break down of savings between rural and urban sectors. The NCAER study on change in the structure of household income in 1970-71 and 1981-82 provides the percentage change within each income group from the different sources of income, agriculture, non agriculture etc. It shows that rural households, particularly the large

as the table below shows:

Table XII

(Rs crores)

| Year | Total Borrowing | Public Sector | Private Sector |
|---|---|---|---|
| 1980-81 | 1037.66 | 810.14 | 137.85 |
| 1981-82 | 1204.02 | 390.65 | 392.48 |
| 1982-83 | 2026.06 | 1543.51 | 240.02 |
| 1983-84 | 1084.84 | 459.33 | 162.15 |
| 1984-85 | 1905.83 | 1085.50 | 378.99 |
| 1985-86 (upto December) | 1235.28 | 663.47 | 160.59 |

Source: Ministry of Finance

This rate of international commercial borrowing is sustainable, it should be stepped up to $2 billion to $2.5 billion in the Seventh Plan, provided it is combined with a policy of moving towards zero net aid.

The incentives offered to the so called Non Resident Indian group has not resulted in a sensible increase of their savings and investment in India. The incentives for the purpose offered to them include (a) income tax at a flat 20 per cent rate, (b) exemption from wealth tax and gift tax, (c) capital gains tax at flat 20 per cent with total exemption if reinvested for atleast 3 years, (d) no tax returns required, (e) 13 per cent interest on Non Resident External (NRE) account and 10 per cent on Foreign Currency Non-resident (FCNR) account and other facilities on investment in government securities, company deposits, investment on non repatriation and repatriation basis, the constitution of a special cell in RBI and the Finance Ministry to deal with their accounting, along with recent concessions covering amendments to FERA, raising foreign exchange entitlement from 25 to 50 per cent, customs exemptions and increased repatriation rights. The results of all this as at December 1985 were NRI invested Rs477 crores, under protfolio investment Rs46.87 crores of which Rs46.57 crores were on repatriation basis. and the total

landowners, more than doubled their non agricultural non wage income during the decade, compared to the 50 per cent increase in that source for all rural households.[58] A survey of the well to do rural farm households in Gujarat, Maharashtra and Andhra Pradesh by the Tata Economic Consultancy Services shows that those households deployed their savings in their own fixed capital, in Postal Savings and bank deposits.[59]

Infact the savings behaviour assumed in the Seventh Plan is that out of the Rs3,22,000 crores to be invested, the household sector savings will be Rs2,16,000 crores, comprising Rs1,14,000 crores in physical assets and Rs1,02,000 crores in financial assets (which as noted earlier is likely to be reversed as between the 2 components). This level of savings by the household sector requires a gross rate of savings of 20.5 per cent and a net rate of savings of 16 per cent. This is not an impossible rate of increase vis a vis the 15 per cent current net savings rate of the household sector. They can be reached towards the end of the Plan, if the annual overall growth rate averages 5.5 per cent.

Another issue thrown up by table XI is the increase in the flow of foreign resources as a percentage of NNP which rises by 60 per cent to 2. Here the current year, 1986-87, aid India pledge is a good pointer to the fact that a major slice of the $4 billion pledged is in the form of commercial loans. This will be so also in the future. The World Bank forecasts that the country will have to borrow $4.5 billion per annum mainly from the commercial sources. This is the way to bankruptcy, and a means of falling into a debt trap. The question is raised as to why there is no reference at all to the beginning of the Fifth Plan's pledge of zero net aid. Now we are in the position of choosing between the World Bank's proposal of $4.5 billion and the government's plan of $2 billion of annual international commercial borrowing. The record of external commercial borrowing has been reasonable

NRI investment is ₨529 crores. They have also total bank deposits of ₨4674 crores as at October 31,1985, of which ₨3088 crores were in rupee accounts.[60] What part of this is hot money needs investigation. This whole arrangement needs further review from the point of view of the savings increase involved, apart from most NRIs being foreign nationals.

There is then left the continuing question as to why with this high rate of saving - which is what the industrial countries attain - the growth rate should be a low 3.5 per cent which is not only the trend rate, but the actual rate for the last 2 years recorded in table X, and why the industrial growth rate is so much below the target rate of 8 per cent.

One explanation hinted at by the KN Raj Committee on savings[61] is that if the investment rate (and savings rate) is expressed in constant prices, there is not such a sharp rise recorded as between the mid 60s and 1979-80.

This argument has been further pushed forward by a recent study[62] which concludes that the real rate of savings has not moved beyond the 10 per cent of the 50s, the nominal rise being due to inflation as set forth in the following table:

Table XIII

| Year | GNP at current prices (₨ crores) | Percentage rate of average annual growth | GNP at constant prices (1970-71) | Percentage rate of average annual growth | Nominal savings as percentage of GNP | Average Annual Rate of Growth |
|---|---|---|---|---|---|---|
| 1950-51 | 9523 | 4.6 | 18,375 | 3.9 | 10.0 | 0.7 |
| 1960-61 | 11946 | | 7,054 | | | |
| 1970-71 | 39979 | 10.3 | 39,979 | 4.0 | 16.8 | 6.1 |
| 1982-83 | 164399 | 12.5 | 59,821 | 3.4 | 22.8 | 7.9 |

Source: IIPA (see reference 62)

The analysis of the data set forth in the above table concludes that the illusory income and illusory savings operate in such a way, that in order to induce people to save more, the government offers a higher rate of interest on savings, and in order to pay the higher interest on savings and for its other expenditures, the government goes in for heavy deficit financing, as a result of which prices go up and the value of the Rupee falls. The investor getting a higher interest rate gets it partially to compensate for the fall in the value of the rupee, which also is reflected in the real value of his income. If he reinvests the interest, it gets accounted as savings, which is not real but illusory. The grain of truth in this analysis, which calls attention to the rate of savings at constant prices being lower than what is set forth in Plan and official documents, which use the rate at current prices, is marred by the fact, that even so the percentage of savings in real terms as estimated by the Raj Committee was 15 per cent in 1970-71 and 16.9 per cent in 1982-83 and by CSO at 13.1 per cent and 14 per cent for these two years and not stationary at 10 per cent as set forth in the analysis.

The other explanation for the contradiction between the high rate of saving and low rate of economic growth is nearer the truth in pointing to the fact that instead increasing and improving the volume and the rate of utilisation of the country's capital assets, the emphasis is only on increase in Plan outlays. The long term trend rate of increase of capital goods is shown to be 4.7 per cent, while nominal investment outlays (seen in Plan outlays) increase by 15 per cent per annum. This only pushed up the price of capital assets which in a sense is the result (as well as the cause) of the increased investment outlays. This means the higher rate of nominal investment does not lead to increased production of capital assets - steel, machinery, transport equipment, cement, etc, and so the coexistence of higher rate of savings and investment and low rate of production increase.[63]

The major reason for the growing savings and investments not producing accelerated economic growth and industrial development is the wasteful use of capital and low productivity which characterises the economy. Earlier the fast growing input - output relationship in agriculture was referred. This is even more so in the case of mining, transport, electricity, where the incremental capital output ratio (ICOR) is increasing from Plan to Plan from around 3 in the First Plan to 6 in the Sixth Plan. The trend over the 6 plan periods has been 5.5. There are sectors like electricity, transport, sugar, textiles, steel where the ICOR ranges from 13 to 6. Hence improved management practices, updated technology, fuller capacity use, widening of the market, improved efficiency, and higher productivity are the essential disiderata for the high savings and investments of the community to produce high real capital assets and production output.

Foreign Trade and Balance of Payments

India's foreign trade, according to provisional figures released by the commerce ministry[64] on August 1, 1986 faced for 1985-86 a record deficit of Rs7951 crores, with exports dropping by 11 per cent to Rs10,420.37 crores and imports increasing by 11.4 per cent to Rs18,371.28 crores. It is now possible to construct the foreign trade and balance of payments figures for the five years of the Sixth Plan and the first year of the Fifth Plan, with a guess about the second year, that is, 1986-87, as in the table below:

Table XIV

(Rs crores)

| Year | Exports | Imports | | Total Imports | Trade Balance | Invisibles | of which Private transfer | Balance on current account |
|---|---|---|---|---|---|---|---|---|
| | | Govt. | Private | | | | | |
| 1980-81 | 6576.4 | 7808.3 | 4739.3 | 12,543.6 | -5967.2 | 4310.6 | 2257 | -1656.6 |
| 1981-82 | 7765.5 | 8629 | 5257.5 | 13,886.5 | -6121.0 | 3803 | 2221 | -2317.3 |
| 1982-83 | 9137.1 | 9813.4 | 5099.8 | 14,913.2 | -5776.1 | 3479.7 | 2527 | -2296.4 |
| 1983-84 | 10168.5 | 9604.8 | 6434.5 | 16,039.3 | -5870.8 | 3608.4 | 2775 | -2262.4 |
| 1984-85 | 11395.5 | | | 16,591 | -5196 | 3300 | | -2000 |
| 1985-86 | 10420.37 | | | 18,371.28 | -7951 | 3300 | | -4651 |
| 1986-87 | 12000 | | | 19,000 | -7000 | 3000 | | -4000 |

Sources: RBI upto 1983-84
Ministry of Commerce for 1984-85 and 1985-86
CMIE for 1986-87

One of the problems in constructing the external account figures and analysing its content is the lag of nearly two years with which the Balance of Payments data is released. In the above table, at this date of writing in August 1986, only the figures upto 1982-83 are firm, the procedures for estimating some of the invisbles were changed from December 1983 and so time is needed to make the figures comparable. The data on official reserves and debt flows are always upto date, but for the trade data the firm ground is really upto 1982-83. This is somewhat shocking.

The table shows exports rising at an annual average of 14.8 per cent during the Sixth Plan, and then declining by 11 per cent during the first year of the Seventh Plan. For the second year 1986-87, the assumption is that improved production which could register a growth of 5 to 5.5 per cent, and the various measures taken to improve exports will lead to a 15per cent increase. As far as imports are concerned, it will be noted that not only did they increase by an annual average of 6.4 per cent during the Sixth Plan, imports by the private sector increased at the same rate as that of the public sector. Imports in 1985-86 increased by 78 per cent over the Sixth Plan rate to 11.4 per cent. Here again an assumption is made that for 1986-87 import increases will be kept down along lines to be discussed later. While the negative trade balance has fluctuated between -Rs5196 crores and-Rs6121 crores in the Sixth Plan, it has begun rising sharply in the Seventh Plan. It is near -Rs8000 crores in 1985-86 and could come down to -Rs7000 crores in 1986-87. Invisibles on the other hand, are steadily declining because of rising interest payments and falling remittances.

Infact the Seventh Plan, as the first two years show, faces serious balance of payments pressures because therewill be (a) no crude export earnings, (b) increased debt servicing, particularly on IMF account, (c) poor prospects of concessional loans, (d) higher Seventh Plan external financial needs,

(e) fall in remittances and (f) slow growth in the industrial countries and growth of the new form of protectionism, termed Non Tariff Barrier (NTB). NTB has many forms and covers (a) voluntary export restraints (as in the case of the Multi Fibre Agreement), (b) orderly marketing arrangements, (c) anti-dumping measures, (d) countervailing duties, (e) safeguards, (f) codes etc. NTB is more important in restraining our exports than tariff. About 60 per cent of our exports are subject to NTB, which is a kind of revival of mercantilism in Japan and EEC countries, which attempt to solve or alleviate their problems of unemployment, lagging growth and declining industries by restricting imports and subsidising exports.

In this situation, action is needed by India on the both the exports and imports front.

To help develop an integrated foreign trade policy, the Abid Hussain Committee sets forth a series of recommendations. It starts soundly with stating that the external sector is part of the national economy, and as exports are 5-7 per cent of GDP, exports can grow only as the economy grows. But then it proceeds to recommends a quantum jump in exports through the usual devices of (a) increased and easy to obtain duty drawbacks, (b) enlarged and tax free CCS, (c) exempting 50 per cent of export incomes from tax (against the present 10 per cent), (d) abolishing licensing and restrictions on import of capital goods and technology which are inputs in export production and (e) the use of 'efficient' import substitution. These recommendations have influenced trade policy in import liberalising, lowering of the protective tariff (on which the Finance Minister makes an announcement almost every week), free import of technology and the relaxing of industrial controls. The import of technology, (very often repetitive), goes along with import of computer systems, electronic spares and systems, import of special purpose machinery under OGL. A new scheme of CCS has been introduced from 1 July 1986 which will i) fix CCS on the basis of cascaded structure of taxes and unrebated indirect taxes, ii) compensate for the high transport

cost of exports of perishables, iii) base it on value added by labour for handicrafts items; and in addition (a) the duty draw back procedures have been simplified, and (b) market development assistance is to facilitate the competitive character of our exports. How far these necessary measures lead to increase in exports can be judged next year.

In the case of the 100 per cent export oriented units started in December 1,1980 by December 25 these have been approved for 609 units, with 470 units being actually set up, and 84 of them producing Rs285 crores worth of goods. In fact, the Tata Economic Consultancy Service in a study of this 5 years old project reports that of the 609 units approved, 139 were cancelled, only 84 went into production and against the target of earning Rs500 crores could earn only Rs285 crores, suggesting that this ill conceived scheme should be wound up. These units are permitted to import machinery, spares, raw materials, free of custom duty and procure indigenous capital goods, components and raw materials without excise, and in return must produce for exports for 10 years, being permitted to sell 25 of their products plus rejects upto 5 per cent indigenously. With the liberalisation of imports, the units complain that they have lost their relative advantage, that the supervision by customs has made matters for them difficult and costly. So 20 of the units in Bombay and 10 outside Bombay have opted out of the scheme because of failure of their exports programme and customs harassment. They would like to be 100 per cent export oriented but outside of the scheme. The government is reviewing the scheme and should preferably close it down. The other special scheme is the Free Trade Zones, of which Kandla reports exports of Rs193 crores between April-December 1985, Santa Cruz of Rs62 crores, with Cochin, Madras, Falta and Noida being organised. Here again there are reports of misuse of concessions and the net exports (when customs free imports are deducted) are small. This

scheme should also be reviewed.

What is required for increase in exports is not the kind of special incentives and special schemes recommended by the Abid Hussain Committee and being acted upon by the government which will create, if successful, special ad hoc islands of prosperity. The latest in this area is the 50 per cent subsidy on the expenditure incurred in submitting tenders for over seas projects by consulting firms. Also consultancy exports will receive 10 per cent project assistance. There are 250 consultancy organisations in the country which canoffer services to other countries in power generation, infrastructure, petro chemicals etc. Both because the cost of submitting tenders has shot up, and because OECD countries are subsidising their project exporters, this new scheme has been found necessary in India. But the means of increasing exports is by offering high quality services and timely completion of projects. If these two essentials are assured, project exports will increase. The case of engineering exports, referred to earlier under the manufacturing section is typical. The scandalous part of the exports scene is that the large units have little or no exports to their credit, that over 60 per cent of the exports in some areas are by small firms. What is worse is that in all fields, the losses incurred on exports are sought to be recovered by pushing up domestic prices, when it ought to be the other way around. Hence the expansion of exports so urgently needed in the Seventh Plan, unlike the late 70s and early 80s when Indian growth stepped up and growth in industrial countries declined so that India could expand its exports and contain its imports, today the country will have not only to produce more of its traditional and non traditional exports, but adapt them to the export market and sell them there. The key to expanding exports is an efficient and productive production structure.

On the import side, a look at the major import items is needed, as the high and fast growing imports are a problem. The table below sets forth some of the major imports:

Table XV

| Item | 1982-83 | 1983-84 | 1984-85 | 1985-86 |
|---|---|---|---|---|
| 1. Machinery & transport equipment | 2232 | 2834 | 2618 | 3600 |
| 2. Crude oil and petroleum products | 5598 | 4812 | 5345 | 4700 |
| 3. Iron & Steel | 1146 | 963 | 777 | 1000 |
| 4. Fertilisers | 278 | 365 | 1435 | 1465 |
| 5. Edible oils | 418 | 846 | 1309 | 766 |
| 6. Sugar | - | - | 114 | 131 |
| 7. Cement | 100 | 152 | 25 | 20 |
| 8. Wheat & rice | 350 | 587 | 158 | 45 |

Source: Ministry of Commerce, except for 1985-86 CMIE

The eight import items listed above are those in which there is unused capacity in the country to replace imports, as in the case of iron and steel, edible oils, sugar, cement and wheat and rice, and/or the possibility of reducing the import quantum by economising, as in the case of crude oil, fertilisers and machinery. The problem of import of machinery and equipment also raises the question of the import of capital goods under the concessionary terms provided in the 1984-85 budget and only partially reversed in the 1985-86 budget, as noted under the manufacturing section. An official committee of government, after a review of the effects of capital goods imports, concluded that it is damaging the domestic industry because (1) the liberalisation of capital goods for 13 industries in 1978 has, in April 1985, been extended to 200 items of machinery which have been included in OGL and their customs duty drastically reduced, (2) the government budget, as noted earlier, reduced customs duty on capital goods across the board and actually

abolished it for capital goods for fertiliser and power projects, 3) the shortage of rupee resources resulted in capital goods imports in the public sector with the help of "tied aid" funds, and (4) technology imports lead to capital goods and machinery imports.

The import of technology does not appear as an item in the table, partly because it is part of the import of capital goods and machinery, partly because it has begun gathering momentum from 1985-86, and partly because the responsibility for coordinating and assembling the information on it vests with the Department of Science and Industrial Research which gives no information on them in its annual reports. The features of technology imports which need attention are: i) the need to diffuse technology that is imported and for this purpose not to accept restrictions on diffusion placed by the suppliers: ii) the assimilation of the technology which is imported is prevented by clauses prohibiting changes in the design, and this again should not be accepted: and iii) most important, is the local R&D both in-house in the public and private sector, and in laboratories and institutions, which will have to develop in face of the resistance of the technology suppliers. It can be done, as demonstrated by some of our firms who have imported technology.

Thus on the imports side what is needed to relieve the growing trade deficit and the looming balance of payments crisis is for the country to produce more machinery, more iron and steel, more edible oils, more fertilisers and the other items which now appear on the import list. This is not a question of going back on the liberalised policies, but of staying within the Rs40,000 crores trade gap estimated for the Seventh Plan by Planning Commission, involving -Rs6500 crores for 1985-86 (where we are already in excess by Rs1400 crores) and keeping our current account deficit to -Rs2200 crores as planned.

The situation on debt servicing is not a too happy one, as it has to take into account the large trade deficits which will face us in Seventh Plan, reducing our servicing margin, the need to maintain our exchange reserves to cover atleast 2/3 months imports, and the maturing debt servicing obligation during the next 10 years arising out of the existing external debt of $27 billion as set forth in the table b low: (to this should be added the additional debt that will be contracted in the next 10 years).

Table XVI

(Rs crores)

| Year | Repayment of Principal | Interest | Total Debt Service |
|---|---|---|---|
| 1985-86 | 1,438 | 1,405 | 2,843 |
| 1986-87 | 1,987 | 1,469 | 3,456 |
| 1987-88 | 2,355 | 1,483 | 3,838 |
| 1988-89 | 2,596 | 1,449 | 4,045 |
| 1989-90 | 2,610 | 1,181 | 3,791 |
| | 10,986 | 6,987 | 17,973 |
| 1990-91 | 1,516 | 658 | 2,174 |
| 1991-92 | 1,326 | 608 | 1,934 |
| 1992-93 | 1,196 | 543 | 1,739 |
| 1993-94 | 1,046 | 517 | 1,563 |
| 1994-95 | 969 | 478 | 1,447 |
| Grand total 1985-86 - 1994-95 | 17,039 | 9,791 | 26,830 |

Source: Economic Survey & RBI

Foreign exchange Reserves are in not too bad a shape. They rose fast during 1976-77 to 1978-79, declined in the next 3 years. Since then they/have been increasing, and in 1985-86 the reserves as at 24 January 1986 stood at Rs6365.81 crores. (The small draw down of Rs450.97 crores during the year kept the inflation rate down.) Gold and SDRs amounted to Rs379.97 crores.

Is the rupee over valued? This is a serious question, because over valuation of the rupee is equivalent to an import subsidy and export taxation. Many goods and services that would normally be exported with equilibrium exchange rates will be imported with an overvalued Rupee. In the case of the rupee, linked as it is for its exchange value to a basket of 12 currencies, which is periodically adjusted (in 1985-86 there were 22 adjustments), during the year it was adjusted downward by 10.43 per cent against the pc sterling and upward by 0.47 per cent against the US dollar - the currencies of its two main trading partners.[65]

The Rupee trading arrangement was expanded during the year. A study of Indo-Soviet trade in 12 commodities showed (a) increase in Indian exports to the Soviet Union of tea, coffee, pepper, jute textiles and declines in raw leather, tobacco and coffee, (b) the unit value of most Soviet imports from India rose by 20-30 per cent, except recently in the case of jute bags, tobacco and coffee (in coffee, USSR being a non quota country, demands and get its coffee at cut prices), (c) there have been annual fluctuations in Soviet imports from India because the consumer goods which are imported are not controlled by the Soviet Plan, and (d) there is little evidence of switch trading. The future of the trade is one of modest but necessary expansion.

Employment and Labour Problems

What is the impact of the developments in agriculture, manufacturing, and services reviewed so far on employment during 1985-86.

The Seventh Plan estimates that employment must be created during the plan period for 48.7 million persons, which involves an average of 9-10 million additional persons being employed a year. To start with there are some problems to be faced. The Seventh Plan, unlike the Sixth Plan, does not define employment and so

we are left with no clue as to whether this aggregate refers to what the Sixth Plan calls 'usual status' of employment, or 'weekly status' or 'daily status'. We shall assume that the 48.7 million persons employment to be created is in terms of 'usual status' and that it means employment has to be generated on an annual average of 9 million person years. A second problem is that the Seventh Plan employment aggregates leaves out some 3.5 million jobless who spill over from the Sixth Plan. If this is added, the task before the Seventh Plan is over 51 million persons or an annual average of creating 9.5 million person years of employment.

As usual, we have no data on the employment generated in the first year of the Plan, 1985-86, as is the case for each of the preceeding years, We can only proceed by indirection and making certain assumptions. The Employment Information Service tells us that for 1984-85, employment in the organised sector (which is the public sector and the non agricultural private corporate sector) increased by 1.2 per cent over employment in 1983-84, that is by 3 lakh to 243 lakhs. Using the trend rate of employment generation in the organised sector, in 1985-86 some 4-5 lakh employment opportunities could have been generated, which was an increase of 1.7 per cent over that of the preceding year, making a total employment of 250lakhs. It will be noted that employment in the organised sector is about 10 per cent of the labour force, and this proportion has held over the last decade and a half.

Second some hints at employment generation can also be obtained by examining the monthly statistical abstract of the Central Statistical Organisation. On the basis of information supplied by the DirectorGeneral of Employment and Training, Ministry of Labour, it reports that employment in the organised sector rose by 1.8 per cent in 1984 (January-December) and 1.4per cent

in 1983. Using these rates, employment generation in the organised sector in 1985-86 would have been 3.7 lakhs which is lower than the Employment information projection used in the previous paragraph.

Using the NSS data, the 38th round shows that 87 lakh were unemployed at the end of the Sixth Plan out of the total labour force of 290 millions. It also reports that some 15 lakh of employment was created in the agricultural sector every year. We may therefore assume that in 1985-86 some 15 lakh jobs were created in the agricultural sector as a result of agricultural development.

The small scale sector reports an increase in employment of 6 lakh persons in 1984-85, and has a target of 4 lakh persons for 1985-86. For that year an additional 4 lakh persons of employment is reported by the Khadi and Village industries.

Under the National Rural Employment Programme, the VI Plan record is (a) utilisation of ₨1834.25 crores against the allocation of ₨2444.56 crores, (b) use of 20.51 lakh tonnes of foodgrains against the allotment of 28.43 tonnes and (c) the generation of 1775.18 million mandays against the target of 2000 million mandays as the following table shows:

Table XVII

| Year | Funds (₨ crores) | | Foodgrains (tonnes) | | Employment generation (million mandays) | |
|---|---|---|---|---|---|---|
| | Allocation | Use | Allotment | Use | Target | Achievement |
| 1980-81 | 348.11 | 225.28 | 15.63 | 13.34 | - | 413.58 |
| 1981-82 | 454.02 | 318.48 | 3.43 | 2.33 | 335.73 | 354.52 |
| 1982-83 | 524.49 | 396.12 | 3.57 | 1.72 | 353.22 | 351.20 |
| 1983-84 | 525.24 | 329.89 | 2.88 | 1.47 | 323.23 | 302.76 |
| 1984-85 | 592.70 | 501.48 | 2.92 | 1.71 | 309.13 | 353.12 |

Source: Ministry of Rural Development

It will be noted from the table that though the target of generating more than 300 million mandays each year was attained, neither the funds nor the foodgrains allocated were used fully in any year. For 1985-86 Rs460 crores (plus the carry over of Rs91.22 crores) and 7.31 lakh tonnes of foodgrains (which includes the additional 5 lakh tonnes for the year) and a special 6.9 lakh tonnes of wheat have been allocated. The employment target is 228 million mandays, of which 172.58 million mandays were achieved by January 1986, so that the target is likely to be achieved for the year.

Under the Rural Landless Employment Guarantee Programme (RLEGP), in 1984-85 Rs377.94 crores were expended, 1.09 lakh tonnes of foodgrains used and 260.44 million mandays of employment generated. (The programme was launched in 1983-84). For 1985-86 a target of 205.73 million mandays of employment has been fixed, of which 134.38 million mandays have been achieved upto December 1985, so that here again the target may be exceeded.[66]

On the basis of these somewhat dispersed and uncoordinated sources, it looks as if some 4-5 million person years of additional employment were generated in 1985-86, the first year of the Seventh Plan. The Seventh Plan states that during the Plan 40 million will be added to the labour force, and with the unemployed backlog of 8.7 million, employment will have to be generated for some 50 millions during the Plan. It states that the Seventh Plan will generate additional employment at the rate of 4 per cent annually, mostly in agriculture. Out of the 40 million standard person years to be employed, 6.9 million will be in cultivation, 11 million in related agricultural works, 6.7 million in manufactures and others in housing, works, mining etc. It may be noted that during the first year of the Plan, employment generation has been less than half this target. There is also the question of how many of the 4-5 million additionally employed were gainfully employed, because the poor in India (unlike in industrial countries) are not the poor who are idle, but are the working poor, what are termed the income unemployed.

Employment generation in the Seventh Plan is to be through (a) increase in cropping intensity made possible through expansion in irrigation, extension of new agricultural techniques to low productive regions and to small farmers, and (b) the creation of productivity assets which is one of the aims of IRDP, NREP and RLEGP, so that the employment and income generated is not a passing phase but is a permanent one. If the creation of durable assets is thus one of the major aims of these programmes, then provision should be made for their use in a manner similar to the subsidising of both fixed capital and working capital in industry and agriculture. In these employment generation programmes, there should be provision for subsidising the use of the productive assets created. This means that the wage cost for and maintenance and utilisation of the created rural assets should be provided, similar to the provision for wages for agricultural land, irrigation system, cotton textiles etc.

I end this rather disjointed employment - unemployment section by repeating my plea that nothing is more urgent than setting up an information gathering system on employment in the unorganised sector, on what is happening on employment in the rural countryside, block by block, district by district and state by state. We can start by using the existing net work of higher education institutions for this data gathering task, which can then be analysed and processed by CSO.

The Labour Bureau reports that the applicants on the live registers of the Employment Exchanges increased from 23,546,000 in December 1984 to 26,270,000 in December 1985. The number of educated uemployed, that is those with matriculation qualification and above increased from 5.5 million to 6 million during this period. The 32nd round of the NSS (1977-78) reports that 12 per cent of the 47.7 million matriculates and above, that is, 5.9 millions were unemployed. The 38th round (January-June 1983) however, found only 8 per cent of the educated as unemployed, that is

3.7 million. We are on somewhat firmer ground in regard to the number of educated employed and educated unemployed. The Employment Exchange records show that the number and percentage of the educated unemployed are increasing, while NSS finds that they are decreasing. This difference may in part be due to the fact that some 20 per cent of those who register at Employment Exchanges are looking for better jobs rather than for first employment. But even so, there is an unexplained residue in the Employment Exchange data, which calls for investigation. There are two reports that impinge on this analysis. One is the fall in the rate of growth of employment in the organised sector during the 38th round survey, which may mean that the increase in employment exchange registration is an urban phenomenon and that rural migration declined in that period. This needs investigation. Also based on the 38th round of NSS and on the assumption that there will be no further deterioration, the Seventh Plan forecasts the number of educated manpower during the Plan increasing from 47.22 million in 1985 to 64.39 million in 1990, involving an increase of educated manpower by 1.2 million to 4.9 million in 1990. This is serious, and has to be reconciled against the growing unemployment recorded by employment exchange data, calling for action both by the economy and education sides.

In regard to labour relations, 1985 was a poor year, as the number of mandays lost climbed steeply from 10,318,000 in 1983 and 18,870,000 in 1984 to 219,188,000 in 1985, with West Bengal being in the lead with 13,375,000 mandays lost, followed by Maharashtra 3,623,000 and Tamil Nadu 3,360,000. Manufactures had the largest number of disputes and within manufactures, cotton textiles registered the maximum. Another feature is that strikes are double the number of lockouts, but the mandays lost under lockouts are more than double than those lost under strikes.

Two schemes to give workers a share in equity of the company were in parliament in August. One is the stock option

scheme wherein the employees will be given 3 options of savings at 3 different rates - Rs500, Rs1000, Rs2000 a year under the employee's savings linked to the scheme. The savings will be for 5 years, at the end of which the savings will get compulsorily converted into equity shares at a price to be determined in the year in which the scheme is introduced. In the second scheme, the companies have been advised that while proposing a further issue of capital to the controller of capital issues, they reserve 5 per cent for their employees on an equitable basis. The extent to which these schemes will attract the workers, whose surplus savings are limited, and the role that they will then have to assume in management are issues to be watched when the schemes become operational.

The problem of industrial accidents and deaths is becoming serious and calls for effective regulatory action. The Bhopal accident has been followed by 3 accidents involving gas leakages and 4 involving nuclear fall out. The Central Labour Institute reports that in 30 years 36,000 workers have been killed and 6.4 million injured in industrial accidents. The Simla Bureau and the National Institute of Occupational Health, Ahmedabad state that over 7000 deaths occur per annum as a result of industrial accidents - at 0.14 per 1000 workers, which is 5.7 times higher than that of Japan (0.02), UK (0.03) and US (0.03). 5 sectors - textiles, metallurgy, machinery manufacturing, chemicals and transport account for 80 per cent of the accidents. 4 states - Maharashtra, West Bengal, Gujarat and Tamil Nadu - with 49.6 per cent of all factory employment account for 66 per cent of accidents. As a result, nearly 5 million days and Rs2000 crores of production are lost, and State Insurance Corporations and other compensation boards pay out Rs180 crores to the injured. To start with, the rigorous inspection of these 5 sectors in the 4 states would reduce the rate of accidents. The inspectorate should be concentrated in this area, without being spread out thinly over the whole country.

The freeing and rehabilitation of bonded labour faces several problems. First it has proceeded so slowly in the Sixth Plan that it has split over into the Seventh Plan. Second as at March 1985 12 states report identifying and freeing 1,77,062 bonded labourers and rehabilitating 1,34,802 of them. Going by the experience in Tamil Nadu, these states figures need to be checked by an outside agency. Third the numbers involved are still unsettled. The states' estimate is 1.2 lakh bonded labourers (which is already surpassed by their reports as at March 1985), the 32nd round of NSS enumerates 3.5 lakh bonded labourers, the Gandhi Peace Foundation and the National Labour Institute as a result of their national survey estimate the number at 22 lakhs. There is need to mount a campaign to free and rehabilitate bonded labourers, and use voluntary agencies in this area.

Despite many laws like the Factories Act, Minimum Wages Act, Employment of Children Act, ESIC and PFA, the plight of children employed in the match and fire works industries blatantly violate every one of the above laws. Employment of children in the 6-10 age group is dominant, working hours are 12 to 14 against the law of four and a half hours, basic amenities are lacking, wages to children are paid on a piece rate basis, the ban on setting up new units in Sivakasi is ignored and a large number of new units spring up daily, factory inspectors do not implement the law and the department has not punished the violators. Under these conditions, it is not surprising that the government draft bill on child labour is based on the belief that, in its opinion, it is neither feasible nor opportune to prevent children from working, that the bill should only aim at humanising child employment, because work develops the creative potential of the child, and it should only be kept away from hazardous occupations, which are however, not defined, and the child workers unions are not allowed to be affiliated to the regular trade union.

It is in line with this philosophy of child labour, that the government of India has launched a National Child Labour Project at Sivaksi to provide non formal education and health care to the children and their mothers. It is necessary to strengthen the part of the project which will reduce the dependence of children on employment in match factories by providing the kind of employment which will raise the income levels of the parents. The tragedy of course is that this reasoning on work developing the creative potential of the child does not apply to children from the well to do families.

Poverty

What effect has all this economic growth, recorded through the sub sector of agriculture, manufacturing, infrastructure, savings and investment, leading to and accompanied by certain directions in employment, and the means of financing all of them, reviewed in this note, had on the standard of living of the people? By standard of living of the people, is meant in this country the number of people living in poverty. In other words, what effect has all the economic growth and development reviewed in this note had on the level, quantum and dimension of poverty and inequality in the country? For that is the only purpose of all the developmentsthat have been reviewed.

To begin with, where as in every sector and sub sector upto now we have examined developments annually, as to what happened in 1985-86 and have attempted a forecast of what is likely to happen in 1986-87, in the case of poverty, we have even less data on an annual basis than in the case of employment, and so the analysis will be for five year periods, which is roughly the plan period, for which some data is available.

We have broad agreement on what is meant by poverty. Using income as the means of measuring poverty, and in the absence of nationwide data on income, using expenditure data as the only

available proxy for income, we have the Planning Commission's definitions of the expenditure of Rs65 per capita per month in rural and Rs75 per capita per month in urban areas at 1977-78 prices, which will assure the individual 2400 calories of food in rural and 2100 calories of food in the urban areas to live above poverty. These expenditure figures have been updated by the Seventh Plan to Rs107 in rural and Rs122 in urban areas at 1984-85 prices.

On the basis of this definitional agreement, there are today broadly three groups or points of view on the status of poverty in the country. One view is that there is a sensible reduction in the number living in poverty, and that this movement will continue in the current and future plans. A second view is that the poverty status of the country remains by and large unchanged. A third view is that there have been some changes but they are marginal and are not measurable.

The first view is set forth on a national basis by the Planning Commission, and on the basis of pilot studies referring to certain areas, where the studies were made by NCAER and the National Institute of Nutrition.

The Planning Commission, using the results of the revised 32nd round of the NSS (1977-78) and comparing it with the result of the provisional data thrown up by the 38th round of the NSS (January - June 1983) comes to the conclusion that poverty in the country has declined by 11 per centage points, that is by 22.6 per cent in that period, as the following table shows:

Table XVIII

| Area | Percentage of people below poverty in | |
|---|---|---|
| | 1977-78 | 1983-84 |
| Rural | 51.2 | 40.4 |
| Urban | 38.2 | 28.1 |
| Total | 48.3 | 37.4 |

Source: Planning Commission

I have referred above to the revised 32nd round of NSS because when the Planning Commission was about to publish the above table, I wrote to the then chairman of the group working on the 38th round results, saying that the published 32nd round shows that the poverty percentage in 1977-78 was 45.67, while the 38th round shows 39.61 per cent living in poverty, so that the decline between 1977-78 and 1983-84 was only 6.06 percentage points, to which the chairman's reply was that the 32nd round results were revised on the basis NSO data on private consumption and the population figures and deflator used for both rounds are different, and it was on this revised basis that the above table is established. I shall return to this question of revisions of the rounds later. The Planning Commission has based the VII Plan on a further reduction of both the percentage and the absolute number of the people living in poverty, which by the end of the Plan will decline to 25.8 per cent, though the number will still be well above 200 million as the table below shows: (with the process continuing so that by the turn of the century the people living in poverty would be 5 per cent, the absolute numbers being around 50 million).

Table XIX

| Year | Percentage Ratio % | | | No of poor (million) | | |
|---|---|---|---|---|---|---|
| | Rural | Urban | Total | Rural | Urban | Total |
| 1977-78 | 51.2 | 38.2 | 48.3 | 253.1 | 53.7 | 306.8 |
| 1984-85 | 39.9 | 27.7 | 36.9 | 232.2 | 50.5 | 272.7 |
| 1989-90 | 28.2 | 19.3 | 25.8 | 168.6 | 42.2 | 210.8 |

Source: Planning Commission

For the Plan, the means of thus reducing poverty is "the combined result of the contemplated growth pattern and the more effective implementation of various poverty alleviation programmes", with emphasis on the crucial role of the growth factor in the economy and particularly in agriculture. This is somewhat close to the World Bank's remedy for poverty set forth in its latest World

Development Report which concludes with the comment, "progress in the battle against malnutrition and poverty can be sustained if, and only if, there is satisfactory economic growth".[67]

The Planning Commission has also worked out the rural poverty ratio by region and state, the average per capita rural consumption expenditure and per capita expenditure on poverty alleviation, and poverty trends in one region as set forth in table below, which show some interesting correlations:

Table: XX

| Region/State | Rural poverty Ratio 1977-78 | Rural poverty Ratio 1983-84 | Per cent decline | Share in the total number of Rural poor 1977-78 | Share in the total number of Rural poor 1983-84 | Average Rural Consumption Expenditure per capita | Expenditure per capita on poverty allocation | Agriculture growth between 1970-73 to 1980-82 in Eastern region Districts which are: Negative growth | Slow growth | Medium growth | High growth |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| Eastern & Central Regions | | | | 57.32 | 62.42 | | | | | | |
| Orissa | 67.89 | 44.76 | 34.1 | - | - | 69.95 | 8.01 | -0.77 | +0.91 | +2.03 | +4.07 |
| Madhya Pradesh | 61.63 | 50.30 | 18.4 | - | - | 68.60 | 8.44 | - | - | - | - |
| West Bengal | 58.31 | 43.84 | 24.8 | - | - | 69.64 | 4.94 | - | - | - | - |
| Bihar | 57.82 | 51.35 | 11.2 | - | - | 69.03 | 6.60 | 16.23 | 16.40 | 19.69 | 19.97 |
| Uttar Pradesh | 49.79 | 46.48 | 6.6 | - | - | 69.51 | 9.01 | - | - | - | - |
| Rajasthan | 33.48 | 36.63 | -9.4 | - | - | 69.67 | 11.39 | - | - | - | - |
| Average | 54.5 | 46.6 | 14.5 | - | - | 693.2 | 7.84 | - | - | - | - |
| Southern Region | | | | 22.91 | 21.25 | | | | | | |
| Tamil Nadu | 56.26 | 44.08 | 21.6 | - | - | 66.84 | 12.13 | - | - | - | - |
| Karnataka | 53.15 | 37.49 | 29.5 | - | - | 70.16 | 9.017 | - | - | - | - |
| Kerala | 47.37 | 26.05 | 45.0 | - | - | 76.18 | 10.09 | - | - | - | - |

(contd...)

Table:XX(contd)

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Andhra Pradesh | 45.45 | 38.67 | 14.9 | - | - | 72.27 | 11.56 | - | - | - | - |
| Western Northern Region | | | | 14.45 | 12.36 | | | | | | |
| Maharastra | 60.36 | 41.50 | 31.2 | - | - | 71.88 | 6.74 | - | - | - | - |
| Gujarat | 43.10 | 27.62 | 35.9 | - | - | 78.44 | 10.40 | - | - | - | - |
| Haryana | 23.21 | 15.19 | 34.5 | - | - | 80.83 | 17.37 | - | - | - | - |
| Punjab | 13.12 | 10.87 | 13.1 | - | - | 81.69 | 31.22 | - | - | - | - |
| Average | 44.8 | 30.3 | 32.4 | - | - | 74.52 | 9.41 | - | - | - | - |
| All India | 51.2 | 40.4 | 21.1 | - | - | 70.94 | 8.83 | - | - | - | - |

Source: Hanumantha Rao: Ragendra Prasad Lecture 1985.

Accepting for the present the validity of the NSS methodology, the table confirms as well as shatters some well known judgements and correlations. The lowest levels of rural poverty in 1983-84 are recorded in Punjab and Haryana (which are accounted for by their high agricultural production base), and Kerala (which is the major receiver of expatriate remittances and has the most advanced social security system in the country). But when it comes to percentage decline in rural poverty, apart from Kerala which is explained above, the largest decline is in Gujarat and Haryana followed by Orissa and Maharashtra which need investigation. Rajasthan records an actual increase in rural poverty. The Eastern and Central regions share of rural poverty has increased in 1983-84 compared to that of 1977-78, which is a reflection of the lower decline in the poverty ratio of the 6 states comprising the region. The correlation between increased per capita expenditure on poverty alleviation and increased per capita consumption expenditure exists only for Punjab and Haryana, and is contradicted in the case of Tamil Nadu and Rajasthan, and in a reverse sense in the case of Maharashtra. In the Eastern region there is a correlation between landlessness and high growth rates, as the districts with high growth attract landless labour migrants.

A second approach supporting the Planning Commission conclusion of a reduction of people living in poverty is that of the NCAER[68] which goes even further than the Planning Commission in claiming not only that a percentage of those living in poverty rose above the poverty line, but that some of those living above poverty were pulled down to poverty within the 10 year period of its study. This is based on a survey in 1970-71 of 4363 rural households in 261 villages spread over the country, and a re-survey of these households in 1981-82 of whom 72.5 per cent were the same,

but only 50 per cent with the same household head and members, which makes it a rather small sample from which to draw wider conclusions. On this basis, the data shows that persons living in poverty in 1970-71 were reduced by 8.4 percentage points in 1980-81, and a portion of those above the poverty line in 1970-71 descended below the poverty line due to the break up of the family and sharing out of the family assets, which if it had not happened, says the report, would have meant a more than three fold decline in the reduction of poverty - that is by 27.31 percentage points. The table below brings out these conclusions.

Table XXI

| 1970-71 Deciles | Percentage of Persons below the Poverty line | | Percentage of Persons below the poverty line in 1970-71 but above the poverty line in 1981-82 | Percentage of persons above the poverty line in 1970-71 but below the poverty line in 1981-82 |
|---|---|---|---|---|
| | 1970-71 | 1981-82 | | |
| 1 | 100.00 | 53.66 | 46.86 | |
| 2 | 100.00 | 59.40 | 40.60 | |
| 3 | 100.00 | 45.64 | 54.36 | |
| 4 | 100.00 | 63.71 | 36.29 | |
| 5 | 100.00 | 40.54 | 59.46 | |
| 6 | 27.09 | 44.06 | | 16.97 |
| 7 | 0.0 | 51.12 | | 51.12 |
| 8 | 0.0 | 49.45 | | 49.45 |
| 9 | 0.0 | 40.90 | | 40.90 |
| 10 | 0.0 | 32.61 | | 32.61 |
| Overall | 56.90 | 48.54 | | |

Source:NCAER

This is supported by an analysis of the per capita annual consumer expenditure of the various income groups as between 1970-71 and 1981-82 which shows increased expenditure on food by the low income deciles, the preference of these deciles for superior cereals against minor cereals, and a relative preference for non cereal foods. With increase in incomes of the lower deciles, this kind of change in the structure of demand should be expected, and if supply does not meet this charged demand as in the case of pulses, edible oils or sugar, there will follow either an increase in their prices or imports or both. The table below shows the improved incomes and food and non food consumption of the lower deciles.

Table: XXII

(Rupees at 1981-82 prices)

| Deciles | RICE 1970-71 | RICE 1981-82 | WHEAT 1970-71 | WHEAT 1981-82 | JAWAR 1970-71 | JAWAR 1981-82 | Per capita food consumption Expenditures 1970-71 | Per capita food consumption Expenditures 1981-82 | Percentage change in per capita food consumption Expenditures | Percentage change in per capita income |
|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1. | 79.98 | 100.55 | 33.75 | 37.12 | 63.92 | 17.97 | 318.80 | 563.19 | 76.66 | 128.9 |
| 2. | 121.58 | 129.75 | 38.36 | 57.63 | 37.29 | 17.18 | 400.94 | 542.08 | 36.20 | 64.0 |
| 3. | 121.56 | 132.10 | 52.52 | 72.14 | 34.12 | 22.02 | 456.61 | 544.58 | 14.27 | 45.9 |
| 4. | 155.47 | 155.20 | 72.29 | 85.53 | 32.67 | 20.73 | 525.77 | 548.21 | 4.27 | 24.2 |
| 5. | 160.51 | 176.63 | 76.32 | 78.12 | 32.28 | 23.27 | 583.36 | 664.36 | 14.75 | 39.4 |
| 6. | 177.33 | 160.64 | 76.80 | 90.17 | 33.85 | 24.89 | 612.04 | 593.60 | -3.01 | 10.0 |
| 7. | 169.95 | 177.57 | 83.63 | 100.41 | 23.33 | 28.51 | 677.00 | 677.84 | 0.12 | 12.8 |
| 8. | 163.07 | 146.24 | 118.41 | 132.29 | 16.90 | 20.36 | 702.01 | 621.16 | -11.52 | -8.7 |
| 9. | 226.79 | 193.40 | 125.31 | 158.74 | 19.67 | 46.64 | 887.98 | 734.29 | -17.31 | -23.8 |
| 10. | 163.49 | 214.87 | 175.50 | 175.28 | 30.49 | 37.86 | 758.24 | 632.74 | -28.10 | -39.7 |
| Overall | 150.98 | 155.80 | 87.14 | 94.28 | 33.35 | 25.29 | 608.75 | 631.84 | 3.96 | 8.0 |

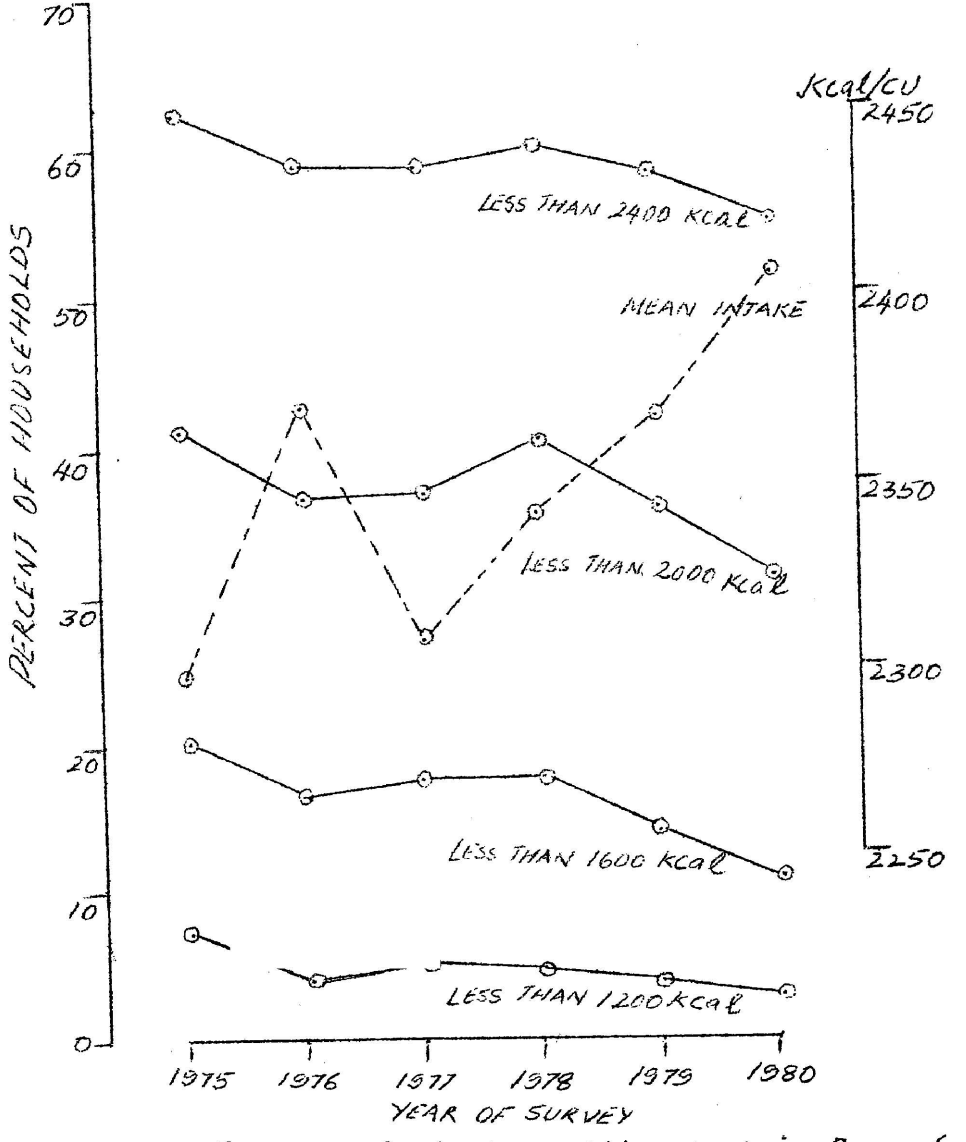
Source: NCAER

The table shows a correlation between increased incomes and increased food consumption, though its all India coverage is limited by the fact that it is rather heavily weighted in favour of rice consuming rural households.

A third study is that of the National Nutrition Monitoring Bureau[69] where the results of a survey of the changes in calorie intake in some of the rural areas are set forth in Figure I and Figure II.

FIGURE - I

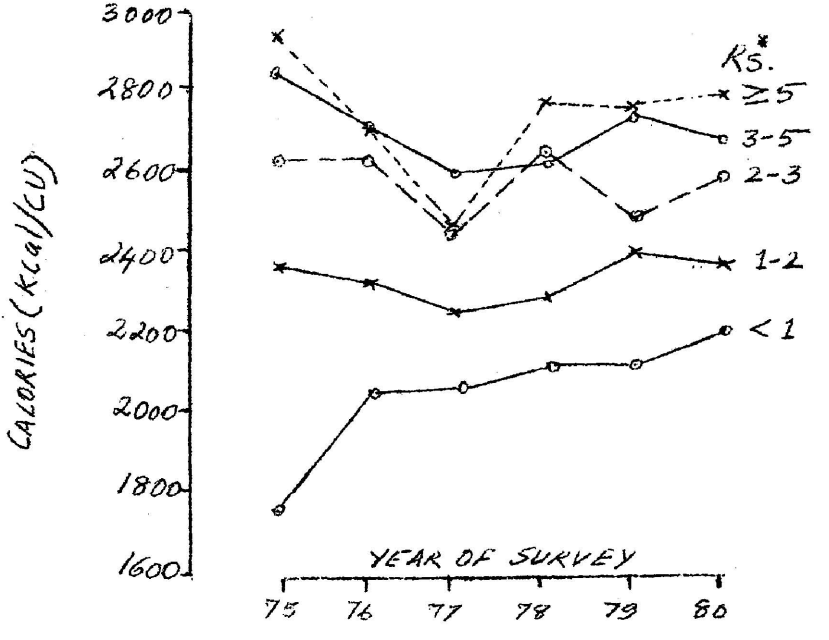
CHANGES IN ENERGY INTAKE (Kcal/CU/DAY)
(RURAL INDIA)




Source : National Nutrition Monitoring Bureau (NNMB)

FIGURE - II

(CALORIE INTAKES IN DIFFERENT INCOME GROUPS DURING 1975-1980)




SOURCE : NNMB

* Income per person per day

Similarly the table below compared the National Nutrition Monitoring Bureau (NNMB) data on calorie intake per capita per day with that of the Protein Food and Development Association (PFND).

Table XXIII

| Year of Survey | Average | Range | Source |
|---|---|---|---|
| 1969-71 | 1993 | 1820-2166 | PFND |
| 1975 | 2296 | 1926-2911 | NNMB |
| 1980 | 2404 | 2115-2992 | NNMB |

Source: NNMB

The main time trends shown in both the figures and the above table are that during the Seventies i) there has been an increase in the average level of calorie consumption, ii) that the increase in the average intakes of calories was accompanied by a concomitant reduction in the percentage of households consuming inadequate levels of calories as shown in Figure I, iii) that the increase is due mainly to increased consumption of rice rather than millets, iv) that the consumption level of protective foods like pulses and vegetables did not show much change, and v) that the lowest income group (with Rs30 per capita monthly incomes) have benefited most. Like the NCAER study, this study also is heavily concentrated on the rice eating belt.

The other view that the poverty status of the country is by and large unchanged derives from a series of technical criticisms of the Planning Commission methodology including its conclusions. The NSS methodology has errors and biases built into it, in designing its sampling, its sampling biases, its errors in data collection and its non sampling errors, so that great care is needed in using the data to judge trends in consumption and poverty status.[70] There are also problems of the methods used in interpreting the NSS data. As noted earlier, the undoctored 32nd and 38th round

show that poverty has decreased by 5.18 percentage points in rural areas (and not by 10.8 percentage points as calculated by the Planning Commission - see table XVIII) and by 10.29 percentage points for the urban areas which is near enough to the 10.1 points of the Planning Commission. This means that even using the NSS data the number of people lifted from poverty in the 5 years is 8.38 million and not 34.1 million as claimed by the Planning Commission. The Planning Commission states that it has adjusted the monthly per capita consumption from the NSS distribution to the CSO private consumption estimate and has used a different deflator to avoid the embarrassment of showing a largeproportion of people in poverty. To put it in technical language, the expenditure vector underlying the NSS distribution data has been multiplied by the ratio of the CSO mean consumption to the NSS mean consumption. In fact one study[71] shows that 8 different poverty profiles can be drawn by the use of NSS and CSO data and the mean derived from them. I attach a summary of the study as an Annex for those interested. At this point, however, we are in danger of making the tragic human problem of poverty a matter of statistical jugglery.

There are other substantive doubts about the Planning Commission data on poverty reduction. It is well known by Montek Ahluwalia's study[72] that rural well being or ill being varies with the state of agricultural production and the estimates of rural poverty vary with the fluctuations in farm output - going down when farm production increases and increasing when agricultural output decreases. Both 1977-78 and 1983-84 were good agricultural years, and to base poverty calculations on these years on which NSS rounds are based is to take two good unrepresentative years and generalise from them. This may have no relevance to the state of poverty in the intervening years. This fixed points of time methodology also applies to the NCAER study.

Poverty and Inequality

Poverty is not only measured by the distribution of expenditures but also by the distribution of income on which there is no data. The attempt made by NSS to collect rural income data (from the 19th to 25th round) was given up because when processing them, it was found that they could not allow for the seasonality of rural incomes. This is to be regretted because the inequality in consumer expenditures will always be less than inequality in incomes, because as the NCAER data show, even the poorest spend on food. This means that another limitation of the aggregate Planning Commission methodology on poverty is that it does not take account of the fact that poverty is income specific. Even the regional and state data on poverty set forth in Table XX need to be further refined into data on poverty by blocks or districts, as is developed for the Eastern region in the last column of that table.

A further question mark about the Planning Commission's poverty reduction profile is that agricultural growth, on the one hand, has for over 3 decades been at the rate of 2.2 per cent which has also been the rural population growth rate, and, on the other, the poverty alleviation and beneficiary oriented programmes like IRDP, NREP, TRYSEM have so many leakages and limitations which official evaluations have brought out. This means the two forces - agricultural growth and the poverty alleviation programmes - could not have been very effective means of reducing poverty. In the case of IRDP the evaluations by NABARD, PEO, RBI and other official agencies show that the interpretation of eligibility to be a beneficiary (Rs2000 for a family of 5) is not observed, that even attempts at decentralised planning through DRDA are misplaced, that it calls on the poor illiterate or semi literate villager to fill in and deal with a lot of documentation, that the assets are inflated and there is lack of follow up. Hence it has been suggested that to improve execution the unit field of action should not be the family as in IRDP, or area as in RLEGP, but the decentralised village,

that in place of the present system of survey and registration, each beneficiary should be issued a pass book so that he may have direct access to the assistance available to him, and that the system of monitoring and evaluation should be changed to sustain the income generating activities. The major problem with NREP is its discontinuities, and with TRYSEM the lack of follow up . self employment. These can be corrected by re-structuring the programmes, but now there is a pathetic reporting that "17 per cent of the sample households according to the RBI study, 47 per cent according to the NABARD study, and 49.4 per cent according to the PEO study crossed the poverty line".[73] What is needed is a system which will permanently increase the income earning capacity of those living in poverty.

Finally the doubts about the Planning Commission reporting on poverty reduction are linked to the stagnation that we face in the field of assets distribution or the state of equality in society. As confirmed by the several field studies[74] income from hiring out machinery and labour is more unequally distributed than income from crop and dairying. Inequality in the consumption of wheat and rice is shown in these studies to be lower than inequality in household income. Again work efforts represented by annual working hours of family workers record higher levels of inequality than consumption. Above all access to draught animals, to ownership, access and use of tractors and equipment, and more particularly access to land, its ownership and use (leasing in and leasing out) are more unequal than income inequality.

It is at this point that land reform story adds to the doubts about claims of poverty reduction. That is, even if there be some reduction in poverty, this could go along with increased inequalities in assets distribution. The Sixth Plan stated that ownership rights of tenants will be recognised by 1981-82. This has not happened in Andhra Pradesh, Bihar, Haryana, Punjab, Tamil Nadu and West Bengal. It also stated that the takeover and distribution of surplus land will be completed by 1982-83.

This has not happened anywhere. Further there are no ceiling laws in 3 states - Meghalaya, Sikkim and Nagaland. Since the inception of this programme, 2.97 million hectares have been declared surplus, out of a possible 9.8 million hectares which are surplus. According to the Agricultural Census 1981, holdings above 10 hectares have fallen a little from 2.31 million to 2.15 million, being 2.4 per cent of all holdings but operating 37.33 million hectares at 22.8 per cent of the total operated area. The number of marginal holdings below 1 hectare increased from 36.20 million in 1970-71 to 50.52 millions in 1980-81, which means an annual rate of increase of 1.1 million marginal holdings a year. Small holdings below 2 hectares increased from 49.63 million in 1970-71 to 66.6 million in 1980-81. This means that the annual rate of growth of marginalisation is 4 per cent in the 70s, when the annual rate of growth of the rural population was 1.9 per cent, which may be an indication of the fact that marginalisation may be due to more to immiseration of the peasantry rather than land reform or the normal devolution of property/ as earlier referred to. In this context, to talk of the people living in poverty being reduced by 25 or 35 per cent seems unreal. What is needed for land reforms and rural assets distribution to become effective is for the poor to organise themselves and fight for their rights. (At this point poverty reduction merges with the fight for equality.) At present, this organisation of the poor faces problems of administrative obstruction, except in West Bengal and Kerala. This opposition from the officer class stems in /part from their class linkages, for which there is no cure except the structural change of society. But where it is, in the other part, due to the usual administrative sloth and easy going bureaucratic tradition, that can be cured by the top administration exerting some pressure against the official obstruction of the organisation of the poor. There can then be an early reduction in poverty brought about by the poor themselves.

All this is not to deny that there has been some reduction in poverty, which is the third view. There has been three decades of 3.5 per cent growth: in the Sixth Plan the growth has been over 5 per cent. Some benefits have filtered down to the poor, despite all the obstacles. Further some agricultural regions have had high and rising per capita incomes (seen in the NCAER and NNMB studies), which unfortunately are nullified by the stagnant or declining per capita incomes in the majority of the other regions, seen even in the 38th round of NSS. Above all, there is no programme of income redistribution and really none of assets equalisation. That is why the record on the whole is a discouraging one, and certainly not one where the reduction of the country's poverty can be measured in terms set forth in tables XVIII and XIX.

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## ANNEX

## POVERTY STATISTICS: REAL PHENOMENA OR ARITHMETICAL ILLUSIONS?

- A Brief Note

According to recent estimates made by the Planning Commission (see the draft Seventh Five Year Plan 1985-90 (Volume I)), there has been a phenomenal decline in the proportion of people in poverty between the years 1977-78 and 1983-84. The head count ratio has declined, at the all-India level, from 48.3 per cent to 37.4 per cent over this period; this is a product of a decline in the rural head count ratio from 51.2 per cent to 40.4 per cent and in the urban head count ratio from 38.2 per cent to 28.1 per cent. A good part of this apparent success in combating poverty has been attributed to the implementation of poverty-alleviation programmes such as the IRDP, the NREP and the RLEGP. Now these are rather strong and significant claims, and, as such, deserve close scrutiny. In particular, it is a matter of no little importance to be able to diagnose to what extent poverty statistics reflect events on the ground, and to what extent they simply reflect certain rules of arithmetic that govern these statistics.

In this context it is appropriate to state the (admittedly self-evident) proposition that the magnitude of the head count ratio is a function of the poverty line selected, the price deflator chosen, and the distribution employed for computing the head count ratio. This proposition assumes relevance when we note that the Planning Commission poverty calculations mark some departure from 'conventional' norms relating to the choice of poverty line, price deflator and distribution.

Thus, while authors like M.S.Ahluwalia and P.K.Bardhan have, in their respective rural poverty calculations, employed

a poverty line of consumer expenditure amounting to Rs.15 per per capita per month at 1960-61 prices (which is a norm fixed by a special Task Force of the Planning Commission in the early 'sixties), the Planning Commission has, in its latest poverty calculations, chosen to employ a poverty line amounting to a consumer expenditure level of Rs.49.09 per capita per month at 1973-74 prices (which norm corresponds to the expenditure estimated to be required in order to have command over food of the calorific value of 2400 kilocalories per day). We may call these two poverty lines the 'conventional' and the 'nutritional' poverty lines respectively. It is to be noted that the 'nutritional' poverty line is higher than the 'conventional' one. The implication of this for the magnitude of the head count ratio is obvious from the following trivially straightforward proposition:

PROPOSITION 1: Other things equal, the higher the poverty line, the larger is the head count ratio.

Next, the price deflator employed by the Planning Commission to express the rural poverty line at current prices is the Central Statistical Organization's (CSO) final private consumption deflator. This again marks a deviation from common practice where (as in the works, again, of Ahluwalia and Bardhan) the price deflator used is the Consumer Price Index of Agricultural Labourers (CPIAL). It is to be noted that the CSO index has risen by a factor of 1.23 from 1973-74 to 1977-78 and by a factor of 2.07 from 1973-74 to 1983-84, while the corresponding figures for the CPIAL are lower, at 1.14 and 1.84 respectively. On the other hand, the CSO index has risen by a factor of 3.04 from 1960-61 to 1977-78 and by a factor of 5.11 from 1960-61 to 1983-84, while the corresponding figures for the CPIAL are higher, at 3.23 and 5.22 respectively. The implication of this for the magnitude of the head count ratio, and how this will vary with

what combination of poverty line and price deflator is chosen, is immediately apparent from the following very simple proposition:

PROPOSITION 2: From one time-period to another, the greater the proportionate increase in the price index, the larger is the magnitude of the head count ratio in the terminal time-period, other things remaining equal.

Finally, we need to examine the consumer expenditure distribution that has been employed by the Planning Commission for its poverty calculations. Here we observe that the Commission has tended to rely on rather rough-and-ready, not to say simplistic, assumptions. Specifically, the only available source of data on the distribution of consumer expenditure across different expenditure size-classes is the National Sample Survey (NSS) of consumer expenditure. Now the NSS distribution's mean has in general tended to be lower than the mean reported by the CSO's National Accounts Statistics; the two means we shall hereafter refer to as the 'NSS' mean and the 'CSO' mean respectively. The Commission is probably right in judging that the CSO mean is a rather better representation of the 'true' mean than is the NSS mean. But to infer -- as the Commission has done -- that a fair representation of the 'true' distribution is obtained by simply scaling the NSS distribution up by a factor equal to the ratio of the CSO mean to the NSS mean appears to be a dubious procedure : for note that any number of widely differing distributions are compatible with a given mean.

Under the circumstances, to assume, in effect, that the NSS distribution understates each person's expenditure level by the same factor by which the NSS mean understates the CSO mean would seem to commit oneself to a drastically

gross simplification; and one that arguably demanded less precipitate acceptance given the seriousness of the context -- that of intertemporal poverty calculations -- than has apparently been forthcoming. The implications of employing 'adjusted' expenditure distributions ('adjusted' for the difference between the NSS and the CSO means) for the magnitude and trend of the head count ratio are a trifle difficult to work out; it is useful, in working out these implications, to note (a) that the ratio of the CSO mean to the NSS mean was lower in 1977-78 than in 1983-84 -- the two ratios being, respectively, 1.09 and 1.22; (b) that the NSS distributions have betrayed a certain stationarity in the real mean over time -- the 1977-78 and 1983-84 means at 1960-61 prices, using the CPIAL as price deflator, being, respectively, Rs.21.27 and Rs.21.54; and (c) that the NSS distributions for 1977-78 and 1983-84 do not exhibit an increase in inequality from 1977-78 to 1983-84 -- the Gini ratios of inequality in the two years being, respectively, .34 and .30. Observations (a), (b) and (c) will be used in the following stylised examination of the consequences of working with 'adjusted' expenditure distributions.

Let $\underline{x} = (x_1, \ldots, x_i, \ldots, x_m)$ be an ordered m-vector of individual expenditure levels in period 1, with $x_i \leq x_{i+1}$ $\forall i$. Let $\underline{y} = (y_1, \ldots, y_i, \ldots, y_n)$ be similarly defined for period 2, with $n>m$ to take account of population increase. The vectors $\underline{x}$ and $\underline{y}$ may be seen as corresponding to the NSS expenditure distributions in 1977-78 and 1983-84 respectively. Let the ratio of the CSO mean to the NSS mean in time periods 1 and 2 be denoted by $\delta_1$ and $\delta_2$ resp ectively, with $\delta_1 < \delta_2$ in conformity with observation (a) made earlier. The 'adjusted' expenditure vectors in time periods 1 and 2 will then be given by $\underline{x}^A = \delta_1 \underline{x}$ and $\underline{y}^A = \delta_2 \underline{y}$. Let $\lambda$ be the ratio

of the price level in period 2 to the price level in period 1, so that if z is the poverty line at current prices in period 1, $\lambda z$ is the poverty line at current prices in period 2. Letting $q(\underline{x};z)$ and $q(\underline{y};\lambda z)$ stand for the numbers of people in poverty corresponding to the NSS distributions in time periods 1 and 2 respectively, given that the poverty lines at current prices in the two periods are z and $\lambda z$ respectively, the head count ratios in the two periods can be written, respectively, as $q(\underline{x};z)/m$ and $q(\underline{y};\lambda z)/n$. Assuming a non-increasing change in the head count ratio from period 1 to period 2, let $\sigma_1$ stand for the proportionate change over the two time periods, so that

$$\sigma_1 := \frac{q(\underline{x};z)/m - q(\underline{y};\lambda z)/n}{q(\underline{x};z)/m} \geq 0. \qquad \ldots (1)$$

Next, let $q(\underline{x}^A;z)$ and $q(\underline{y}^A;\lambda z)$ denote the numbers of people in poverty corresponding to the 'adjusted' expenditure distributions in periods 1 and 2 respectively, given that the poverty lines at current prices in the two periods are z and $\lambda z$ respectively. Note that if the $x_i$ and the $y_i$ in the vectors $\underline{x}$ and $\underline{y}$ are sufficiently 'densely packed'*, then it should follow straightway that the head count ratios corresponding to the 'adjusted' expenditure distributions will be smaller than those corresponding to the NSS distributions, viz., $q(\underline{x}^A;z)/m < q(\underline{x};z)/m$ and $q(\underline{y}^A;\lambda z)/n < q(\underline{y};\lambda z)/n$.

Further,
let $\beta_1 := q(\underline{x}^A;z)/q(\underline{x};z)$ and $\beta_2 := q(\underline{y}^A;\lambda z)/q(\underline{y};\lambda z), \ldots$ (2)
with $\beta_1, \beta_2 < 1$. $\beta_i$ $(i = 1,2)$ is the proportion by which the 'adjusted' expenditure vector understates the head count ratio vis a vis the NSS expenditure vector in time

* This is awkward terminology, occasioned by the fact that we are dealing with discrete distributions.

period i. What can we say of the relative magnitudes of $\beta_1$ and $\beta_2$ ? The observations (a), (b) and (c) made earlier are useful in deriving an answer to this question. Before coming to that, we take note of the fact that the slope of the Lorenz curve at any point corresponding to an expenditure level x is given by $x/\mu$, where $\mu$ is the mean of the distribution. At constant (i.e., period 1) prices, the poverty line is z. If $\mu$ is the mean of the NSS distribution in period 1 at period 1 prices, then, in line with observation (b), $\mu$ is also the mean of the NSS distribution in period 2 at period 2 prices. A somewhat stringent -- and also inexact, if simplifying -- translation of observation (c) would be to require that the Lorenz curves corresponding to the vectors $\underline{x}$ and $\underline{y}$ coincide. The head count ratio corresponding to the 'adjusted' expenditure distribution $\underline{x}^A$ will then be given by the horizontal ordinate of that point on the Lorenz curve at which the slope of the curve is $z/\delta_1\mu$; similarly, the head count ratio corresponding to the 'adjusted' distribution $\underline{y}^A$ will be given by the horizontal ordinate of that point on the Lorenz curve at which the slope of the curve is $z/\delta_2\mu$. Since, by assumption, the Lorenz curves for both distributions $\underline{x}^A$ and $\underline{y}^A$ coincide, and since $\delta_1 < \delta_2$ so that $z/\delta_1\mu > z/\delta_2\mu$, the point at which the slope of the Lorenz curve is greater (viz., at which the slope is $z/\delta_1\mu$) will be to the right of the point at which the slope is smaller (viz., at which the slope is $z/\delta_2\mu$). In other words, the head count ratio corresponding to the distribution $\underline{x}^A$ will be closer (than the head count ratio corresponding to the distribution $\underline{y}^A$) to the head count ratio shared by the distributions $\underline{x}$ and $\underline{y}$. This is to say, precisely, that $\beta_1$ will be greater than $\beta_2$.

Next, let $\sigma_2$ be the proportionate decline in the head count ratios corresponding to the 'adjusted' expenditure

vectors $\underline{x}^A$ and $\underline{y}^A$ over the periods 1 to 2:

$$\sigma_2 := \frac{q(\underline{x}^A ; z)/m - q(\underline{y}^A ; \lambda z)/n}{q(\underline{x}^A ; z)/m} \qquad \ldots(3)$$

Making use of the identities in (1), (2) and (3), it can be verified, through suitable manipulation and rearrangement, that $\sigma_2 - \sigma_1 := (\beta_1 - \beta_2)\, q(\underline{y}; \lambda z) > 0$ since, as we have just seen $\beta_1 > \beta_2$ .

We are now in a position to state the following proposition:

PROPOSITION 3 : Under the conditions discussed above, and other things remaining equal, (i) the head count ratios corresponding to the 'adjusted' expenditure distributions will be smaller than those corresponding to the NSS distributions; and (ii) the proportionate decline over two time periods of the head count ratio will be greater for the 'adjusted' than for the NSS distributions.

*

Given that there are at least two poverty lines (the conventional and the nutritional); at least two price deflators (the CPIAL and the CSO private consumption); and at least two expenditure distributions (the NSS and the 'adjusted'): we are in a position to generate at least eight ($=2^3$) variants -- each variant corresponding to a particular combination of poverty line, price deflator and expenditure vector. Table 1 presents the head count ratios in 1977-78 and 1983-84 and the proportionate decline in the head count ratio over the period 1977-78 to 1983-84 for each of the eight variants.

Armed as we are with Propositions 1,2, and 3, we can see from Table 1 that our prior expectations are fully confirmed. First, note that for the variants in the pairs 1 and 3, 2 and 4, 5 and 7 and 6 and 8, only the poverty line differs. In line with Proposition 1, the head count ratio corresponding to the nutritional poverty line is always greater than that corresponding to the conventional poverty line. Next, for the variants in the pairs 1 and 2, 3 and 4, 5 and 6 and 7 and 8,

only the price deflator varies. In line with Proposition 2, the head count ratio corresponding to the CPIAL deflator is greater than that corresponding to the CSO deflator when the conventional poverty line is used -- and just the converse when the nutritional line is used. Finally, for the variants in the pairs 1 and 5, 2 and 6, 3 and 7 and 4 and 8, only the distribution employed differs. In line with Proposition 3, the head count ratio corresponding to the adjusted distribution is always lower than that corresponding to the NSS distribution; further, the proportionate decline in the head count ratio is always greater when the distribution employed is the 'adjusted' one.

The variant that appears to have been most widely used in the Indian poverty literature is variant 1. The variant employed by the Planning Commission is variant 8. Variant 8 differs from variant 1 in respect of all three factors -- the poverty line, the price deflator and the distribution -- on which the magnitude of the head count ratio depends. The net effect on the magnitude and behaviour of the head count ratio over time is difficult to predict a priori, when all three factors are allowed to vary simultaneously. But the numbers in Table 1 seem to suggest that variant 8 is a politic choice: it reflects a sort of optimum decision in favour of the greatest decline in the head count ratio that is compatible with credible absolute levels of the ratio.

Propositions 1,2 and 3 reveal what one may expect -- from purely logical prior considerations -- that poverty statistics will exhibit, without necessarily any knowledge of poverty, as such. Table 1 shows that -- depending on what combination of poverty line, price deflator and expenditure distribution we may be disposed to favour -- the head

count ratio could vary from 29 per cent to 59 per cent in 1977-78, and from 20 per cent to 56 per cent in 1983-84; further, the proportionate decline in the head count ratio from 1977-78 to 1983-84 could vary from 4 per cent to 37 per cent.

In the end, numbers are brutes, governed by the inflexible laws of arithmetic; and when the numbers purport to describe what is happening to poverty in our economy, it might be as well to keep at least one eye cocked on the rules of arithmetic.

* * * *

TABLE:1: POVERTY PROFILES UNDER ALTERNATIVE COMBINATIONS OF POVERTY LINE, PRICE DEFLATOR AND EXPENDITURE DISTRIBUTION

| Variant No | VARIANT | | | Head count Ratio (per cent) | | Percentage change in head count ratio from 1977-78 to 1983-84 |
|---|---|---|---|---|---|---|
| | Poverty line | Price Deflator | Expenditure vector | 1977-78 | 1983-84 | |
| 1. | Conventional | CPIAL | NSS | 41.25 | 35.93 | -12.90 |
| 2. | Conventional | CSO | NSS | 36.39 | 34.22 | - 5.96 |
| 3. | Nutritional | CPIAL | NSS | 52.91 | 47.45 | -10.32 |
| 4. | Nutritional | CSO | NSS | 58.90 | 56.45 | - 4.16 |
| 5. | Conventional | CPIAL | Adjusted | 34.12 | 21.57 | -36.78 |
| 6. | Conventional | CSO | Adjusted | 29.45 | 20.12 | -31.68 |
| 7. | Nutritional | CPIAL | Adjusted | 45.79 | 32.11 | -29.88 |
| 8. | Nutritional | CSO | Adjusted | 51.20 | 40.40 | -21.09 |

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