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ECONOMIC REFORMS

Editorial

Moving With The Changing Times

A welcome change has taken place in the world scenario in recent years. The spectre of cold war has suddenly vanished and with it has gone the haunting fear of nuclear holocaust. Equally welcome is the trend that economic matters are gradually gaining precedence over the political issues. Technological advancement has shrunk the world to such an extent that there is now increasing awareness that all problems particularly economic ones be tackled collectively for the mutual benefit. Due to increasing interaction today's world has more open economy.

Rightly responding to the needs of the changing times, we too realised that it would be in our interest to join the process of globalisation taking place the world over as it is unwise to live in isolation. There were other reasons too. Lack of competitive edge had crept in our industry giving rise to inefficiency due to continued protection given to it. The BoP position was causing concern. The foreign exchange reserves were precariously low. External debt burden was mounting. The overall economic scenario was bleak. In economic growth, we were lagging even behind our South Asian neighbours what to talk of developed countries. With a view to giving a boost to our economy, a phased programme of economic reforms was launched by the Government about three years ago. Strengthening of the financial system through structural reforms was one of the major goals so that sustainable economic growth could be ensured. Equally important were changes effected in the EXIM policy to give a big push to exports.

Unfortunately, the process of liberalisation had its detractors too within the country, though not many. The skeptics had their own apprehensions or perhaps they were too rigid in their approach to appreciate the urgent need for moving and adapting with the changing times. Serious doubts were raised about the possible adverse impact of the patenting privileges of the Trade Related Intellectual Property Rights (TRIPS) on the Indian economy particularly on the Indian agriculture and pharmaceutical industry. Similar doubts were raised when India signed the historic Uruguay Round of multilateral trade negotiations, popularly known as the GATT agreement along with more than over a hundred countries at Marrakesh, Morocco in mid-April, which paved the way, *inter alia,* for setting up the World Trade Organisation from January next year. Among other things, the critics were fearing that GATT agreement will ruin the indigenous small scale industry, drug prices would shoot up, farmers would be hit hard, common man would suffer because of discontinuance of the Public Distribution System etc. May be some doubts still linger, but these fears were by and large allayed by the Government making it amply clear that GATT is a vehicle of free, non-discriminatory and equitable trade. It may be worthwhile to point out that the GATT agreement concerned only trade related matters, while the reforms encompass the entire Indian economy.

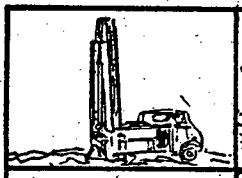
If the scenario on domestic front was somewhat blurred due to these misgivings, the mood abroad was certainly receptive and cheerful. India's new economic agenda was received with great understanding and appreciation at the international level. The new economic ethos impressed even such hardened multilateral agencies as the IMF and World Bank. As a result, the international business community started evincing interest in what is happening in economic and business fields in India.

Though the reform process is certainly to continue for some more time, its beneficial effects are already visible. The trade deficit has reduced, while exports have touched an all time high, registering a growth of over 21 per cent. The economy is expected to register a growth of about 3.8 per cent in real Gross Domestic Product. The rupee is as good as convertible on current account and there is a steady flow of foreign capital, a clear indication of investors' confidence in our economy. There has been an estimated inflow of $ 5 billion till the May-end. At the same time, social sector has not at all been ignored as increased budgetary allocations were made for poverty-alleviation programmes, rural development and also for education and health. This proves that the emphasis is on all-round development. In a nutshell, it can be safely claimed that our economy, which was on the brink of disaster not long ago has been put on the rails during the last three years.

However, there is no room for complacency. Much has still to be done. Fiscal deficit has to be substantially reduced, inflation to be further checked, production cost to be lowered through efficient management and more attention to be paid to such vital infrastructural areas as power, irrigation and communication, if we are to compete with the best. No doubt, it is a daunting task but not insurmountable particularly with the cooperation of all concerned. ❐

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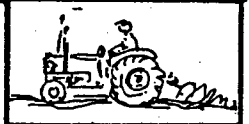


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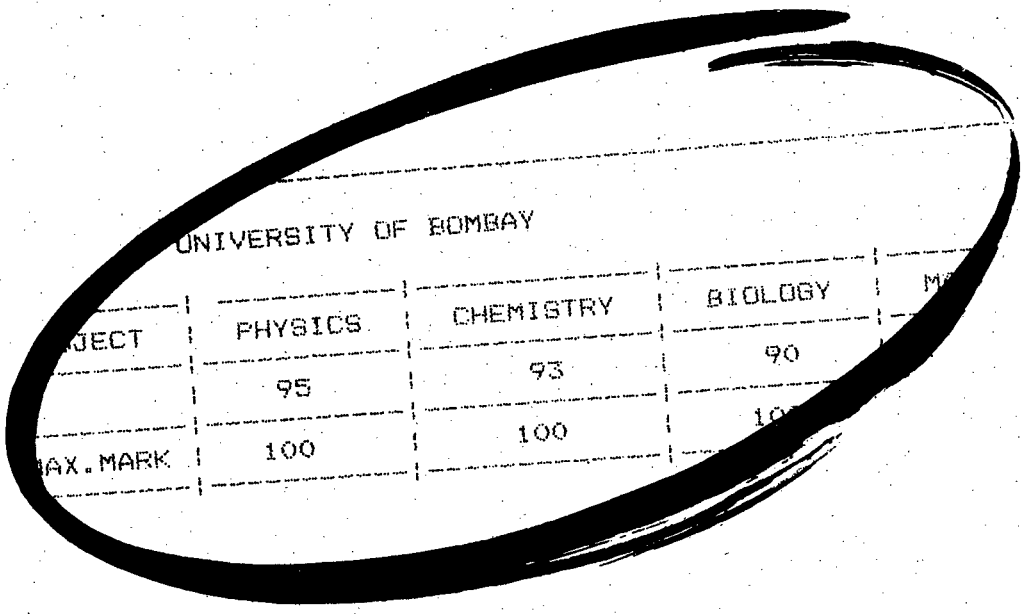
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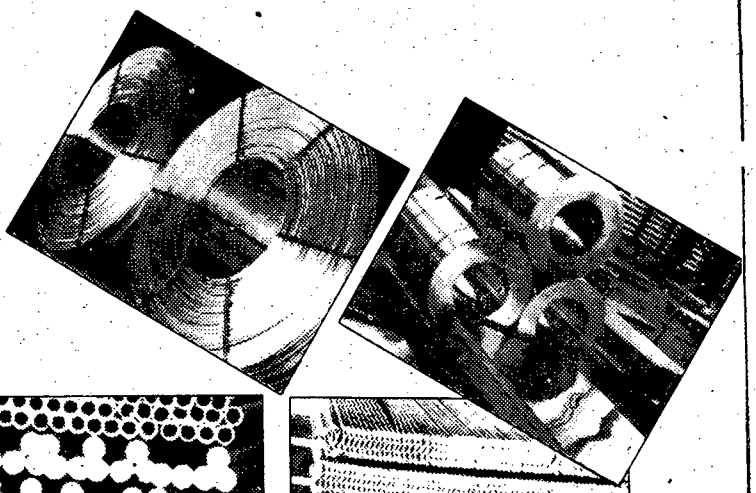
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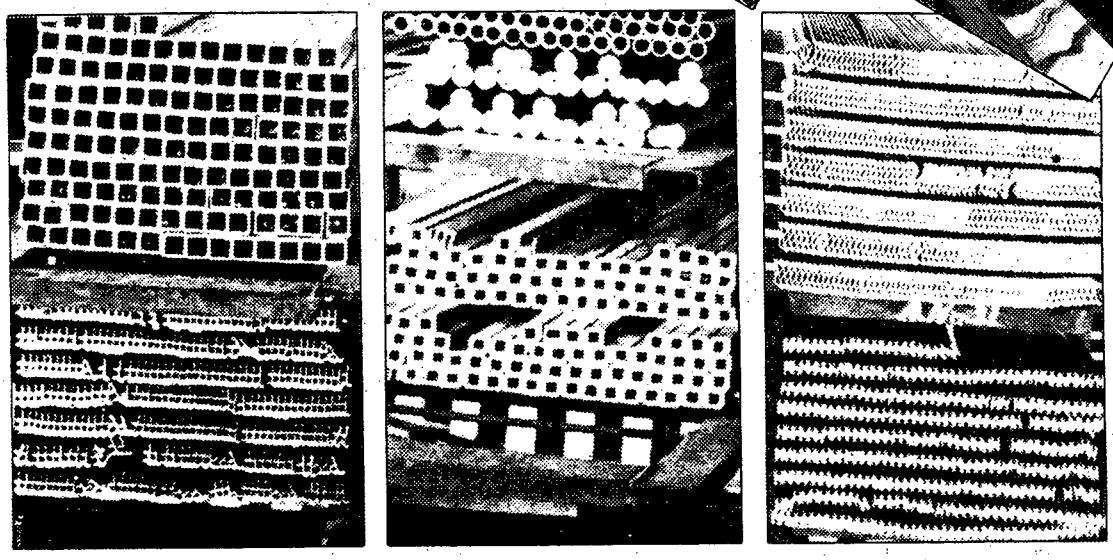
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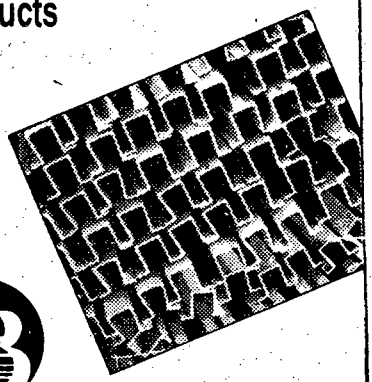
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Ensuring A Prosperous Future

Montek Singh Ahluwalia

The write-up below is based on the statement made by the author at the meeting of the India Development Forum (formerly Aid India Consortium) in Paris on June 30, 1994. Referring to the assessment of the World Bank made in the Country Economic Memorandum, the author quotes, "The skill with which reforms have been introduced thus far has few parallels elsewhere and enhances the credibility of the reform process".

THREE years ago, we were faced with a crisis of unprecedented severity. To deal with this crisis, we initiated an emergency programme of economic stabilization. Simultaneously we also embarked on a programme of far reaching structural reform aimed at strengthening our longer term growth potential to take the economy on to a path of sustainable growth at 6 to 7 per cent per year. In this process, we introduced far reaching changes in industrial policy, the external trade and payments system, the tax system, and the financial system.

Upswing

The task of stabilising the economy was substantially accomplished by the end of 1992-93. A year ago, the economic situation had improved enormously, inflation had been reduced to single digit level and foreign exchange reserves had been rebuilt from the low of $ 1 billion in June 1991 to around $ 7 billion. However, there were uncertainties ahead. We felt the situation remained fragile and there was a perception that fast disbursing assistance may be needed in the course of the year. At this time last year we anticipated a continuing need for IMF assistance and had planned on accessing EFF (Extended Fund Facility) or ESAF (Extended Structural Adjustment Facility) resources later in the year.

As events unfolded, however, the Balance of Payments position proved to be much stronger. Exports performed exceptionally well, growing at over 20 per cent. Imports remained restrained despite extensive liberalisation. Foreign investment flows were much larger than expected. For all those reasons we ended the year with foreign exchange reserves of $ 15 billion. There was clearly no need for exceptional balance of payments assistance. In recognition of this development India decided not to approach the Fund for an EFF. In fact, we were able to advance repayment due to the Fund in order to reduce the burden of interest charges on this account. These favourable developments on the external front have continued in the first quarter of 1994-95. Our foreign exchange reserves have continued to rise, despite the advance payment to the Fund and foreign exchange reserves today exceed $ 16 billion.

The pace of economic growth is also beginning to accelerate. Industrial growth was slow during most of 1993-94 but picked upto 7 per cent in the last few months. Investment was also sluggish during the first three quarters of 1993-94, but there are clear indications of an upturn in the last quarter. These developments hold out the prospect that the economy will grow at about 5 per cent in 1994-95.

Fiscal Consolidation

This is not to say that there have been no problems. Fiscal consolidation has been an important objective in our programme and the Central

government fiscal deficit was brought down from 8.4 per cent of GDP in 1990-91 to 5.7 per cent in 1992-93. There was, however, a slippage last year when the fiscal deficit increased to 7.3 per cent of GDP (against the targeted 4.7 per cent). To some extent, the deterioration occurred because of the sharp reduction in import duties and the fact that imports did not rise as much as was expected. There was also an overshooting of expenditure, reflecting pent up pressures which had built up over two years of fiscal consolidation and some delay in making price adjustments to keep subsidies under control.

The government recognises the dangers of any premature easing of fiscal control. The rise in the rate of inflation which occurred in the second half of 1993-94 reminds us of the dangers inherent in this process. We are therefore committed to reversing the fiscal deterioration which occurred in 1993-94. We have stipulated a target for the fiscal deficit in 1994-95 of 6% of the GDP. This is a significant improvement over the actual performance last year and will mark a return to a process of fiscal consolidation which we recognise has some way to go in future. I must also add that an important new initiative announced in the 1994-95 Budget is the fixing of a cap on the monetisation of the Central government deficit. Henceforth government borrowings from the Reserve Bank of India above this self-imposed cap will not be possible. We have also undertaken strong measures to revamp revenue collections and expenditures. Thus far the government's need to borrow from the Reserve Bank has stayed well below the self-imposed cap in the first quarter of 1994-95 and far below borrowing levels of last year.

Fiscal consolidation has been an important objective in our programme and the Central government fiscal deficit was brought down from 8.4 per cent of GDP in 1990-91 to 5.7 per cent in 1992-93.

Structural Reforms

Let me now say a few words about our programme for structural reforms which is aimed at making the economy internationally competitive, open to trade and foreign investment, encouraging the development of the private sector and refocussing government activities on the development of the country's infrastructure and human resource and on the alleviation of poverty. In the short period of three years, we have achieved substantial progress in each area of reform, though the task is not yet complete. This assessment is also shared by the World Bank which in the Country Economic Memorandum states that "the skill with which reforms have been introduced thus far has few parallels elsewhere and enhances the credibility of the reform process."

The most radical changes implemented in the reform package have been in the areas of industrial policy, the foreign trade and payments regime, the financial and capital markets and the tax system. Entry barriers in the industrial sector have been eliminated and many core sectors have been opened up for private sector participation. These include power, hydrocarbons, air transport and telecommunications in which private promoters, both domestic and foreign have shown active interest.

Industrial deregulation has been accompanied by a radical restructuring of the policy towards foreign investment. Since July 1991, direct foreign investment prosposals approved have risen steadily and cumulated to nearly $ 5 billion by May 1994. Restrictions on the operation of companies with foreign equity have been eliminated by amendment of Foreign Exchange Regulation Act and all companies incorporated in India are now treated alike irrespective of the level of foreign equity. India has joined the Multilateral Investment Guarantee Agency and earlier this year we concluded, a bilateral Investment Protection Agreement with UK.

In the short period of three years, we have achieved substantial progress in each area of reform, though the task is not yet complete. This assessment is also shared by the World Bank.

Similar bilateral agreements are being negotiated with other major investing countries. Actual inflows of foreign capital including portfolio investments have been of the order of $ 5 billion during 1993-94 as compared to $ 150 million only a couple of years ago.

Trade Policy

In the area of trade policy and external payments regime, the sweeping reforms undertaken over the past three years are well known and described in the Bank's Country Economic Memorandum. Capital and intermediate goods imports are almost wholly free of quantitative restrictions. Imports of consumer goods remain subject to restrictions but here too, the objective of policy is to gradually remove these restrictions and shift to a tariff based system of protection. As a step in this direction, the Export and Import Policy announced in April 1994 expanded the scope of the special import licences under which import of consumer goods are permitted and widened the range of consumer goods which can be imported against these licences. The removal of quantitative restrictions on imports have been accompanied by massive reductions in customs tariffs. Most recently, the

1994-95 Budget has brought down the maximum tariff rate to 65 per cent, compared to rates of 300 per cent and higher prevailing in 1991. The rates on capital goods imports have been reduced to a range of 20 to 40 per cent compared to 100 per cent in 1991. We intend to further rationalise and lower the tariffs over the next few years to bring them to levels comparable with other developing countries.

A unified floating exchange rate of the rupee was introduced in March 1993. With further liberalisation of payment restrictions announced in the 1994-95 Budget, near full current account convertibility has now been established. Thus at the end of three years of reform, the exchange rate system has been totally transformed and we are now moving towards formally accepting Article VII status in the IMF.

Reform of the tax system has been an important element of our programme. The strategy has aimed at moving towards simpler systems of taxation with moderate rates, few exemptions and a broad tax base. Earlier budgets had implemented these principles in direct taxes. The 1994-95 Budget has continued these trends in direct taxes and brought sweeping reform of indirect taxation which continues to account for over 80 per cent of tax revenues in India. In regard to both excise and customs, hundreds of special exemption notifications have been eliminated, the number of rate categories has been sharply reduced, the structure of rates has been brought down and a massive shift has been made from specific to *ad valorem* duties to ensure built-in revenue elasticity. A beginning has been made in extending indirect taxation to a few services and the system of credit for taxes paid on inputs called MODVAT, was extended to cover petroleum and capital goods. We are now pursuing the objective of moving to a full fledged Value Added Tax.

The most radical changes implemented in the reform package have been in the areas of industrial policy, the foreign trade and payments regime, the financial and capital markets and the tax system.

Financial Sector

Reforms of the financial sector have made substantial progress in the last three years. The government's pre-emptive draft on bank resources through the mechanism of reserve requirements has been reduced. Government borrowings are now very largely on market determined rates. There is now an active market in government securities for 91-day and 364-day bills and longer maturity securities are also sold by auction. These trends will be further accelerated by Reserve Bank of India's decision to establish a system of primary dealers in government securities as announced in the credit policy in May 1994. The interest rate structure has been greatly simplified and liberalised.

All commercial banks have now adopted the prudential and income recognition norms advised by the RBI in April 1992. While this has revealed the relatively low profitability of some banks in the past two years, it is a necessary step in the process of financial sector reform. To strengthen capital base of public sector banks, the government has again allocated a large sum, Rs. 5,600 crore, from the budget towards strengthening of the capital base of public sector commercial banks. Access to this capital is on the basis of agreeing to a detailed Memorandum of Understanding on performance criteria with the Reserve Bank of India. Recently, the Banking Nationalisation Act has also been amended to permit public sector commercial banks to raise resources from the capital market. The State Bank of India has already had a very successful public issue which allowed it to raise fresh equity of more than Rs. 1000 crore. Appropriate legislation has been enacted and Debt Recovery Tribunals have been established to facilitate recovery from defaulting borrowers. Bank supervision has been strengthened by establishing a new Department of Bank Supervision in the RBI. New private sector banks have been licensed and several of them have already commenced operation this year. While substantial progress has been achieved, the task of restoring full health to the financial sector will, inevitably, take some years. Our approach will be to ensure steady liberalisation and consolidation of the financial sector while at the same time protecting interests of depositors.

Reform of the tax system has been an important element of our programme. The strategy has aimed at moving towards simpler systems of taxation with moderate rates, few exemptions and a broad tax base.

Capital Markets

Reform of the capital markets has been an important objective. Capital issues were decontrolled subject to supervision by an independent regulatory authority. Firms are now free to issue capital and price new issues according to market conditions subject only to guidelines aimed at effective disclosure of information necessary for investor protection, ensuring transparency of trading practices and speedy Settlement. A National Clearing and Settlement System is also envisaged with the setting up of a National Stock Exchange and a Central Depository. An important initiative taken as part of the reform is the opening up of capital

markets for portfolio investments. Indian companies have been allowed to access international capital markets by issuing equity abroad through the mechanism of global Depository Receipts and foreign institutional investors have been allowed to invest directly in the Indian capital markets. Favourable tax treatment has been granted to such investments. The initial results have been remarkable. It is estimated that inflows from international equity issues by Indian companies in 1993-94 amounted to about $ 2.5 billion while foreign institutional investors have invested about $ 1.5 billion in domestic capital markets.

The Malhotra Committee has recommended extensive reform in the insurance sector. The government has announced that it will draw up a programme of reform in this sector after consultations with all parties concerned. The consultative process is far advanced and we hope to come up with specific proposals for reform in the course of the year.

Public Sector

Another important area of reform relates to the public sector. Unlike the case in many other countries where public sector reform has involved outright privatisation combined with closure of unviable units, our approach has been more measured. We have begun by disinvesting upto 49 per cent of equity of these enterprises with the twin purpose of providing non-inflationary resources for the Budget and to impart greater accountability through wider public participation. Public sector companies are increasingly financing their investment through internal cash generation or by raising resources from the capital markets. A number of them have successfully done so. For the loss making public sector units, the government has been scaling back budgetary support, and they are being encouraged to seek restructuring, wherever it is possible to make them economically viable, through the mechanism of the Board for Industrial and Financial Reconstruction and where it is not, to close them down with adequate compensation for labour.

Another important area of reform relates to the public sector. Unlike the case in many other countries where public sector reform has involved outright privatisation combined with closure of unviable units, our approach has been more measured.

Social Safety

A programme of structural adjustment inevitably creates transitional difficulties and the government is deeply conscious of the need to ensure that the burden of transition does not fall disproportionately on the poor who are least capable of bearing it. With this objective, we had finalised a Social Safety Net Programme with the support of the World Bank and some bilateral donors which is under implementation. The programme focusses on the needs of the most vulnerable section of our society particularly the workers affected by industrial restructuring, poor women and children and landless labourers. The critical elements of the programme cover primary education, primary health including endemic disease control programme, and the integrated child development scheme. The National Renewal Fund component of the programme encompasses voluntary retirement scheme and costs of retraining and redeployment of affected workers.

Agricultural Sector

Agriculture is still the dominant sector of our economy. A number of measures have been taken in the past three years which have directly benefitted this sector. Reduction in protection levels for domestic industry has improved the relative protection and profitability for agriculture. The market-determined, unified exchange rate system has revealed agriculture's true comparative advantage. Many restrictions on domestic and external trade in agriculture have been removed. As a result, agricultural and agro-processed exports have boomed in 1993-94. We expect a stronger inflow of investible resources in this sector and rapid expansion in the exports of agricultural, agro-processed, horticultural and marine products in the coming years. This will impart a new dynamism to the rural economy and greatly expand employment opportunities.

A programme of structural adjustment inevitably creates transitional difficulties and the government is deeply conscious of the need to ensure that the burden of transition does not fall disproportionately on the poor who are least capable of bearing it.

Infrastructural Support

The success of our economic reforms will depend crucially upon the availability of infrastructure support for economic development. This focusses attention on sectors such as power generation, roads, ports and telecommunications. This will call for massive investment in all these sectors. While we are opening up these sectors to private sector participation, and there is substantial scope for attracting such investment in some of these sectors even in the short term, the bulk of the investment in these sectors will have to come from the public sector. Improved performance, including financial performance, of the public sector entities in these sectors is

therefore crucial. Official Development Assistance could be effective in attracting additional private capital resources into these sectors through innovative co-financing mechanisms and through counter-guarantees which would lower the risk perception of the investors for long term investments in these sectors.

The commitment of the government to holding the fiscal deficit in 1994-95 to the target of 6% is already mentioned above. We recognise that continued progress in fiscal consolidation over the years ahead will be crucial for ensuring price stability and for the success of our economic reforms. The tax reforms we have introduced will help to generate the necessary buoyancy in revenues in future which, together with expenditure restraint and better performance by the public sector, will help to reduce the fiscal deficit over time.

Unfinished Agenda

We also have to address the unfinished agenda of reforms which include some of the more difficult measures. In the area of trade liberalisation, reforms will cover further lowering of tariffs and phased removal of remaining quantitative restrictions both on imports and exports. The process of financial sector reforms which has begun in earnest has to be completed. Government's pre-emption of Bank's resources will be progressively reduced to permit greater autonomy and profitability for the commercial banks. The remaining restriction on interest rates will be phased out as fiscal control is effectively established. Tax reforms will encompass further rationalisation of the structure, widening of the base, elimination of exemptions and emphasis on strengthening tax administration to reap the benefits of these measures. Over time we shall also attempt to introduce a nation-wide Value Added Tax in consultation with the states. In key infrastructure sectors like power, hydrocarbons, telecommunications, roads and ports, we will press ahead with developing appropriate institutional and policy frameworks to facilitate the entry of much-needed private capital, to enhance competition and thus ensure effective provision of key infrastructure services which are essential for the growth of output and exports.

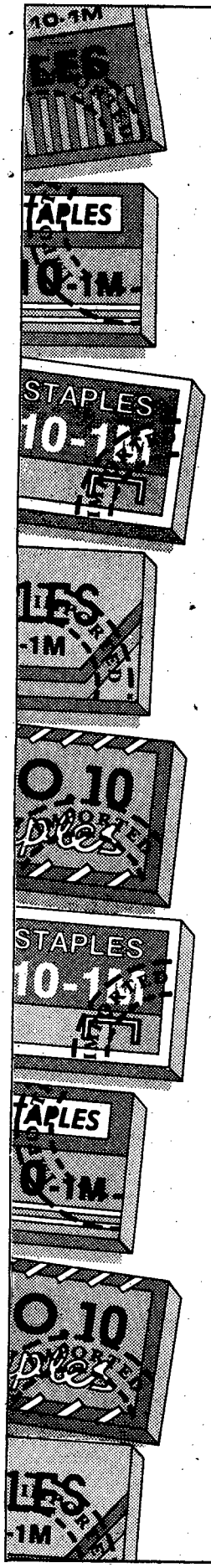
Now it would be pertinent to turn to the balance of payments prospects for 1994-95 and its implications for India's external financing needs. In view of the substantial improvements in our external account, the current account deficit in 1994-95 is estimated to be less than one per cent of GDP. This level is manageable with normal capital flows and there is no need for fast-disbursing. To that extent our need for external assistance in 1994-95 is definitely lower. We would also like to limit recourse to high cost financing as part of our effort to contain external debt and also in recognition of the large inflows of portfolio investment that have taken place and are expected to continue.

However, as pointed out to the Bank, Official Development Assistance will continue to be critical for sustaining investment levels in key infrastructural sectors such as power, water supply, telecommunications and surface transport. These sectors are prime candidates for long term development assistance which could be effective in attracting private capital into these sectors. Social sectors also have large resource needs and long term development assistance to support their investment programme is essential for the success of our reform programme and to put the economy on a higher growth path and alleviate poverty.

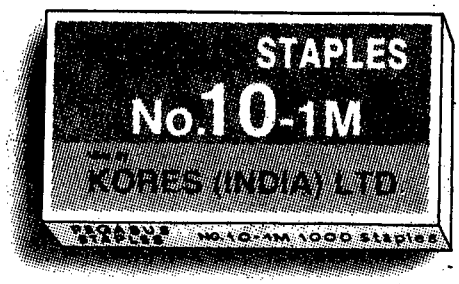
We have also taken several steps to improve aid utilisation, through careful monitoring and discussions with the Planning Commission, we have tried to ensure that adequate provisions are made in the outlays for all externally aided projects. Steps have also been taken to address weaknesses in project management, procurement procedures and strengthening of the institutional arrangements to improve aid absorption. The decision taken last year on government disintermediation for lending to Central public sector undertakings has worked well and after a consensus is arrived at based on discussions with donors, we should extend this to state public sector undertakings also. The recommendations of the Task Force set up by the Ministry of Finance to go into the issues of streamlining of procurement procedures are being implemented and some of the standard bidding documents finalised by the Task Force in consultation with the World Bank have been mandated for use in all World Bank aided projects in the country. The remaining standard bidding documents will be finalised with the World Bank later this year. A similar exercise for the ADB project is also in progress. For the third year in succession, an exercise to rationalise the portfolio of World Bank projects was undertaken and the overhang of unutilised aid was reduced by another $ 800 million. All these actions have resulted in an improved disbursement ratio in real terms.

The transition that is underway in India is momentous and the success that we have achieved in the first three years has strengthened our commitment to persevere with the task that we have embarked upon to assure a more prosperous future for our people. ❐

The author is Finance Secretary, Govt. of India.



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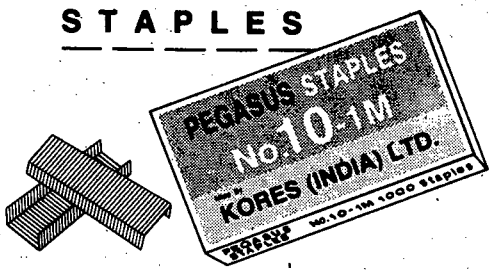
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Liberalisation And Agriculture

Prof. C.H. Hanumantha Rao

Raising the productivity of resources through better allocation between different crops and regions and adoption of improved technologies is a major objective of liberalisation, says the author. Export orientation would provide incentives for the regional specialisation of crops and use of new technologies in production, processing and marketing. However, a high priority is needed for soil and moisture conservation in rainfed areas to facilitate the adoption of new methods there, he suggests.

ACHIEVING food security has so far been the overriding goal of agricultural policy in India. As such, the inputs and technology tended to be concentrated in irrigated areas where the results were quick, substantial and assured. One can now discern the beginnings of a significant shift in the perspective for agriculture in India. Consolidating the food security already achieved and moving much further to avail of the opportunities opened up by trade is emerging as the guiding principle of agricultural policy in the period ahead.

The growth of food grain output has so far been limited by domestic demand. Population growth and the rise in per capita income will no doubt necessitate a significant rise in the output of food grain. However, it is necessary to bear in mind the significant downward shift taking place in the demand for food grain. This is on account of the change in the consumer tastes with the availability of a wide variety of goods and services even in rural areas. It is now estimated that the demand for food grain may increase at the rate of around 2.6 per cent per annum upto 2010 A.D., even after taking into account the secondary demand for cereals as animal feed. This demand growth is lower than the output growth of 4 per cent per annum projected by the Planning Commission for the Eighth Plan period.

If agricultural growth is not to be constrained by the domestic demand but should indeed contribute to raising the overall economic growth, then agricultural output needs to be stepped up for exports by diversifying into areas such as dairying and other animal products, horticulture, floriculture, etc., the demand for which is less inelastic or less unfavourable than for food grain. Trade in these areas will contribute to modernizing these sectors in the sphere of production as well as processing and marketing. Agricultural research and technology in the post-green revolution era has been focussed mainly on food grain in the irrigated areas. The emphasis has now to shift to the new activities with favourable export demand. The rainfed or dry land areas in the country have a comparative advantage in animal husbandry, horticulture, floriculture etc. The development of new technologies for these activities can thus benefit the agriculturally backward areas where poverty is widespread.

The employment generation per unit of additional output has gone down steeply and has even become negative in the irrigated green revolution belt. The prospects for employment generation do not appear to be bright, at least in the short run, in the non-

agricultural sector in the wake of liberalisation. There could even be a decline in employment in some of the rural industries, adding to the pool of unemployed in the rural areas. A number of special employment and rehabilitation programmes are being envisaged as 'safety nets' to cope with the consequences of structural adjustment. However, agriculture can serve as the biggest safety net in the process of adjustment not only by softening the rigour of inflation but also by providing new avenues of productive employment. The new activities which have a favourable export demand are also employment-intensive. But the experience shows that the substitution of capital for labour in high-wage areas has been basically responsible for the decline in the employment per unit of output. This has happened despite the in-migration of labour from the less developed areas. This experience suggests that new technologies suited to low-wage areas such as rainfed or dry land areas offer better prospects for labour absorption.

If agricultural growth is not to be constrained by the domestic demand but should indeed contribute to raising the overall economic growth, then agricultural output needs to be stepped up for exports by diversifying into areas such as dairying and other animal products, horticulture, floriculture, etc., the demand for which is less inelastic or less unfavourable than for food grain.

This underlines the need for location-specific research and extension, for maximizing the employment opportunities.

Raising the productivity of resources used in agriculture through their better allocation between different crops and regions and by adopting improved technologies is a major objective of liberalisation. Export-orientation will provide incentives for the regional specialization in crops according to their comparative advantage as well as for the adoption of new technologies in production, processing and marketing. It may be noted, however, that unlike in the command economies where allocative decisions were made by the collectives and the communes, the institution of peasant proprietorship in India has been conducive to decision-making by the individual farmers in their millions, so that the allocation of resources at the farm level has, on the whole, been efficient. Also, we have, by and large, a free movement of agricultural commodities across different regions in the country which has been conducive to regional specialization in the production of crops. The success of green revolution in India would have been unthinkable without a large national market for food grain. However, productivity of resources can be enhanced further by extending infrastructure to the less developed areas and by introducing new technologies. Removal of input subsidies where they have outlived their utility would also promote their efficient allocation as well as give impetus to the evolution of cost-reducing innovations.

In the early years of green revolution, when the attainment of food security was the overriding objective, ecological concerns were not in the forefront of agricultural policy. In course of time, however, population growth as well as the growing demand from the affluent sections have been exerting pressure on environment. Further, the unregulated exploitation of natural resources caused, among other things, by the underpricing of inputs such as irrigation water and electricity for pumping ground water have contributed to the degradation of environment. Although, as yet, chemicalization of agriculture as such is not a serious problem, the evolution of new biotechnologies to save on chemical inputs has to be accorded a high priority in agricultural research. Besides, the efforts for conservation of soil and water resources in dry land areas need to be stepped up with a view to creating the necessary conditions for the profitable application of yield-increasing technology.

Evolution of new biotechnologies to save on chemical inputs has to be accorded a high priority in agricultural research. Besides, the efforts for conservation of soil and water resources in dry land areas need to be stepped up with a view to creating the necessary conditions for the profitable application of yield-increasing technology.

Contribution Of Productivity

The area under food grain has declined somewhat during the eighties. The entire increase in food grain output during this period is, therefore, the result of the rise in productivity per acre on account of the increase in yield-raising inputs. However, the efficiency of resource-use consequent upon the application of new technology is measured by the total factor productivity (TFP) or the productivity of all the inputs combined. This is obtained by the difference in the growth rates of output and the index of inputs. The total factor productivity so measured is estimated to account for one-third of output growth during 1957-85. The contribution of total factor productivity rose to over 50 per cent of output growth in the post-green revolution period. Public research and extension and private research have been the major sources of increase in

total factor productivity. Public research and extension accounted for over two-thirds of increase in total factor productivity after 1975. This indicates that the rate of return to investment in public research and extension has been quite high. It has indeed been found to be as high as over 60 per cent in respect of public research and over 50 per cent in respect of extension. These high rates of return on investments in research and extension are attributable, in no small measure, to the spread of new technology to the new regions and crops in the last decade.

These high rates of return on investment in research and extension indicate that there is considerable scope for improving productivity through the extensive application of known technology as well as by evolving new technologies. The studies conducted by the International Food Policy Research Institute in collaboration with the Indian Council of Agricultural Research show that the potential for productivity increase by extending the known technology to new regions and crops by redeploying the existing resources is significant. These potential gains are in the main attributable to two sources. First, by bridging the gap between the actual and the potential productivity from the use of fertilizers

Agriculture can serve as the biggest safety net in the process of adjustment not only by softening the rigour of inflation but also by providing new avenues of productive employment.

in respect of crops and regions where the level of fertilizer use is far below the optimum levels. Such a potential is found to be quite high in Uttar Pradesh, Eastern and Central regions. The second major source is the balanced application of nitrogenous, phosphatic and potassic fertilizers in all the regions.

The level of fertilizer use in the country has become very uneven over a period of time. For example, as much as 50 per cent of total fertilizers consumed in the country is accounted by the top 20 per cent of the districts. Owing to the diminishing returns to fertilizer use at higher levels, the aggregate response of output from the use of fertilizers has declined. If the decline in productivity due to the unbalanced use is also accounted for, the output response has gone down from 1:10 to 1:6. It has been estimated in a joint study by the International Food Policy Research Institute (IFPRI) and the Indian Council of Agricultural Research (ICAR) that, for wheat, an optimal distribution of fertilizers as between different regions would increase output by 1.6 million tonnes. A change towards balanced use of NPK, by raising both P and K per unit of N, would raise output by 2 million tonnes. Both the adjustments together, i.e optimal regional distribution as well as best NPK mix would increase wheat output by 6 million tonnes or 12% with a marginal increase of half a million tonnes in fertilizer consumption.

Similarly, in the case of rice, a change in NPK mix results in an increase in output to the extent of 1.2 million tonnes. Diversion of fertilizers away from the Northern to Eastern regions would yield 9 million tonnes with 1.2 million tonnes of additional fertilizers. Optimal levels of fertilizer distribution with the best NPK mix (2:1:1) leads to an additional output of 15 million tonnes or about 20 per cent increase with 1.5 million tonnes of additional consumption of fertilizers.

Development And Diffusion Of New Technology

Adequate funding for public research, appropriate economic signals for setting right priorities in research, whether public or private, and favourable institutional framework and the resulting incentives for the absorption of new technology are the three basic prerequisites for the proper development and diffusion of new technology. These are best ensured when the demarcation of the relative roles of the the state and markets or the public and private sectors in agriculture is rational. A number of studies have shown that favourable macro-economic environment including openness in trade have been conducive

High rates of return on investment in research and extension indicate that there is considerable scope for improving productivity through the extensive application of known technology as well as by evolving new technologies.

to the adequate development and diffusion of new cost-reducing technologies in agriculture. This has happened on account of favourable terms of trade for agriculture, inducement to improve quality and reduce costs for becoming internationally competitive, prices reflecting truly the scarcities of resources so that research is directed to save on the scarce factors and the adequate allocation of resources-public as well as private-for research and extension.

Economic analysis, following John Hicks's contributions, has been focusing on the significance of relative prices of factors of production in inducing cost-reducing innovations directed towards saving on the scarce factors through the greater use of the abundant factors. For example, heavy subsidies on inputs like fertilizers, surface irrigation, electricity for pumping water and on farm credit, apart from causing macroeconomic imbalances and shortage of resources for public investment in research and

other infrastructure, discourage research in biotechnology which saves on chemical inputs and is environment-friendly, discourage the conservation of water and energy, and in general, encourage capital-intensive techniques. Private research and extension is becoming increasingly important on account of scientific break throughs such as the emergence of biotechnology with low investment requirements in applied research and the greater responsiveness of private research to the user-requirements which vary considerably across agro-climatic regions. In a situation like this, adequate intellectual property protection becomes necessary to provide incentives for private investment and effort in research.

Adequate funding for public research, appropriate economic signals for setting right priorities in research and favourable institutional framework and the resulting incentives for the absorption of new technology are the three basic prerequisites for the proper development and diffusion of new technology.

Apart from the incentive framework conducive to technological change mentioned above, the development of certain forms of infrastructure including human capital is essential to raise the profitability of investment in research. Development of irrigation, roads and processing and marketing network would facilitate the widespread adoption of new technology by raising the yields, reducing their variability and by ensuring remunerative and assured prices for the products. Improvement in the literacy levels of the farmers and in the system for the dissemination of information is essential particularly when the new practices are sophisticated and the rate of technological advance is rapid. The importance of infrastructure development for Indian agriculture is underlined by the fact that both in respect of irrigation and literacy, only about 50 per cent of the potential has been realized so far.

Even after the full potential for irrigation is achieved, nearly half the cultivated area would still be dependent on rainfall. The rainfed or dry land areas in the country are getting degraded due to the depletion of soil fertility and moisture. Experience has shown that a critical minimum of soil fertility and moisture levels are essential for the profitable adoption of new technology. Research in the evolution of new seeds and improved practices by itself has proved to be insufficient for such areas. The existing programmes for soil and moisture conservation have failed to make an impact on account of inadequate planning of works on watershed basis, failure to involve the beneficiaries in the planning and implementation of works and lack of coordination among various departments concerned with these programmes. A high priority has, therefore, to be given to the soil and moisture conservation in the dry land areas by revamping the present strategy to create the necessary conditions for the adoption of improved agricultural practices. ❐

Apart from the incentive framework conducive to technological change, development of certain forms of infrastructure including human capital is essential to raise the profitability of investment in research. The importance of infrastructure development for Indian agriculture is underlined by the fact that both in respect of irrigation and literacy, only about 50 per cent of the potential has been realized so far.

The author is former Member, Planning Commission.

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New Economic Policy And Technology Exports

Prof. S.Z. Qasim & P.M.Sarma

Examining various aspects of technology exports in the wake of ongoing economic reforms, the authors stress the need for a close linkage between the national research laboratories and the industry. This would enable our country to have a better share in the world trade. In the present era of globalisation, whosoever goes on upgrading its technology, would surely win the race, they feel.

TECHNOLOGY can be defined as the knowledge of science to be used for production, commercialisation and distribution of goods and services. It is a combination of two components—hardware and software. The former includes equipment, machinery, tools and physical facilities and the latter embraces knowhow in the form of processes, techniques, methods, skills etc. Possession of technology is a well guarded secret by its owner and it is this secrecy that gives its owner certain terms and conditions which he sets for transferring his technology to others (within India or abroad). When the transfer takes place from one country to the other, we may call the transfer as export of technology. This takes place in three ways—projects, consultancy including services and joint ventures. Let us take each type of technology export separately in the Indian context.

Exports from India involve both low and high technology. The term low technology is used for the projects connected with power distribution, simple products, structures and processes. High technology, on the other hand, is applied for power generation, machine tools, chemical projects and others involving sophisticated designs and advanced R&D capabilities.

Some of the prestigious projects successfully exported and executed abroad both in the non-manufacturing and manufacturing sectors include: power generation and distribution including construction of hydro, thermal and atomic power stations, dams, bridges, ports, airports, roads, highways, water treatment and environmental pollution control, housing, hospitals and industrial projects connected with fertilisers, oil refining, petrochemicals, sugar, textiles, cement, steel etc.

Project Exports

Projects exported from India have been classified as turnkey projects by the prime contractors or as sub-contractors of the prime contractors from other countries for the purpose of executing only a part of the new projects or for the expansions of the existing plant facilities. In certain cases, when the prime contractors are not manufacturers and they have bought plants and equipment from the Indian manufacturers, and performed only the engineering functions, they come under the category of sub-contractors. These exports fall into three categories broadly: civil engineering construction projects, industrial turnkey projects and the associated sub-contracting services. The total values of the contracts secured in respect of the export of projects are given in Table-1 for each year from 1978-79 to 1992-93.

Table-1

Earnings In Project Exports From 1988-89 To 1993-94

Year	Rs. in crore
1988-89	495
1989-90	560
1990-91	1115
1991-92	1417
1992-93	1543
1993-94	792

The Table- 1 shows that there has been an increasing trend in this type of exports until 1992-93 and that there is

a decline during the period 1993-94. Nevertheless, the successful execution and maintenance of the projects overseas have proved the Indian capabilities in the export of technology in terms of their merit.

Consultancy Export

The second category of the technology exports is in the area of consultancy, which plays a major role in technology transfer and in promoting the export of equipment and materials. In view of the multiplier effect of the consultancy services, this sector has been identified as one among the thrust sectors for export promotion by the Government of India. In recent years, the Indian consultants have played an important role by offering services in several diversified fields such as: engineering supervision; project management and its implementation; civil, structural and architectural designs; technical management; operation and maintenance of plants; design of equipment and plants; textile mills; software application packages; system software; computer-aided engineering; operation and execution of the projects on turnkey basis etc. Today, there are about 20,000 highly specialised professionals and technocrats working in more than 700 consultancy organisations or are independently offering services in a wide range of disciplines. The Table-2 gives the consultancy earnings year-wise from 1978-79 to 1992-93.

In view of the multiplier effect of the consultancy services, this sector has been identified as one among the thrust sectors for export promotion. In recent years, the Indian consultants have played an important role by offering services in several diversified fields.

It may be observed from the Table-2 that there has been an increasing trend in this type of export and that this increase is significantly larger from 1989-90 onwards as compared to the earlier years. In fact in 1991-92, the exports are more than double that of the period 1990-91. To have a further insight into the various types of consultancy exports, the specialisations in which India has markedly improved its consultancy export capabilities can be grouped into five broad categories, namely, infrastructure, management, process knowhow, engineering and agro-based industries. An analysis of the data for a ten-year period (1978-87) in these five types of consultancy capabilities indicates that, while the total export of all the consultancy capabilities has shown a remarkable growth, there has been an appreciable shift from the exports of other categories of consultancy to management consultancy. The increase in the export earnings in this sector alone in just two years (1985-87) is more than 3 times of the earlier year. Nearly half of the export earnings in the management sector have been from the export of computer software by 80 consultancy organisations in India during the year 1987-88. Predominant sectors, other than management, during the period of 1985-87, are infrasturcture and process industries. This analysis also brings to light that the Indian consultants in these three sectors have geared themselves to the needs of emerging technology largely for the developing countries. With this increase, an obvious corollary that emerges from the analysis is that the consultancy exports in the enginering and agro-based industries sectors have recorded a sharp decline.

Table-2

Consultancy Export Earnings From 1978-79 To 1992-93

Year	Rs. in million
1978-79	95.61
1979-80	226.55
1980-81	226.56
1981-82	312.50
1982-83	475.76
1983-84	585.01
1984-85	578.30
1985-86	734.07
1986-87	939.04
1987-88	1003.40
1988-89	1260.00
1989-90	2200.00
1990-91	3120.00
1991-92	7200.00
1992-93	8310.00

In context of the new Industrial Policy, preparedness towards internationally competitive technological capabilities for providing appropriate technical inputs to the enterprises has emerged as a new task before the Indian entrepreneurs.

Impact Of New Policy

In context of the new Industrial Policy announced in July, 1991, the preparedness towards internationally competitive technological capabilities for providing appropriate technical input to the enterprises has emerged as a new task before the Indian entrepreneurs. Naturally then, the choice and acquisition of new technologies to produce competitive products and services to suit the international environment become important issues in context of industrial development of the country. Since the expansion of exports is the key word in the new environment, the service sector is expected to play an increasingly dominant role in the industrial and economic development in the future. The consultants and consultancy services would, therefore, assume greater significance in the

process of technological, industrial and economic development.

In the case of small scale sector in particular, the new Policy of 1991 stresses on the need for more efficient technical services and technological inputs leading to a better performance. This calls for an encouragement in the R&D specific to the small scale sector, associated with a provision of necessary testing facilities and advisory services. The consultants would, therefore, play an increasingly important role in the development of the small industries sector as well. Since the small scale sector is not very much exposed to consultancy services, there is a need to create awareness amongst the small scale industrial units about the available consultancy facilities in the country.

The benefits that would accrue by creating a strong consultancy base are: increased exports of not only projects and services but also of goods, reduction in imports and commercialisation of indigenous technologies developed in the R&D institutions etc. Some of the organisations which have specialised in the field of consultancy development in the country are: Consultancy

The benefits that would accrue by creating a strong consultancy base are: increased exports of not only projects and services but also of goods, reduction in imports and commercialisation of indigenous technologies developed in the R&D institutions etc.

Development Centre (CDC), National Productivity Council (NPC), The Association of Consulting Engineers (India)—ACE(I), Federation of Indian Export Organisations (FIEO), Institute of Management Consultants of India (IMCI) etc. These would play a greater role in bringing the consultancy organisations to the level of meeting the needs not only of our country but of other countries as well.

Joint Ventures

The third area in which technology exports take place is the joint ventures. A joint venture is an enterprise in the manufacturing, trading or services sectors in which the entrepreneurs in the host country, where the joint venture is located, collaborate with the entrepreneurs from one or more foreign countries in the manufacturing and/or management and/or financial operations of the joint venture. It is essentially a commercial enterprise with a profit motive. The objective of the joint ventures is to promote industrial growth and trade across the borders. It results in a new form of Foreign Direct Investment (FDI) which involves technical-cum-financial collaboration between the firms forming the joint venture. The formation and operation of the joint ventures are governed by the laws and regulations of the host countries in which these are conducted. Joint ventures have been described as engines of growth or the bridge across which the technology flows between the countries, both developed as well as developing.

In this area also, India has played an active role by setting up joint ventures abroad both in the developed and developing countries including the least developed countries.

According to the latest data available as on 31st December, 1992 from the India Investment Centre, there were about 324 joint ventures in operation or under implementation in the areas of automotive ancillaries, transport equipments, food processing industry, paper and pulp industry, textiles, sugar factory, steel furniture, metal flexible tubes, railway network, newsprint project, palm oil refining, machine tool complex, industrial estates and light engineering goods such as switch gears, stainless steel ware etc.

The major benefit of this activity has been that India's image is projected as an exporter of capital goods and technology. Other consequent benefits have been the realisation of dividends, royalties etc. and the strengthening of economic relations and cooperation with the other developing countries. A remarkable feature of this activity undertaken by the Indian entrepreneurs

A remarkable feature of the activity undertaken by the Indian entrepreneurs has been that the economic aspiration of the developing countries were kept in view while entering into the joint venture agreements and special care was also taken to infuse a kind of confidence in the foreign partners that these ventures are for the mutual development.

has been that the economic aspirations of the developing countries were kept in view while entering into the joint venture agreements and special care was also taken to infuse a kind of confidence in the foreign partners that these venturs are for the mutual development of the participating countries and are not really meant for their exploitation. The benefits and good features of the joint ventures notwithstanding, the government had to revise its policies from time to time depending on the performance of the joint ventures. The changes in the government policies on this issue are indicated in brief.

Guidelines

The policy of the government on the joint ventures during the sixties, when it was in its formulative phase, was reasonably open and flexible. Approvals were granted liberally. As a result of this, many joint ventures

were established overseas without adequate home work and without an indepth study of the prospects of such ventures in the host country. As a result, the Indian entrepreneurs had to face many difficulties and consequently several joint ventures had to be abandoned. However, to regulate such ventures, the government announced several guidelines in the year 1970. Depending on the circumstances, and based on the practical experience and feedback, these guidelines were again revised in 1976 and subsequently in 1986. The revisions facilitated the removal of some constraints and difficulties experienced by the joint ventures and these helped the Indian enterprises to achieve a greater degree of success.

Nevertheless, the guidelines, as formulated till 1986 were considered by the trade and industry as regulatory rather than promotional in their conceptualisation. The two main considerations underlying the regulatory character of the guidelines were: (a) the Indian partners in the joint ventures were to operate within a tight regime of the foreign exchange control and their operations in the joint ventures could not circumvent these regulations and(b) a greater degee of selectivity and rigidity was introduced owing to many casualties among the joint ventures caused by the successive increases in the oil price during the seventies and the eighties. Apart from the regulatory character of the guidelines, it was felt that these laid a greater emphasis on the transfer and trade of the technology in use (import of Indian machinery and equipment) in which India's technological skill was not as high as required. Moreover, due to bureaucratic formalities and procedures, despite the fact the Ministry of Commerce served as a nodal point and provided a single window clearance for taking decision on all aspects of the joint ventures, some of the prospective joint ventures suffered a setback.

Realisation

These deficiencies have been rectified to a large extent under the new regime of economic reforms. Furthermore, there is also a realisation that, by investing in the joint ventures, the consequent creation of an Indian base abroad, directly or indirectly, would help in boosting the exports of goods and services in addition to enhancing the level of export and augmenting the foreign exchange earnings. Besides this, the joint ventures would also serve as an assured source of imported raw material at a lower cost which the country or a company would have otherwise to separately import from the other overseas manufacturers. Added to these beneficial consequences, the new policy has some encouraging features such as: formulation of automatic/ quick approval process; creation of a special cell to monitor the joint venture operations; 100 per cent tax exemption for repatriated earnings; permission for equity participation in more than one joint venture; export of the Indian second hand and reconditioned machinery towards equity contribution of joint ventures etc.

Depite these facilities and benefits, since the Indian exporters have to operate themselves in a competitive environment created by the new Industrial Policy, the experience of some of the organisations like the NRDC, CSIR, DRDO etc. in the field of export of technologies can be a guideline for the new entrants or even to those who were unsuccessful earlier. The NRDC, for example, has been licensing, commercialising and exporting the indigenous technologies. Its basic charter involves technical, commercial, and financial measures needed for closing the gaps in the innovation chain through which an idea, an invention or a process is converted into a product in the market. During the last one decade or so, it has successfully exported a number of indigenous technologies to various countries such as Burma, Nepal, Senegal, Malaysia, the Philippines, USA etc. The technologies exported included: the products such as gamma irradiator and nasal filters; chemicals like bentonite and phenol formaldehyde and processes like electrochemical metallurgy and high draught kiln etc. Some of the technologies like the bottling of coconut water, handmade paper, paper slate etc., are specifically meant to be handled by women. The NRDC has also entered into the area of joint ventures and a number of technologies for a variety of products and processes for export to Nigeria, Indonesia, Madagascar, Vietnam etc.

During the period 1993-94, the NRDC launched a new scheme for small and medium industrialists with the objective of encouraging them in the process of converting their ideas into commercially viable technologies. In short, the NRDC has geared itself to meeting the challenges of the new economic reforms.

In the case of CSIR system, the recent technology exports are valued at about US $3 million. The clients for the CSIR technologies/ services are in the USA, UK, Brazil, Finland, Switzerland etc. Broad areas of these exports include: drugs and chemicals, catalysis, software for the use at aerodromes, transmission tower testing etc.

In the wake of the new industrial and EXIM policies which seek to establish a framework of globalisation of India's foreign trade with a view to promoting productivity, modernisation and competitiveness of the Indian industry, a dominent role lies ahead for the S&T institutions especially for promoting the exportable technologies.

A further elaboration of this fact is attempted here.

Competitive Environment

The liberalised industrial Policy (1991) would create more and more competitiveness among the various goods and services in order to have a better share of India in the world trade. The application of advanced know-how plays a dominant part in this game. For this, a close linkage between the national research laboratories and the end-users, i.e., industries and markets, is of much significance. To quote the Eighth Plan document, "quality improvement in our products and related efforts would increase the demand for the S&T not only in the concepts and design but right through the production, testing, packaging, transportation of goods and post-sale activities". This applies to both low and high technology sectors. The low technologies which are mostly applicable to rural sector and are generally in the areas of agro-horticulture, post-harvest operations and food preservation; fabrication of low cost building materials etc., and the high technologies are related to coal, petroleum, petrochemicals, drugs, aviation needs, communication, machine tools, power, irrigation etc. These are to be enhanced further. In the high-tech sector, however, the development of globaly competitive technologies should be the main objective in view of the fact that these would largely be dominated either by foreign technologies, licence agreements and technical collaborations or by the multi national companies (MNCs) which are likely to set up plants and other complex infrastructure in India in their sectors.

Judicious Mix

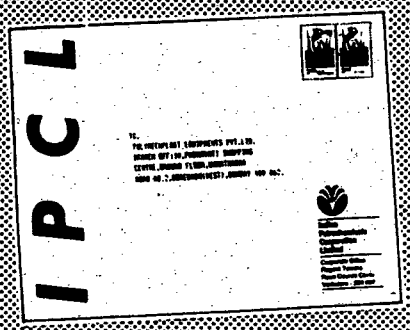
To achieve the goals on the lines stated above, while certain imports form essential elements of the export strategy, a judicious mix of the indigenous and imported technologies would be necessary in the long run at least in the high-tech areas. For example, the import of capital goods (of which machines and transport equipment form the major components) serves dual purpose. Firstly, it satisfies the immediate need to augmenting the indigenous capability to produce consumer goods which may otherwise face a shortfall (either in the export term or in the in-house consumption). Secondly, it leads to progressive technological upgradation in the long run. This, however, can take place only when the industry working on the imported machinery learns the detailed engineering associated with it and starts improving upon the innovations to suit the local needs as well as those required by the countries to which our technologies are being exported.

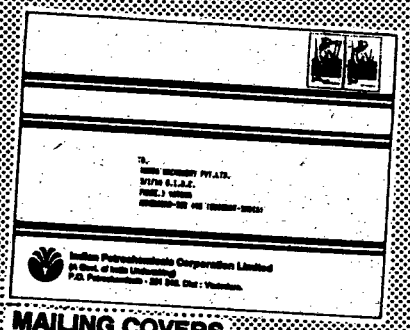
Admittedly, one of the roles of S&T/R&D infrastructure in the country should be to help the industry to choose appropriate technology and participate in its innovation for achieving a cost-effective solution. The programmes of the CSIR laboratories and the industrial in-house R&D units should be oriented in such a way that it meets the immediate and direct needs of the industry sector. The Technology Information Forecasting and Assessment Council (TIFAC), under the DST, has been etablished to carry out detailed exercises on the current and future industrial technology scenario, vis-a-vis, on the role of the Indian Scientific and Technological system in the process of acquiring technologies for innovation and bringing the technological levels of our industry to fill in the necessary gaps in the technologies by conducting in-house researches. This organisation should play an important role in the process of economic reforms.

It would not be out of place to mention in the end that there is one area for which the policy of the Indian government/industry needs re-examination, or in fact some modification. Despite the fact that we have a strong base in the manufacture of critical equipment and detailed execution of engineering projects in the oil and power sectors, India is still giving to foreign agencies a lot of turnkey contracts including consultancy under the restrictive clauses in the operational sector. Perhaps, it is time to take stock of the capital goods sector and also the consumer industries sector in which only process technology through process licences from the parties would be enough to make the domestic industry sector competitive or to make it at par with the international standards. Perhaps by placing the entire project in the hands of a foreign giant may turn out to be counter productive. Therefore, a close linkage between the industry and the national laboratories seems an important need of the hour to work out an MOU amongst them instead of giving an outright contract of the projects to a foreign firm on a turnkey basis.

In the present context of encouraging foreign investment in India, it is really necessary to study the extent to which the foreign enterprises, which could come either by way of equity participation or as independent ventures, would use their own R&D activity to substitute the Indian innovations. It is, in fact, a matter to be watched carefully. In any case, the one which goes on upgrading its technology, an Indian or a foreign firm, would surely win the race. ❐

The authors are Member and Deputy Adviser, Planning Commission respectively.

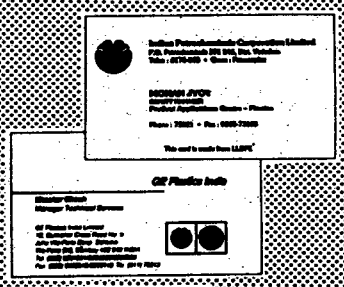




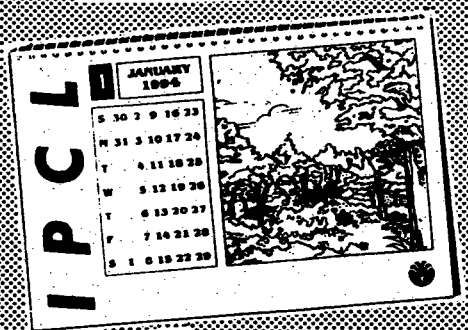
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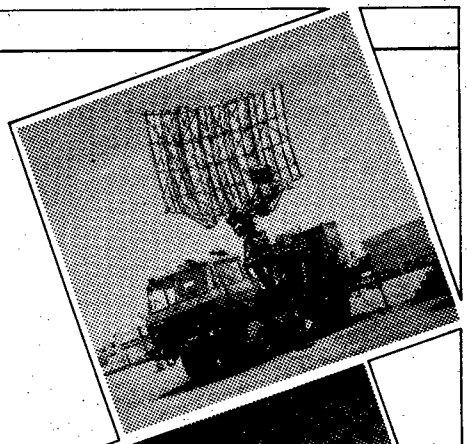
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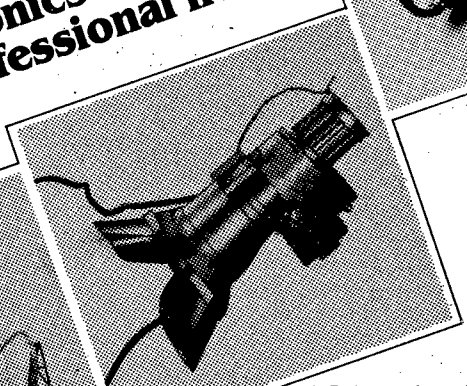
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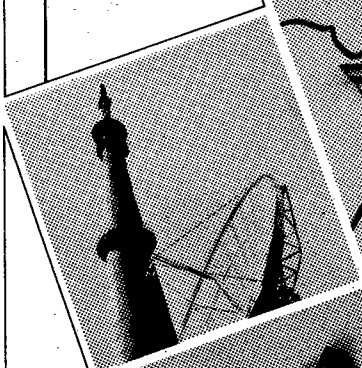
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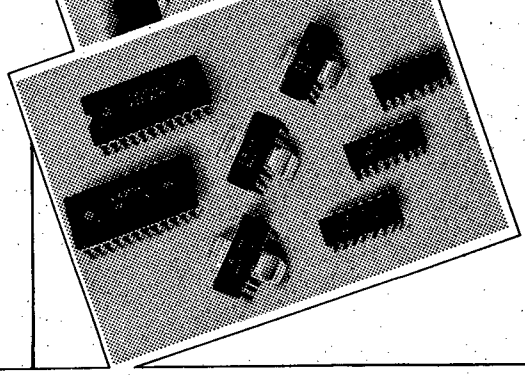




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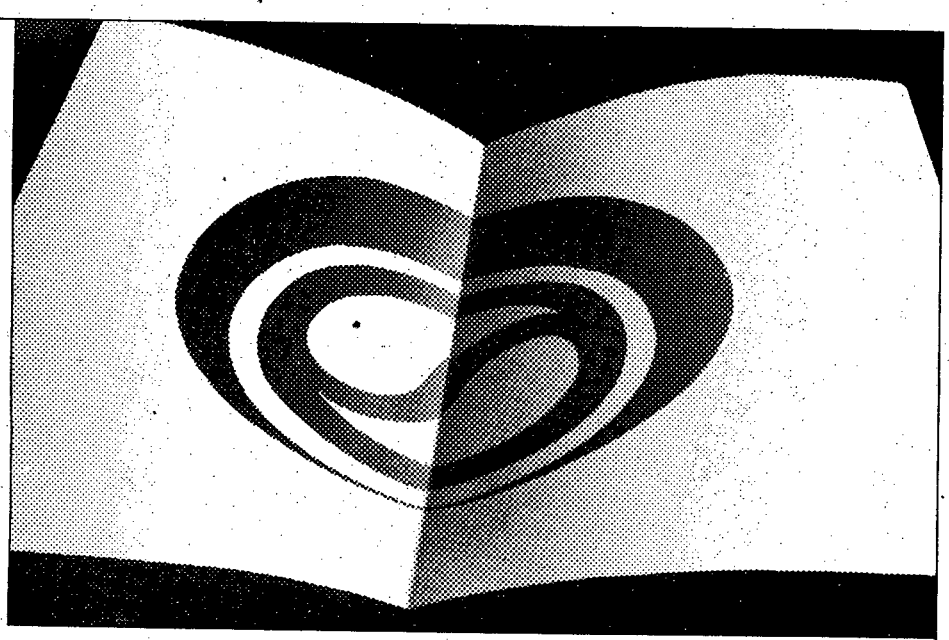
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Foreign Investment And Liberalisation

Dr. Malcolm S. Adiseshiah

Welcoming the opening up of the economy and resultant increase in flow of foreign investment, the author says that the country needs more investment, both domestic and foreign. While domestic investment is responding to the needs of the economy, the foreign investment also is beginning to increase. All efforts should be made to encourage this trend, he says.

LIBERALISATION is the term being used to cover a wide variety of reforms aimed at opening up the economy. This involves removal of various forms of control such as licences and permits as well as other barriers to investment represented by MRTP and FERA. One of the objectives of this reform programme is to invite and enlarge investment, both domestic and foreign.

Domestic Investment

This opening up of the industrial sector has led to large scale inflow of domestic funds. One sign of this is a report of the Industry Ministry of 15,000 enquiries received last year for establishing industrial units. The other indicator is that as against the average of Rs. 200 to Rs. 300 crore per annum being raised in the stock market, currently Rs. 2,500-3,000 crore per annum are being raised and yet the industrial recession persists.

A turn around is reported for the last quarter. A quick estimate prepared by the Industry Ministry covers 24 selected industries which account for 50 per cent of the group which CSO uses for its detailed Index of Industrial Production (IIP). Among the industrial groups so covered, the automotive sector has recorded the highest output at around 23 per cent. The unorganised decentralised textile industry has also shown an important improvement with a growth of 22 per cent, while the mill output has fallen by about 6.5 per cent. The manufacturing sector which has the highest weightage in IIP remains subdued for most of 1993-94 but is reported as picking up from December 1993. During much of February 1994 for which quick estimates are available, the sector grew by 7.4 per cent, so that the growth during April/February, was 2.9 per cent, as compared to the previous year's 2.4 per cent. As per the use based classification of IIP, the February growth was all round except for consumer non-durables. The consumer durables recorded a high 23.7 per cent as compared to the previous February, followed by intermediate goods 18.6 per cent, capital goods 5.1 per cent, basic goods 5.6 per cent, and consumer goods 2.5 per cent. The consumer non-durables recorded a negative growth of-1.4 per cent. For the period April/February the growth was moderate at 0.7 per cent.

Foreign Investment

The opening up of the economy has also invited foreign investment as against the annual $200 to 300 million flowing in from abroad, currently $2,000 to 3,000 million is coming in. The government reports that, in contrast to its earlier indications, net investment by Foreign Institutional Investors (FIIs) in the primary and secondary markets have shown a recovery in May 1994. Net aggregate investment by them crossed the $2 billion mark in June this year. This should be taken along with the clearance by the Cabinet Committee on Foreign Investments at the end of June for 5 proposals involving Rs. 3,157.25 crore. These projects include setting up a refinery at Pondicherry, a joint venture by Modiform enterprise with Italian collaboration, along with Ashok Leyland to augment its foreign equity, joint venture between DCM Toyota and the Korean Daewo. However it is important that the contribution of MNCs and direct foreign investment should not be exaggerated, as being the means of pulling industry out of its recession. In fact, the credit for pulling

the country out of the mess it was in 1991 goes to the NRIs who count in millions, the Indian exporters who have explored new markets across the globe, and the Indian companies who have tapped over $2.5 billion from the Euro market. Further over a third of the foreign capital inflow is being held in short term securities which is a characteristic of hot money. The Industry Ministry reports that the enquiries from foreign investors number 2,500 as against the 15,000 enquiries reported from the domestic investors referred to earlier.

Further, the latest (July) report of the Industry Ministry, raises questions about the official foreign investment projections of Rs. 3 billion for 1994. This should be compared with the Rs. 8,205.72 crore of foreign investment in 1993, which is over half the total foreign investment since the new policy was announced (during the period 1991-1994), amounting to Rs. 14,470 crore. The disturbing trend is that during the first six months of 1994 foreign investment proposals have amounted to only Rs. 1,312 crore.

In this, the US which accounted during the three years of the liberalisation period, for almost one third of the total foreign investment at Rs. 5,452.62 crore, records a negative trend in growth in the first half of 1994 at Rs. 573.39 crore compared to Rs. 185.85 crore in 1991, Rs. 1,231.50 crore in 1992 of Rs. 3,461.88 crore in 1993. This reported decline of FDI from the US if not reversed during the second half of the year would be a serious dent in our FDI prospects and scenario. Again despite several efforts by the government and business community in the country and a number of vistis of business teams from Japan, Japan has been almost a non-starter, with investment proposals of Rs. 52.71 crore in 1991 rising to Rs. 610.23 crore in 1992 and declining to Rs. 257.43 crore in 1993 and further to a meagre Rs. 18.90 crore in the first half of 1994. In the case of the other small contributors like South Korea, and Russia, there is the same trend. The countries which have steadily increased their investment proposals are the UK, Germany, UAE, France, Singapore and Canada. Australia, Austria and the Netherlands join in the declining trend.

The opening up of the industrial sector has led to large scale inflow of domestic funds. One sign of this is a report of the Industry Ministry of 15,000 enquiries received last year for establishing industrial units.

The NRIs first investment proposals in 1992 were Rs. 439.13 crore, shooting up to Rs. 1,043.31 crore but are also reported on recording a decline at Rs. 80.63 crore in the first half of 1994. It is to be hoped that the recent meeting of the India Development Forum in Paris which is the new name given to the Aid India Consortium headed by the World Bank, with its strong endorsement of the liberalisation programme will help to reverse this declining trend of foreign investment reported by the Industry Ministry. The Paris meeting of the Forum had 150 prospective private investors of trade and industry who advised that greater attention needs to be paid to removing procedural constraints to timely investment approvals. Areas that require attention in order to strengthen India's ability to compete for investment funds in international market, were also identified. In the follow up meetings to this, being planned by the government and private sector in India, the suggestions made should be filtered in relation to our programme of liberalisation and prioritisation and quickly implemented to reverse the declining investment trend noted above, during the first half of the year.

Positive Features

The positive aspects of foreign investment are mainly connected with the technology and modernity that accompanies it. Indian industry is not only lagging in this area of modern technology, but is also not generating or adapting the fast growing technologies in the non-energy-intensive, non-material-intensive areas, for which we are still dependent on foreign technology.

The credit for pulling the country out of the mess it was in 1991 goes to the NRIs who count in millions, the Indian exporters who have explored new markets across the globe, and the Indian companies who have tapped over $2.5 billion from the Euro market.

The other positive feature is that foreign investment also relieves the Balance of Payment problem of the country, because there is no problem of repayment that borrowing from the international money market or bilateral donors involve.

A further advantage of foreign investment hopefully is that it will accelerate the development of industry, and help overcome recessionary tendencies. In this connection, I should mention that one of the paradoxes of the Indian economy is that the rate of savings which is relatively high at over 23 per cent to 24 per cent of GDP over a two and a half decade period, has not however produced commensurate industrial growth rates. This contradiction has been reviewed in my Mid-year Review of the Economy, year after year, without being able to identify the causes for this lack of correlation between the high savings rate and the low or medium growth rate in industries. In regard to the primary industry; agriculture and allied activities which have close links with manufacturers,

there has been in the last five years a disturbing decline in capital formation and investment in that area. This has attracted the attention of the World Bank which notes the decline in the growth of private investment in it over the years, from 2.8 per cent per year in the 70s to 1.9 per cent in the 90s. The Bank has identified the following four constraints to account for this serious development:

1. The decline in public investment in agriculture.
2. Implicit taxation of agriculture which lowers its profitability.
3. The current policy regime which discourages domestic agricultural trade and private investment.
4. A number of acts and orders on agriculture such as (a) universal licensing requirement for wholesale trade, storage and processing, (b) movement restrictions requiring official permits to move, for instance, paddy out of Tamil Nadu and Andhra Pradesh, (c) cold storage restrictions, (d) ban on futures and forward trading of agricultural commodities and (e) public procurement through levies on rice and sugar. With the opening up of the private sector to include sericulture, aquaculture and floriculture, areas in which the foreign investment can be and is being deployed because they are attractive to the foreign investor in terms of returns, there could be a turn around also in the rate of agricultural investment.

Problems

Foreign investments also present problems.One problem with foreign investment is that it has been attracted through offering various incentives and concessions which are not available to the Indian investor. The most glaring example of this is in the power sector, where government has guaranteed a 16 per cent return to foreign investors. The development of what is called the Bombay Club and its main plea for a level playing field arises from this unevenness in the returns to investment to the foreigner as compared to the Indian.

A second danger to be guarded against is that the foreign investor is being mainly motivated to invest in areas where the highest profits can be obtained, not paying much attention to the country's priorities. For instance, the consumption goods industries, like Coca Cola, Pepsi Cola, Mcdonnald, and other fast foods enterprises are rapidly developing with their investment and technologies, to the neglect of investment in durable consumer goods and most importantly in the capital goods sector. On this, even for the frame work of a free market economy which liberalisation represents, the examples of Japan and Korea could be followed where governments help in directing foreign investment in the priority areas of the country.

A further problem with foreign investment which is already being experienced is that in certain new areas like aquaculture as well as in traditional areas like thermal power, serious environmental problems are being created in view of India's fairly open system in regard to various forms of pollution. Industries, including parts of them as in some pharmaceuticals which are not permitted in the industrialised countries of the West, are brought to India and endanger lives and create serrious problems of pollution of the area, of water, air etc. This points to the urgency of the government in undertaking antipollution legislation and other directives to safeguard the environment.

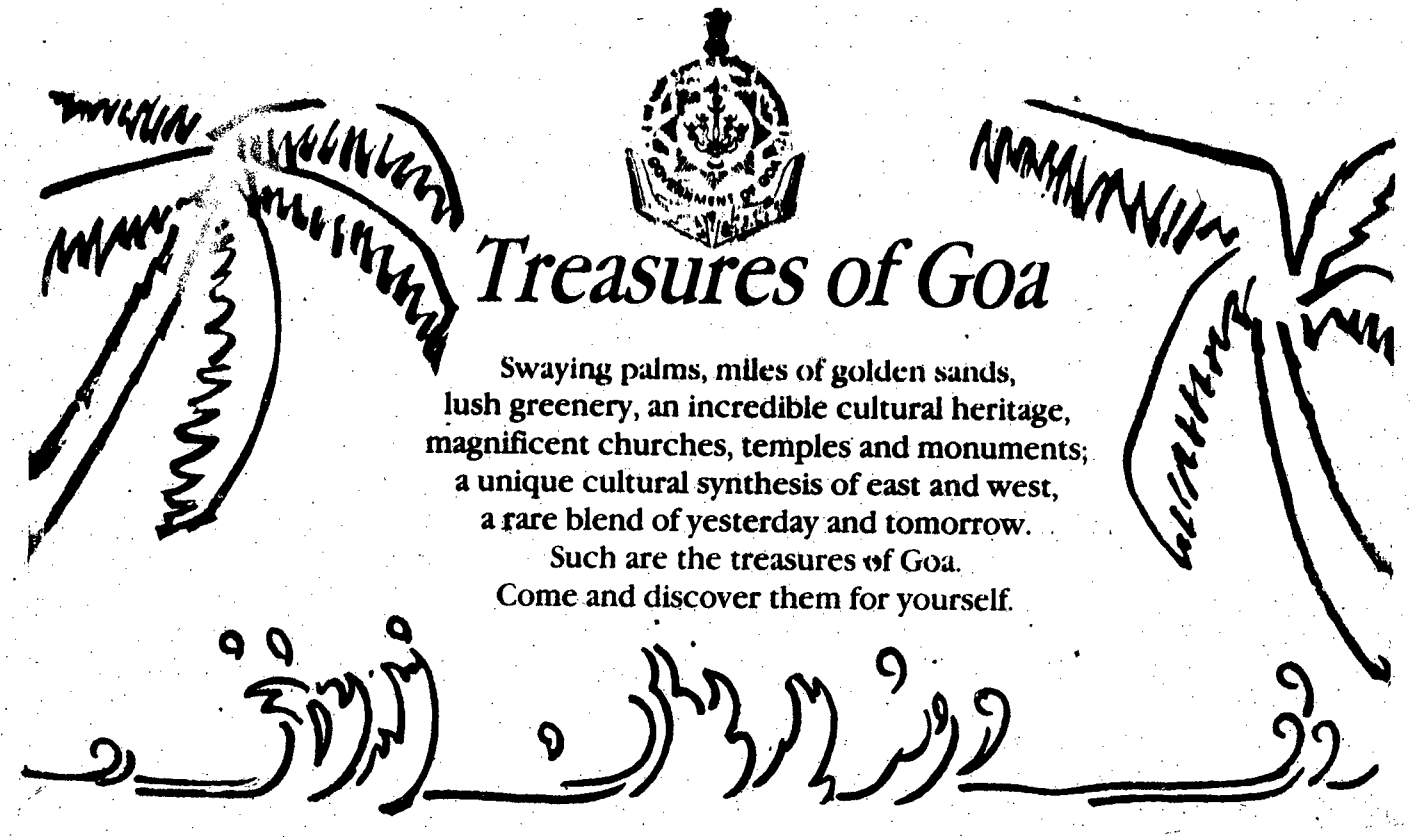
Some Concluding Thoughts

The economy needs more investment, both domestic and foreign. While domestic investment is responding to these needs, foreign investment also is beginning to increase.

Everything can and should be done to encourage this trend, while undertaking the necessary safeguards against their ill effects and misuse, as has been done by the East Asian economies including China which are attracting large amounts of foreign investment but under condition in which the governments overview and the country's safeguards are ensured. In this matter, for instance the restructuring of the National Environmental Tribunal Bill 1992 recommended by the Standing Parliamentary Committee should be followed whithout modification. This relates particularly to pollution caused by any factor and not only when hazardous substance are involved. It is good that the original Bill's restrictions of not covering government agencies causing accidents is removed, on the basis of the recommendations of the Parliamentary Committee. This means that Central and state governments and their agencies will not be granted exemption from the Bill's purview.

Foreign investment can also be used for renovation and modernisation of existing enterprises and not only for new projects. Fresh investment for green-field projects which are also needed require a gestation period of four to five years. Investment for renovation of the existing projects will require less investment and a shorter term than green-field projects. This applies particularly to the somewhat outdated power plants in which the state governments and theState Electricity Boards are heavily involved. ❐

The author is Chairman, Madras Institute of Development Studies, Madras.



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Market And Planning

Prof. S.R. Hashim

Functioning of a free market is essential for evaluation of efficiency. Planning is, however, equally important as it has been playing a vital role in creation of facilitating environment for achieving higher goals of social and human development and also for building up necessary infrastructure, says the author.

It was during the decades of forties and fifties when most of the Third World countries, having achieved independence from the colonial rule, found themselves in a position to give some concrete shape to the pursuit of their aspiration for development. The underdeveloped countries at that time had, behind them, the experience of economic decline spread over a long period of time, mostly under colonial exploitation and economic stagnation before that. These countries also had seen the advantages of technological advancement and industrial revolution which really gave military and economic strength to the colonial powers.

It was natural to expect that given the freedom of managing their own affairs these countries could also achieve industrial and technological advancement. The Soviet revolution was another experience to look at. While a complete revolution of that type was not always welcome, the strong role that "Planning" could play in turning the tides of economic fortunes was seen from the Soviet example. In keeping with these trends, thinking in economics was also undergoing a change. Economics which was earlier concerned with equilibrium processes, trade cycles and natural growth processes, started paying attention to problems of development. Development was rightly conceived as different from natural growth. It was defined mostly as human and social development conditioned by economic prosperity. The First Five Year Plan of India clearly stated that the central objective of planning in India at that stage was to initiate a process of development which would raise living standards and open out to the people new opportunities for richer and more varied life. The First Plan recognised that the problem of development of an under-developed economy was one of utilising more effectively the potential resources available to the community and it was this which involved economic planning. Planning was to be viewed as an integral part of a wider process aiming not merely at the development of resources in a technical sense but at the development of the human faculties.

Models

A variety of models of development were thought out, which collectively formed a rich body of literature on economics of development. The emphasis at the core of these models was "accumulation" (i.e., savings and capital formation) and "modernisation" (technological upgradation and industrialisation). It was also perceived implicitly or sometimes stated more clearly that in order to give a push to the process of accumulation and modernisation and in order to shorten the time period involved in the complete transformation of the economy, the State had to take initiative and play a major role in the process. States' initiative and role could only take shape under a planned framework of development.

Primacy was given to State's initiative mainly in view of the initial conditions which were characterised by undeveloped markets, undeveloped institutions, absence of basic infrastructure and lack of entrepreneurship, etc. The process of development just could not get started on its own under these circumstances, and hence the State had to play a major role in bridging these gaps. This was the beginning of the justification of State intervention in natural working of the market.

Preventing Dualism

Most of the underdeveloped countries had in early stages this feature in common: miserable existence for a large majority of the people and affluence of a few. Due to the vast gap between asset holdings, knowledge and experience between the poor and the rich, and between the rural areas in general and a few urban centres, whenever and wherever attempts were made to initiate developmental

activities or create new economic opportunities, only those who had training in deriving benefits from such opportunities i.e., the affluent class, took the advantage and the benefits were confined within narrow circles. This created dual structures in society. In order to prevent the perpetuation of dualism, it was thought, attention had to be paid to income distribution. Land reforms, and reforms of tenancy system were the first major thrusts. Later on, more stringent measures of imposing ceiling on rural land and urban property were also legislated. Prevention of concentration of income and wealth became another goal to be pursued through public policy.

To start with public sector was perceived as one which could make up for the missing ingredients in growth, i.e., infrastructure, capital-intensive production of capital goods, financial and other institutions, research and technology etc. Later on, income distribution (prevention of concentration of economic power and wealth) became an important justification for the public sector. This led to a spate of nationalisation measures. Nationalisation of the scheduled commercial banks in 1969 was a land mark in this process.

Development was rightly conceived as different from natural growth. It was defined mostly as human and social development conditioned by economic prosperity.

Income distribution as an objective in the plans had always remained vague. There was no clearly laid out strategy either to reduce the gaps between the low and the high levels of income, or to ensure a "minimum level" of living. This inadequacy was perceived during the early years of the Third Plan, and a working group was set up by the Planning Commission to work out a "minimum level of living". Quantitative implications of achieving this target were also worked out. But in the wake of severe economic dislocations during 1965 and 1966 it was forgotten.

Poverty Alleviation

During the late sixties and early seventies, a number of studies came out with quantification of the incidence of poverty. Poverty alleviation targets and programmes were given increasing importance in the subsequent plans. The programmes were mainly of two types: employment generation through rural works and enabling the poor to acquire productive assets through loans and subsidies. These programmes have acquired high political importance due to their mass-reach and their visibility. This role of the State and planning has come to acquire a more popular acceptance.

Socialist Pattern

A re-enforcement of the distributional objective had been attempted in the Second Five Year Plan Document when "socialist pattern of society" was defined for the first time. The document stated that essentially the phrase "socialist pattern of society" meant "that the basic criterion for determining the line of advance must not be private profit but social gain, and the pattern of development and the structure of socio-economic relation should be so planned that they result not only in appreciable increase in national income and employment but also in greater equality in incomes and wealth." This statement might not have substantive impact on income distribution as such, but it continued to have an impact on the approach towards the evaluation of need and performance of public sector investments. In fact, much of the early discussion on public sector pricing policy was based on the idea that the public sector ought not to make profits.

It was in this background that Planning in India adopted a mixed strategy of working through the market intervention. However, market intervention took many forms. Some of these forms resulted into inefficiencies and waste of resources. While some others succeeded reasonably well in achieving the objectives.

Planning Interventions

Two broad indicators are generally used to indicate the extent of planning intervention in the market economy. One is the share of public sector in capital formation, and the other is the share of public sector in domestic product. Neither of the two is an exact indicator of the extent of planning intervention. A large part of capital formation in the public sector is for laying down the infrastructure like roads, irrigation and communication systems, etc., benefits of which accrue to private producers without paying a cost commensurate to the benefits. This type of infrastructure in fact expands the scope of the market and facilitates its working-and hence it can hardly be called intervention. Share of public sector investments in transport, communication and energy sectors is very high. (Table-1). On the other hand the State (or the Planning authority) also intervenes with the working of the market through fiscal policies, price controls, licensing of economic activities, etc., which does not get reflected in the public sector's share in production. Subject to these limitations, share of public sector in production and investment can be taken

Market intervention took many forms. Some of these forms resulted into inefficiencies and waste of resources. While some others succeeded reasonably well in achieving the objectives.

Table-1

Sectoral Investment during the Eighth Plan (1992-93 to 1996-97)

(Rs. crore at 1991-92 prices)

Sl. No.	Sector	Public	Private	Total	Share of Public Sector in Total Investment by sectors (%)	Sectoral Distribution		
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	Agriculture	52000	96800	148800	34.95	15.24	11.23	18.65
2.	Mining & Quarrying	28500	11100	39600	71.97	6.06	6.70	4.96
3.	Manufacturing	47100	141300	188400	25.00	23.60	26.00	23.61
4.	Electricity, Gas & Water	92000	10120	102120	90.09	12.07	13.65	12.80
5.	Construction	3300	17240	20540	16.07	2.73	1.86	2.57
6.	Transport	49200	38710	87910	55.97	9.42	9.93	11.02
7.	Communication	25000	1000	26000	96.15	1.50	2.03	3.26
8.	Services	63900	120730	184630	34.61	29.38	28.60	23.13
	Total	361000	437000	798000	45.24	100.00	100.00	100.00

Note: Sixth & Seventh Plan figures are calculated at 1980-81 prices.

Source: Government of India, Planning Commission, *Eighth Five Year Plan* (1992-97). Vol. I, p. 55

Table-2

Share of Public Sector in Gross Domestic Capital Formation and Gross Domestic Product at Factor Cost

(At current prices)

At the End of		% of Public Sector to Total GDCF	% of Public Sector to Total GDPfc
1.	First Plan (1955-56)	33.97	
2.	Second Plan (1960-61)	45.20	
3.	Third Plan (1965-66)	45.09	12.28
4.	Annual Plans (1968-69)	41.97	12.63
5.	Fourth Plan (1973-74)	40.20	14.07
6.	Fifth Plan (1978-79)	40.79	18.70
7.	Annual Plan (1979-80)	46.82	19.73
8.	Sixth Plan (1984-85)	54.87	23.57
9.	Seventh Plan (1989-90)	41.51	27.13

Source: National Accounts Statistics, Central Statistical Organisation, India.

GDCF=Gross Domestic Capital Formation

GDPfc=Gross Domestic Product at factor cost.

as a broad indicator of extent of planning intervention.

Table-2 shows that share of public sector in total investment in the Sixth Plan was the highest (nearly 55%), otherwise it has generally remained at less than 42 per cent except during the Second and the Third Plans. The Sixth Plan did invest more in infrastructure, particularly energy and transport, and this is one important reason for generating higher GDP growth during the eighties. Contribution of public sector to GDP has been growing—from a little over 12% in the Third Plan to over 27 per cent in the Seventh Plan. Thus, nearly three-fourth of the production does take place in the private sector. However, the production activities in the economy has been widely governed by tariff rates, administered prices of essential inputs like power, petroleum, steel, etc., and industrial licensing and other controls.

Forms Of Interventions

Planning for development implies taking an overall view of social compulsions and needs, resources, constraints and possibilities, and chalking out a path of production and human development for the country as a whole. Indian Plans have always done this. However, when it comes to adopting instruments for achieving those goals, there are many possibilities. Instruments, in fact, are planning interventions, and these can take various forms. The Indian planning process is a mixture of, broadly, the following forms:

(a) Direct State participation in production activity.

(b) Directing the economy through regulatory mechanism—licensing, controls, regulation of financial institutions, fiscal policies and other regulatory policies.

(c) Giving direction to the economy indirectly through creation of facilitating environment and incentives.

(d) Investment in human resource and minimum needs.

(e) Investment activity, expenditure or allocation of funds aimed at protecting the relatively weaker sections or weaker regions.

Production And Regulatory Mechanism

The Second Five Year Plan was more explicit, both on the development strategies for the nation and the instrumentality of achieving it. What was perceived then dominated the working of Indian economy for the next two and a half decades. The Second Plan accorded high priority to industrialisation and especially to the development of basic and heavy industries. A large expansion of public enterprises in the sphere of industrial and mineral development was envisaged. Heavy industry, oil exploration, coal and atomic energy were given priority. The main responsibility for these programmes was given to the Central Government. A new Industrial Policy Resolution was adopted in 1956. In accordance with this policy, the public sector entered into direct production activity in a broad range of industries—steel machinery, defence equipment, chemicals, petroleum products, shipping and aviation and road transport operation and even the production of consumer goods. The increasing share of public sector in production sphere can be seen from the following figures of public sector share in total gross value added from the manufacturing sector.

Failure In Production

It is generally agreed now that the public sector has not done well in the production sphere. Barring a few exceptions, public sector failed to generate its own resources, maintain a reasonable growth rate, productivity and reasonable degree of efficiency. Inefficiency of public sector in this sphere had implications for the inefficiency of the economy as a whole. Reasons for inefficient performance could be many. The basic strategy of going in for heavy industries and basic processing at the initial stages of development has been questioned. Many of the successful cases (countries) are those which started with assembling and final processing and slowly moved towards basic processing which requires much higher technological input. Constantly updating the technology apart from the availability of technology requires fast rate of obsolescence which a capital short economy can ill afford. We lagged behind in technology in all those industries which required high technological inputs.

A large part of capital formation in the public sector is for laying down the infrastructure like roads, irrigation and communication systems, etc., benefits of which accrue to private producers without paying a cost commensurate to the benefits.

Even more important reason for failure of the public sector in production sphere may be its inability for self-evaluation, in respect of cost and efficiency. The administered prices for inputs and outputs, in course of time, distort the evaluation of costs and profits. This tendency is further strengthened in a monopolistic environment and under high degree of protection from foreign trade.

Public sector enterprises have also been stiffled for lack of autonomy in their operations and accommodations that they had to make towards political and bureaucratic demands. The idea that "the public sector ought not to make profits" re-inforced the dominance of objectives other than purely commercial objectives. A few enterprises in the public sector which performed well, like HMT, happened to have more competitive environment and also a higher degree of autonomy in their working.

The regulatory mechanism also expanded over the years. The principal instruments of policy were an elaborate industrial licensing framework under the Industries Development and Regulation Act of 1951, a protective foreign trade regime, the Monopoly and Restrictive Trade Practices (MRTP) Act which became effective in 1970, the Foreign Exchange Regulation Act of 1973, etc. There was also a separate policy of reservation for certain lines of production in small scale sector. This policy regime resulted into barriers to entry, protection from foreign competition, restrictive hurdles, and generation of rental income for some. Thus the regulatory regime came in the way of achieving the growth potential of the economy. The industrial sector was supposed to be at the base of modernisation and transformation of the economy. Its growth remained very low. However, public sector participation in industrial activity did help to create a diversified industrial base, gave opportunity for learning by experience, served as great

	1960-61	1969-70	1979-80	1989-90
Share of Public Sector in Manufacturing Gross Value Added (Percentage)	2.49	8.49	12.00	18.2

inducement to the development of a large size of technical and skilled manpower.

Facilitating Environment

A very important role that the process of planning and the public sector have performed affecting large segments of the economy is giving direction to the economy indirectly through creation of facilitating environment and incentives. This has broadly included the following:

(a) Creation of infrastructure to facilitate production and trade—mainly transport, energy, communication and irrigation.

(b) Creation of institutions to facilitate production and trade—special financial institutions, cooperatives, regulated markets, institutions to disseminate information and technology, etc.

Planning for development implies taking an overall view of social compulsions and needs, resources, constraints and possibilities, and chalking out a path of production and human development for the country as a whole.

(c) Special arrangements for production, supply and distribution of crucial inputs—essential raw materials, essential minerals and metals, power and petroleum, seeds and fertiliser, etc.

(d) Research and technology development and its dissemination.

The physical infrastructure, particularly in the areas of energy, transport, communication and irrigation has largely been a creation of public sector. Nothing has helped development as much perhaps as the provision of physical infrastructure. Similarly, public sector has been responsible for evolution, strengthening and expansion of financial institutions. After nationalisation of banks in 1969 large-scale expansion of bank branches took place in rural areas. A number of specialised financial 'institutions' for industry and agriculture were instituted. Special arrangements for easing the supply of essential inputs were made from time to time. Particular attention, after mid-sixties, was paid to agriculture sector in respect of supply of seeds, fertilizer and power. Government sponsored research or research by government sponsored institutions (like agricultural universities) took a leading role in adopting the high yielding varieties of seeds to local conditions and in disseminating the results of such researches.

Achieving the targets by indirectly leading the economy along a desirable path through creation of facilitating conditions has been more successful, wherever practised with a clarity of goal and objectives. Two good examples of success in this line are:

(a) Success in achieving good rates of domestic savings.

(b) Success in achieving relative self-sufficiency in food production.

Domestic Savings

As stated earlier, accumulation and modernisation constituted the basic paradigm of development from the very beginning in India. And hence domestic savings were emphasized from the very beginning, even when the average levels of incomes were very low. It is not just incidental that India today has a rate of domestic savings at more than 21 per cent of GDP, whereas most of the developing countries in similar income brackets have half that rate or less. In 1950-51 rate of domestic savings in India was 10.4 per cent, of which the household sector was saving 7.7 per cent of GDP. By 1988-89, the rate of domestic savings was nearly 21 per cent and the household sector was saving 17.5 per cent of GDP.

This was achieved in earlier years by constraining the supplies of consumption durables and through expansion of financial institutions, financial innovations and extension of incentives (tax concessions etc). During the eighties the government performance in savings had been particularly bad. Government savings had turned negative. As a result, for sometime during the eighties the savings had plateaued around 20 per cent but there has been a rise again during the recent years. Household sector continues to improve its performance in savings.

Barring a few exceptions, public sector failed to generate its own resources, maintain a reasonable growth rate, productivity and reasonable degree of efficiency.

Food Production

Indian agriculture, particularly the food production and food management, has been another success story of Indian planning. Agriculture as a sector had been emphasised from the very beginning of planning in India simply because of food requirements and large masses of people directly subsisting on agriculture. However, food supplies were being supplemented by imports, quite a bit of which was on concessional terms. In the meanwhile, population was also growing at a higher rate than expected. Due to the severe droughts of 1965 and 1966 and the prevalent conditions of famine with difficulties in the availability of imported food, the country was jolted out of its

complacency on this account. A major thrust to agricultural planning was given in the Fourth Five Year Plan (1969-74).

The Intensive Agricultural District Programme (1960-61) and Intensive Agricultural Area Programme (1964-65) had operated within the limitations set by existing crop varieties which had relatively low response to fertilizers. A major change occurred with the introduction of high-yielding varieties. The Sixth Plan (1969-74) set out the following elements of a strategy for intensive agriculture:

(1) Coordinated research in respect of all important crops.

(2) Continued expansion of irrigation facilities.

(3) Improvement in the utilisation of existing irrigation potential.

(4) Expansion in the supply of fertilizers, plant protection material, farm machinery and credit.

(5) Intensive efforts in selected suitable areas for raising the yield levels of major commercial crops.

A very important role that the process of planning and the public sector have performed affecting large segments of the economy is giving direction to the economy indirectly through creation of facilitating environment and incentives.

(6) Improvement in agricultural marketing system in the interest of the producer along with assurance of minimum prices for major agricultural commodities.

Agricultural research was accorded an important place in the plan. The Indian Council of Agricultural Research, which was an apex organisation for sponsoring coordinating and directing agricultural research was reorganised. A multi-disciplinary and coordinated approach to agricultural research was adopted.

Special attention was paid to multiplication and distribution of improved seeds. Supply and distribution of fertiliser formed a special component of the Plan. Similarly, attention was paid to agricultural credit and agriculture marketing.

The role of minimum support prices in facilitating agricultural production was recognised. The following principles of pricing were endorsed:

(i) The announcement of prices should be made well before the sowing season.

(ii) In order that guaranteed minimum support prices may help in creating a favourable climate for long-term investment, the prices should be fairly stable over a long period.

(iii) Government should provide wide publicity to the minimum support prices and to the effect that it will be prepared to purchase all the quantities offered to it at those prices.

(iv) Adequate arrangements would be made at important markets for making purchases at the support prices whenever the needs arise.

These principles are still being followed.

Elements of agricultural planning have been strengthened over the years. During the course of the Seventh Plan a Special Area Action Plan (after the drought of 1987-88) was launched, and another extensive programme of Agro-climatic Zonal Planning was launched, which is going into elaborate evaluation of problems and potentials of agricultural development of each of the agro-climatic regions of the country.

The procurement at declared prices and buffer stocking has helped in stabilising production of major food grains on the one hand and avoiding food scarcity and food stress in years of monsoon failure on the other. A very severe drought of 1987-88 could be faced without severe shortages of food and without dislocating the economy in general.

Agriculture is an excellent example of achieving goals through creation of facilitating environment rather than direct control and fiat.

While population in India has been growing at the rate of 2.1 per cent over the last 40 years, growth in food grain production has been maintained between 2.75 to 3.0 per cent. The rate of growth has improved during the later years.

Agriculture is an excellent example of achieving goals through creation of facilitating environment rather than direct control and fiat. Millions of peasants make their own investment and production decisions, but their behaviour is guided by infrastructural facilities, type of seeds and inputs available and the prices they expect.

Human Development Goals

In a certain sense, human development is the ultimate goal of society. The Eighth Plan gives top priority to this objective. The main elements of this objective are: employment generation, population control, literacy, education, health, drinking water and provision of adequate food and basic infrastructure for congenial living. Planning has, through public sector investment and expenditure, performed a crucial role in this area in the sense that whatever levels of health, literacy, education

etc., have been achieved at the given low levels of income would not have been possible without public intervention. Example of Kerala within the country and Sri Lanka in the neighbourhood of India shows that with careful planning and public intervention, excellent results can be obtained in this sphere even with moderate levels of income, which would perhaps not be achieved in an unplanned environment even with higher levels of income.

As mentioned earlier, there are large sizes of plan programmes for poverty alleviation and generation of employment. While, there is much to be desired in their implementation, independent evaluations do show that these programmes have benefited the poor to a large extent.

Conclusion

The failures of planning interventions have been more glaring where the State participated directly in production activity. The consequences for the health of the economy have been even worse where the State tried to achieve its social goals through a regime of controls and fiats. However, reasonably good and successful results have been obtained where the State has played a facilitating role. The facilitating role is performed by creation of conditions and environment which will guide the private investment and production decisions along the socially desirable lines. Functioning of a free market is essential for evaluation of efficiency.

Planning is, however, needed for creating a long-term vision of society in terms of social and human development and also for building up the necessary human, social and physical infrastructure in order to lead society towards that goal. This involves protection of ecology, regeneration of environment and management of natural resources and technology. It also involves paying a special attention to people and regions with relatively more inadequate levels of development. ❐

The author is Principal Adviser, Planning Commission.

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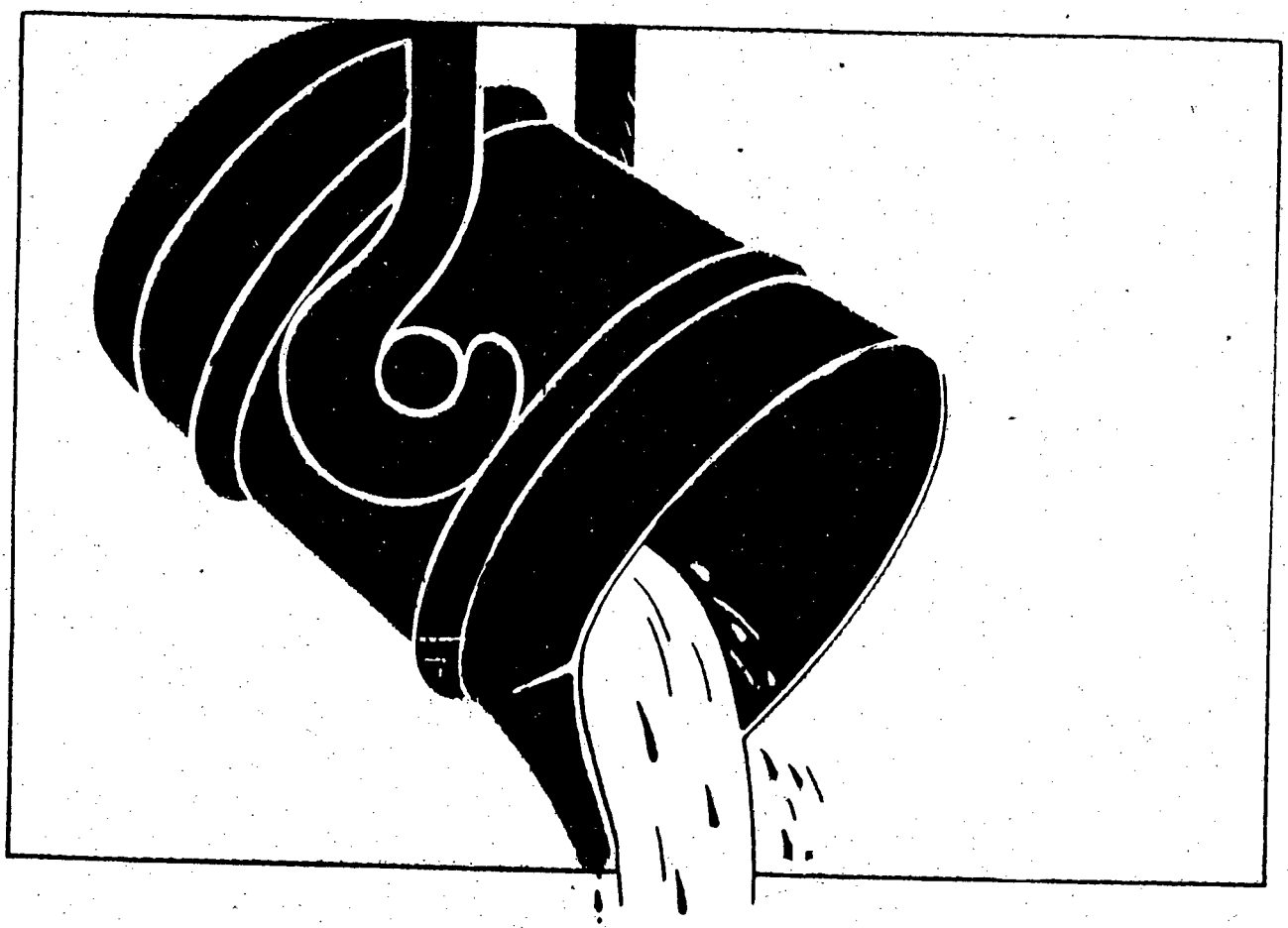
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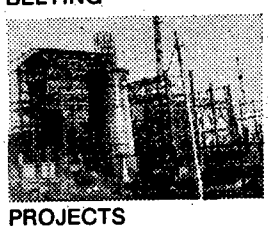
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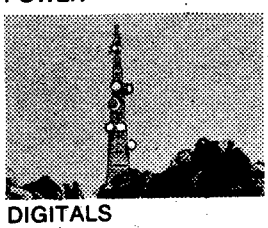
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Private Sector
A Significant Partner In Progress

Dr. Bansi Dhar

Underlining the vital role of the Private Sector in country's development, the author points out that it has been regularly supplementing governmental efforts to push the economy ahead. The ongoing liberalisation process would further increase its importance as well as contribution, he feels.

THE economic history of modern India began with the First Five Year Plan. Given the political and economic scenario, it was felt that the best approach to development would be a socialist pattern of society with the focus on State led growth. Accordingly, the commanding heights of the economy were reserved for the public sector. As per the industrial policy resolution of 1956 industries were licensed and any entrepreneur in the private sector had to first take a licence before he could proceed with business. Licensing arguably was designed to ensure that there was no wastage of resources as the State was supposed to be the best judge of demand and supply conditions. In this scenario the outlet for growth in the private sector was limited. In fact, it goes to the credit of the entrepreneurs that the private sector began taking shape, although on a limited scale, right from the day one.

The public enterprises were built up both under central and state governments. Today, they comprise a large portion of the industrial base, technological capabilities and stock of human capital. There are about 1,000 public sector units of which roughly 700 are under state governments, the rest are in the Central sector. Even as of now public sector enterprises contribute the entire output in the case of petroleum, lignite, copper and over 90 per cent of coal. They also contribute more than 50 per cent of steel and alcohol and about 1/3rd of fertilizers.

It was, however, realised that the over dominance of public sector would be detrimental to rapid industrialisation. In fact, in the First Five Year Plan itself it was felt that large private investment was inhibited by the uncertainties arising from State ownership and management and the control and regulation in the private sector. These fears were allayed to an extent by the Industrial Policy Resolution, 1956 but the stop-go kind of situation which prevailed till 1968 and then a more stringent move towards socialism following the nationalisation of banks impeded the dynamism of private sector.

Slow Growth

Lack of competition, increasing bureaucratic style of functioning and lack of profit motivation led to slow growth of public sector. The Indian economy slowly started becoming high cost and the capital output ratio started climbing up. The increasing emphasis on autarchy under the garb of self-reliance further led to uncompetitive production. Quality suffered and as a result consumers had to pay high prices. Bearing testimony to this theory are the comparative growth rates and productivity levels of countries like South Korea, Taiwan, Japan, Hong Kong and later on Malaysia, Philippines and China in Asia itself. In fact in 1960 South Korea had a per capita income lower than that of India. By 1992, while India's per capita income had inched towards $ 310, South Korea enjoys a per capita income of over $ 6,700.

This difference came about because of the different economic policies followed. South Korea from 1960 itself had a market and export oriented economy. It was able to take advantage of the growing international trade. The need for export required international level of competitiveness and thus

continuous upgrading of technology. South Korea addressed itself to these crucial issues. In a nutshell, instead of binding its economy through tariff barriers, it let loose the entrepreneurial skills and spirit of its people through well directed market oriented policies. The results tell their own tale and there is no room for doubt that an open economy with a vibrant private sector and with healthy competition internally and externally can do wonders.

Statistics reveal that in 1960 India was the 12th largest contributor to global industrial production and contributed 1.1 per cent of the total production. In 1980, India as a contributor to global production in industry slipped to the 22nd position

Lack of competition, increasing bureaucratic style of functioning and lack of profit motivation led to slow growth of public sector. The Indian economy slowly started becoming high cost and the capital output ratio started climbing up. The increasing emphasis on autarchy under the garb of self-reliance further led to uncompetitive production.

accounting for only 0.9 of global production. This phenomenon can be basically attributed to the declining performance of the public sector which was the only producer in the core sector.

The poor performance of the public sector undertaking in India is also reflected in the abysmally low return on investment. The growing monopoly of public sector units led to the decline in their efficiency and consequent increase in the capital output ratio resulting in reduction of profits and capital available for reinvestment. By 1987-88 the net fixed capital in factories was around Rs. 48,000 crore in the public sector and Rs. 23,000 crore in the private sector. The point of concern is that addition to gross value of output was only Rs. 45,000 crore in the public sector while it was Rs. 92,000 crore in the private sector i.e. more than double at half the investment. The net value added also was Rs. 9,600 crore in the public sector as against nearly Rs. 16,000 crore in the private sector. Although, public enterprises were fulfilling social objectives but the cost involved was substantial as the return on investment was minimal and in fact even today it is only around 2.3 per cent.

Review Of Industrial Policy

It made sense to review the earlier industrial policy and redefine the role of public sector in India's socio-economic development. The experience of other countries in similar situations helped Indian Government to re-orient its policy and streamline in such a manner that private sector has been given a major role to play. As a result, investment of public sector shows a humped curve signifying that the share of public sector in total investment has begun to come down with the private sector increasing its share. The public sector accounted for 54.6 percentage of total investment during the Second Plan with the private sector accounting for the remaining 45.4 per cent. The public sector's share increased to 57.6 per cent in the Fifth Plan, since then has been declining and now stands at 45.2 per cent during the Eighth Plan, while the private sector share has been gradually increased to 54.8 per cent. Thus, we see that between the Second and Eighth Five Year Plans, the percentage of investment between the public and private sector has been reversed.

According to available statistics major investment projects in Mining, Manufacturing and Electricity in respect of which investment decisions have been taken for 1992-93, the public sector accounts for about 44 per cent of the total investment and private sector 41 per cent. The remaining being in the joint sector.

South Korea from 1960 itself had a market and export oriented economy. The results tell their own tale and there is no room for doubt that an open economy with a vibrant private sector and with healthy competition internally and externally can do wonders.

The Indian Government undertook several measures to relax and liberalise licensing provisions in the 1980's in the wake of external oil price shocks of 1973 and, 79 which drove home the point for enhancing the productivity and efficiency of the private sector. These measures included automatic growth of installed capacity at the rate of 5 per cent per annum above the authorised capacity in 15 engineering industries. But these concessions were hedged with restrictive provisions. However, the policy of giving freer reign to private sector continued through the 1980s. The Indian private sector did respond to these policy changes.

India's industry grew at an average annual rate of 8 to 9 per cent with significant expansion of private sector. The economy achieved a growth rate of 5.2 per cent during the 1980's as against an average growth of 3.5 per cent in the preceding decades.

The gulf war in 1991 brought India's economy to a virtual standstill. Economic growth slowed down to almost zero. Industrial growth turned negative. Inflation picked up. Consequently imports were squeezed and a restrictive monetary policy adopted which further enhanced the recession. The economy came to a

point when its foreign exchange reserves were down to equivalent of two weeks of imports. Its international credit rating was lowered. It was in this background that the current phase of revolutionary economic reforms was devised and implemented. The public sector is being pushed back. It has been realised that private enterprises in an environment of a market oriented economy characterised by healthy competition is the best motivator of efficiency and productivity. The private sector has now been allowed entry into all but 6 strategic areas like nuclear energy etc. and only 15 industries remain under licensing.

Partner In Progress

The Private sector on its part has played an important role as partner in India's progress. It has supplemented the efforts of government to push ahead the economy. Private enterprises also contributed significantly to India's economic development. In fact, its

The gulf war in 1991 brought India's economy to a virtual standstill. Economic growth slowed down to almost zero. Industrial growth turned negative. Inflation picked up. Imports were squeezed and a restrictive monetary policy further enhanced the recession.

contribution of Rs. 4570.5 billion (at current prices) in 1992-93, contributed as much as 72.8 per cent of GDP.

Over the years India has emerged as one of the largest producers of many industrial products including bicycles, scooters, chemicals, engineering, & electronic goods, cotton nylon, textile and leather products. The private sector has been the major producer of these items and has now entered the services sector also. Private sector contributed 64.5 per cent of gross industrial output in 1992-93. Agriculture of course in India has been a total private activity. Production in these areas grew substantially. It was rightly envisaged that the private sector would be the supporting arm of the government for achieving industrial growth. Private sector could have played a much bigger role had it not been subjected to the restrictive industrial policy.

The private sector has also been a major earner of precious foreign exchange. India's exports right from the 1950s basically comprised primary products, taxtiles, enginering products, gems and jewellery. Later on items like leather products, readymade garments, handicrafts also formed part of exports. Exports of most of these items have been from the private sector and that too in the medium and small scale sector. In 1992-93, total exports from the private sector were Rs. 13,514 crore. The private sector contributed 14.6 per cent of gross capital formation as percentage of GDP, with the economy having overall rate of 24.5 per cent.

Investment is a function of saving and it is in this area where the private sector excelled. India has been able to sustain gross domestic saving rates of above 20 per cent of GDP. These are comparable to the rates of developed countries. Over 75 per cent of savings came from household sector income and reinvestible profits were higher in the private sector. In fact, the saving rate of the private corporate sector was 2.8 per cent and that of households is 17.8 per cent of GDP, out of total gross domestic savings of 22.3 per cent.

The private sector is also a major source of employment. It accounted for 71 per cent of total employment in the organised manufacturing sector, as on 31st March 1991. In the organised agricultural sector, it accounts for 62 per cent of total employment.

The pattern of industrial growth during the last 43 years reveals that the private sector has been able to contribute significantly to industrial

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growth. It has achieved higher productivity levels and contributed proportionately much more to net value added and incremental gross capital formation. It has been basically from the 1980s, which coincides with the development of capital market and increased access of private sector to capital market funds, that growing investment and output have taken place in this sector. These also highlight the fact that the private sector produces a wide array of products and has developed a sound base of indigenous technology and through joint venture and foreign collaborations has been able to import modern technology. The private sector contribution to industrial production with the shift in Government's strategy, GDP and economic growth will increase at a faster rate in future. With the expected privatisation of the public sector, the Indian economy too would become a market oriented economy, dominated by private enterprises. ❐

The author is President, Federation of Indian Chambers of Commerce and Industry.

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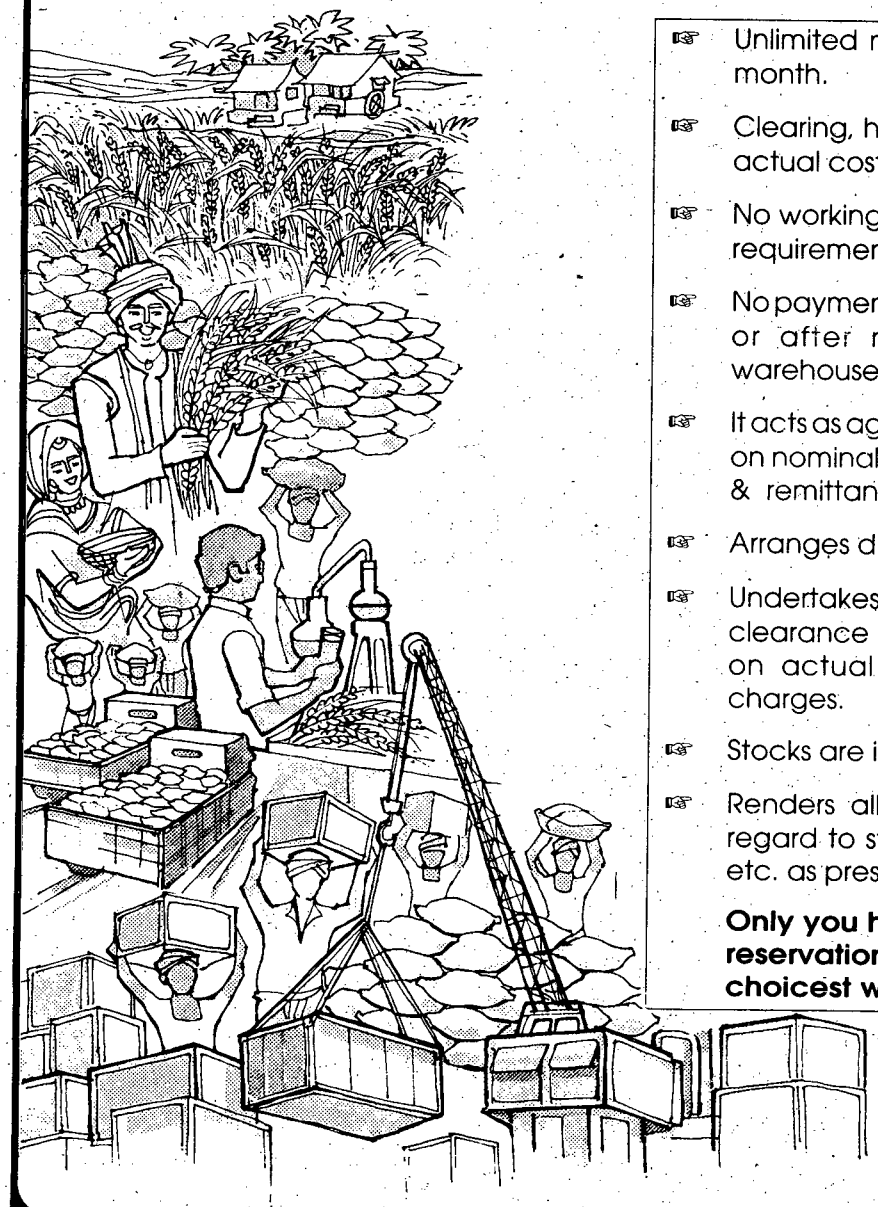
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Economic Cooperation With ASEAN

Govind Hari Singhania

With a large resource base and a big market, the ASEAN region has emerged as one of the most dynamic groupings in the world. In the coming decades it would be a major powerhouse. A significant scope exists for investment and joint collaborations for mutual benefit of both India and the ASEAN, says the author.

THE changing global trade scenario entailing the internationalisation of commercial transactions on the one hand and the accent towards bilateralism and formation of trading blocs on the other, has meant that India would soon get increasingly marginalised unless it joins the international mainstream as a major player. Hence, at this juncture, a systematic strategy aimed at globalising the Indian economy which would be reinforced by concluding preferential agreements with major trading blocs, assumes importance. One such possibility could be a linkage with the South-East Asian countries operating under the aegis of the Association of South East Asian countries (ASEAN).

The reasons for seeking to turn "Asian" are numerous. In fact the ASEAN region has emerged among the most dynamic groupings in the world having a large resource base and a big market. No wonder, the coming decades would see its emergence as a major powerhouse in this region.

The purpose of this paper is to highlight the economic significance of the region and the potential it offers for initiating economic cooperation with India. The paper has been divided into two sections. The first section gives an overview of the ASEAN economies in general which is followed by analysing the potential for promoting Indo-ASEAN economic ties.

This also includes the assessment of trade and investment opportunities prevailing in the ASEAN countries of Malaysia, Singapore and Indonesia as perceived by the author while leading the recent ASSOCHAM's business mission to these countries.

A General Profile

The ASEAN—Association of South East Asian Nations—was found on 8th August 1969 with the coming together of Indonesia, Malaysia, the Philippines, Singapore and Thailand. This was later joined by Brunei in 1984.

It was under the aegis of the ASEAN that the cultural identity of the South East Asian countries was rediscovered. As a matter of fact, the recognition of this common cultural and historical lineage of South East Asia has provided the basis for keener understanding among the people which has helped to promote trade and business in the region.

The functioning of the ASEAN is essentially based on two principles viz. "Mushawara"—a Malay word, meaning decision by concensus building and "Bayanihan" i.e. each country contributing according to its ability for mutual benefit. In fact the "bayanihan" spirit, more than any other force, has helped in maintaining flexibility and regional cooperation among the heterogeneous group of nations.

ASEAN, with the land area of approximately 3,069, 581 sq. km. is, as mentioned earlier, one of the fastest growing regions in the world with a market size of 374 million people. This grouping has a combined GDP of

approximately US $ 330 billion. Despite the recession, during the last few years, the ASEAN countries have continued to register an annual average growth of 4-5 per cent.

Heterogeneity and diversity in resource base and the different levels of economic development is an important hallmark of the region. The per capita income varies widely among the members. For instance, Indonesia has the least per capita income of US $ 610, whereas Brunei, which is a crude oil export economy, has a high per capita income of above US $ 20,500 (1990).

The ASEAN countries are rich in natural resources. The region is among the world's largest producer of abacahemp (95%), rubber (83%), tin (70%), palm oil (80%) and coconut products (67%). Besides these, it is also a major producer of tobacco, sugar, rice, coffee, nickel, copper, coal, tungsten and petroleum.

The industry in the ASEAN countries is growing at a fast pace. The region, though primarily agrarian, has taken off to the stage of economic development wherein it has made large forays in the industrial and services sector. The value added in these sectors in the year 1992 and 1993 is given in Table 1.

Some of the important industries of the region are: electronics, petroleum refining, chemicals, transport equipment, rubber products, fertilizers, processed foods, forestry products, textile, wood, pulp and paper board. The ASEAN countries have also entered the hi-tech industries such as precision instruments, optics, lasers and informatics.

The areas in the services sector that are being promoted are mainly technology-intensive or trading companies. These include legal services, computer services, education and training services, engineering consultancy, transport and distribution.

The region has also emerged as the hub of the global business activity, especially Singapore which is the operational base for many multinational corporations. This trend is fast catching up among other ASEAN countries.

At this juncture, a systematic strategy aimed at globalising the Indian economy which would be reinforced by concluding preferential agreements with major trading blocs assumes importance.

Table-1

Growth Rate of Value Added in Industry & Services

	1992	1993	1992	1993
Singapore	7.5	6.4	4.8	5.5
Indonesia	7.5	8.7	5.8	4.9
Malaysia	10.0	10.6	8.8	7.7
Thailand	8.6	10.8	7.9	6.9
Philippines	-0.5	2.9	0.8	3.4

Indo-ASEAN Cooperation

The fourth ASEAN summit held in January 1992, opened a new chapter on India's relations with these countries. Keeping in view India's increasing trade and joint collaborations with the ASEAN countries, the status of the dialogue partner of the ASEAN was conferred upon India. This status presently applies also to EEC, USA, Japan and New Zealand. The first inaugural meeting of the India-ASEAN sectoral dialogue partnership was successfully held in March 1993, in New Delhi.

India is a very small player among the ASEAN trading partners. Our exports and imports constitute less than one per cent of their global trade. Nevertheless, the ASEAN region accounts for six per cent of India's international business. Singapore is India's largest trading partner among the ASEAN countries, followed by Malaysia and the Philippines. India's bilateral trade with Brunei is negligible.

India's exports to the ASEAN countries increased by 22% in 1992-93 (over 1991-92), whereas the imports registered a decline of 5%. Table 2 gives the details.

It is important to note that primary commodities constitute a large portion of India's trade with the ASEAN region. India mainly imports chemical

Table- 2

India's Trade with ASEAN countries

US $ (million)

Country	Exports		Imports	
	1991-92	1992-93	1991-92	1992-93
Malaysia	201.3	187.0	390.0	405.0
Philippines	64.2	54.6	31.3	9.7
Indonesia	147.3	138.0	65.4	59.0
Thailand	197.9	253.0	48.4	58.0
Singapore	387.2	587.0	690.4	629.0
Brunei	.4	.5	.1	-
Total	998.3	1220.1	1225.6	1160.0

materials, vegetable oils, coking coal, briquettes, pulp and waste paper, cashew nuts, crude rubber, transport equipment, artificial resins, electrical machinery and professional instruments.

Exports to ASEAN constitute cotton, cotton yarn, fabrics, processed minerals, marine products, spices, leather manufacture, meat & meat preparations, dyes & intermediates and certain electronic products.

There exist a number of potential areas where trade can be carried out for mutual benefit. Some of these are: leather manufactures, telecom equipments, wood products, computers, rubber products, auto components, processed foods and metal manufactures.

Indo-ASEAN Joint Collaborations

The growing convergence of the process of reforms in the foreign trade and investment sector in both India and ASEAN has opened new avenues for investment and joint collaborations. In 1991 and 1992, 124 joint collaborations were approved with the ASEAN countries. They are mainly in areas like texturising yarn, polyester filament yarn, marine products, aquaculture, industrial alcohol, cellular mobile phones, rubber wood, computer software, cutting and polishing granite, paints and enamels, auto components and construction projects.

The recognition of common, cultural and historical lineage of South East Asia has provided the basis for keener understanding among the people which has helped to promote trade and business in the region.

Scope also exists for collaborations and joint ventures between small and medium enterprises of India and the ASEAN in areas such as software, information technology, designer jewellery, agro-processing, toys and engineering products. In the field of hi-tech, the potential areas, like laser technology, robotics, fibre optics, can also be exploited for mutual benefit.

India and the ASEAN can also jointly explore the possibility of joint ventures for exports to third countries in areas like agro-processing, textiles, fertilizers, machine tools, software development and pharmaceuticals.

Some of the capital surplus countries of the ASEAN e.g. Singapore are in search of investment opportunities. India, which according to a study by Price Water house, has a more favourable investment environment than Malaysia, China, Taiwan and Indonesia, can be an attractive destination. India and the ASEAN can pool their resources and skills to establish more joint projects and growth triangles like the one in Kalimantan and Sarawak for promoting collective trade and collaborations.

Observations Of The Business Mission

During the course of my visit to Singapore, Malaysia and Indonesia, I realised that our cultural and socio-economic ties with the region had strengthened the scope for bilateral cooperation. Some country-specific observations of the mission are mentioned hereunder:

Singapore

It was inferred from the meetings in Singapore that there was a growing interest among businessmen of that country in trading with India. This interest was generated after the visit of their Prime Minister, Mr. Goh Chok Tong to India in January 1994. In fact Prime Minister's visit sparked off an India fever in Singapore.

Real estate emerged as a major area of interest for Singaporians in India. The Singapore businessmen however are constrained by the Indian Rent Control Act. This Act, they felt, needs to be substantially amended so as to make it more investor-friendly. Singapore businessmen also evinced interest in investing in sectors such as construction of highways, power, telecom and health services.

India is a very small player among the ASEAN trading partners. Our exports and imports constitute less than one per cent of their global trade.

Singapore companies also expressed their willingness in sourcing their production bases in India for their exports to third countries.

Joint projects were also found in areas viz. electronic information system, bio-technology, marine products, textiles, processed foods, chemicals, fabricated metal products, rubber products, transport equipment, engineering plastics, precision machinery parts, value added services and hotels.

Malaysia

In Malaysia, the mission perceived that India could help Malaysia in strengthening its small and medium scale industry. Both India and Malaysia could have joint collaborations in the resource based industries and building ancillaries for the engineering sector and supporting industries.

Malaysian companies also showed willingness to invest in India's infrastructure sector, especially power plants and also in cement industry.

Indonesia

Indonesian businessmen suggested that India could help them in developing their Human Resource through training and upgrading the skills of Indonesian workforce. This

was particularly so, in view of the need for personnel to plan and implement sophisticated projects that were then on the anvil.

Some of the areas identified for India-Indonesia joint collaboration were: engineering sector, power generation, food processing and agro-based industry, auto components, coal mining, training and manpower development, computer software and chemicals.

Suggestions

Based on interaction of our business mission's members at different fora such as the seminars, workshops and meetings with the ASEAN business men, the following suggestions have emerged that could help us promoting trade and joint collaboration with the region.

1. The main constraints in enhancing exports to ASEAN have been product quality and non-availability of technologically superior products matching quality of supplies from Japan, South Korea and Taiwan. Globally competitive product in terms of technology performance, international standards (including packaging) is the answer for long term growth of exports to the ASEAN countries.
2. There is a significant scope for cooperation between the ASEAN and Indian companies for global marketing of products of the ASEAN and Indian origin and products of the joint ventures in India or in ASEAN markets.
3. To make India's presence effective in the ASEAN region there is a need to evolve an export growth plan for this market. This plan needs to identify selective thrust areas for exports of goods and services from India in which the latter has a competitive advantage.
4. The prospects of the ASEAN Free Trade Area (AFTA), which is a move towards reducing tariff among the ASEAN countries to a level 0-5% over the next 10-15 years, holds promise for augmenting Indo-ASEAN trade. Hence, efforts should be made to intensify our economic relations and to further explore areas where we can have active cooperation.

The author is President, ASSOCHAM.

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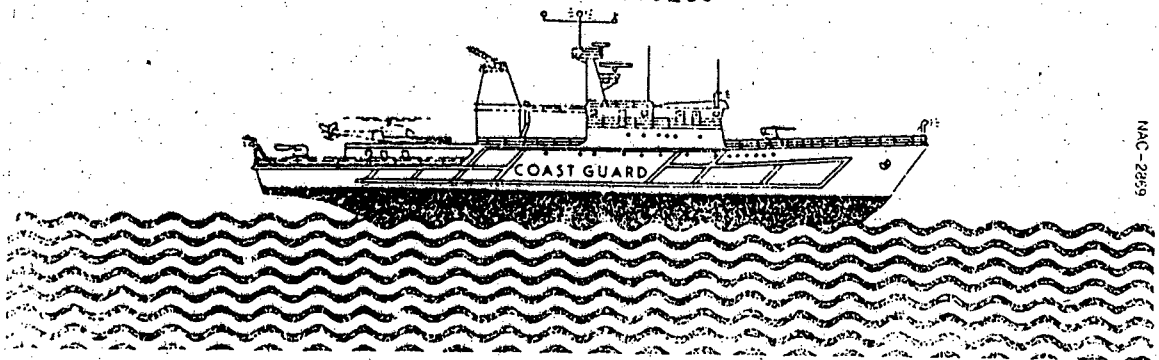
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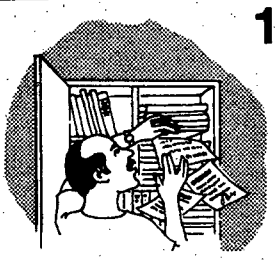
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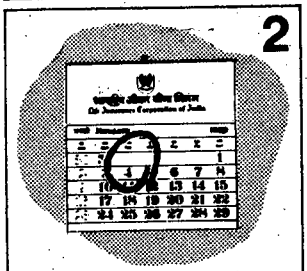
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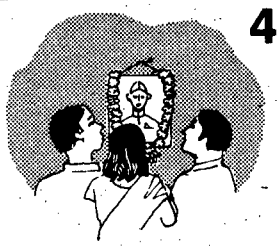
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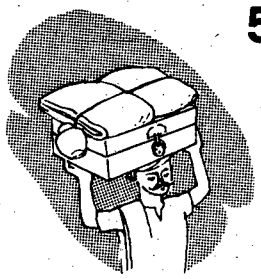
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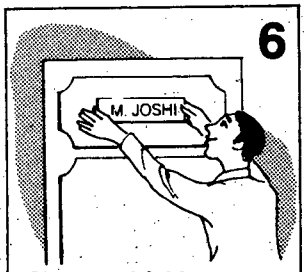
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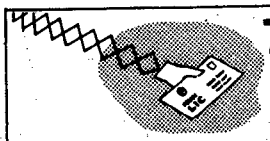
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Ensuring Prosperity Through Reforms

A.N. Prabhu

The economic reforms have let in a whiff of fresh air edging out the tired and the old, and freeing industry of the fetters of quota, control and regulation, says the author. In the new regime, private initiative will be the engine of growth and the government policy will be to encourage and promote it, he opines.

INDIA'S experiment with economic reforms entered the fourth year in June last. The results have not been dramatic but reforms have brought about a change in attitude from the cynical to cautious optimism about the future. In the final analysis, this has been a big change, a virtual U-turn in economic policy held by many dear to their heart for more than four decades.

It is well-known by now that India was literally pushed to the battlefield. It had no option but to take the plunge and make do with whatever it could. But it cannot be said that India was not prepared for such an eventuality because for years before June 1991, when a new government headed by Mr. P.V. Narasimha Rao took over, a feeling of disenchantment with falling standard of living, slow growth, stagnant industrial production, and unsatisfactory exports performance had mentally prepared the nation that the time has come to make a change and take a new route to growth and development so that mass poverty can be reduced if not eliminated.

The process of change received a shot in the arm by fortuitous circumstances in a way. The fall and disintegration of the Soviet Union, the economic reforms in China even as it retained its political apparatus with an iron hand with spectacular results in less than a decade and a half (growth rate averaging 12 to 13 per cent a year) and the dramatic development recorded by the Asian tigers, South Korea, Thailand, Taiwan, Hong Kong, Indonesia, Malaysia and Singapore were such events. No doubt these countries do not have the kind of problem a sub-continental economy like India faced, yet it became clear that India has a chance of putting up a better show than that it had shown three years from 1989.

When London's Economist wrote that India was like a freed tiger, freed from the jail of control, regulation and licences, the policy-makers realised the great potential. The vital decision had to be taken to partly abandon or completely do away with policies which had become a stonemill around the country's neck. The decision was to follow a modified policy but at ground level it became clear that the country will have to go the whole hog and not resort to piecemeal reforms. And the second and most important compulsion was the cumulative impact of the policies followed for the last four decades and a half, the policies as reflected in the rising prices, falling production, increasing burden on the government treasury by the staggering losses of the public sector, the wide and deep impact of the unprecedented external debt both long-term and short-term amounting to about $ 78 billion. Repayment of principal and interest became an uphill task. The then government perforce had to mortgage gold to avert mother of all sins—defaulting repayment liabilities, a calamity which had to be averted at all costs. The intolerable burden, straining the Balance of Payments (BoP) position and culminating in the country's inability to pay without resorting to mortgaging gold—a decision the then government rued later. But the decision had to be taken for better or worse.

Above all while the tiger has been released, it urgently needed help to enjoy newfound freedom restored for the first time. The tiger continued to think it was still within the four walls of the jail!

The series of decisions taken by the Rao government which came to power on June 21, 1991 were really, breathtaking. The radical changes brought about in jetspeed dazzled the captains of industry. It was an awe-inspiring experience, bold, innovative,

risky and fraught with possibilities of a slip.

The world looked with disbelief at the steps taken with ease by a minority government. Many genuinely believed that it was only a flash in the pan. Events later proved that it was not so. Nor was there any likelihood of going back to the old regime of control and regulations. "One does not know, it is difficult to say," several foreign company executives, diplomats and Indian media reported, but revised their opinion slowly.

Thus in a major reversal of earlier policy, the government abandoned licensing for almost every industry, conceded the demand by foreign companies to raise their equity automatically from 40 per cent to 51 per cent (without having to wait for the much criticised bureaucratic discretionary procedure of granting permission on a case-by-case basis), MRTP threshold limits for assets were

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given up, restrictions on FERA and MRTP companies on investment were removed, phased manufacturing programme (PMP) abolished and convertibility clause in the loan agreements with banks and financial institutions removed. The decision to disinvest public sector undertakings' share is another milestone in the economic reforms programme.

Externally, the government first announced EXIM scrips for exporters for free trading, replaced it with partial convertibility of the rupee and later again replaced it by full convertibility on trade account.

The list is not exhaustive. The Foreign Exchange Regulation Act (FERA) has been diluted fairly thin and more amendments are in the offing.

The government also devalued the rupee in two doses by about 22 per cent. The apprehension that the rupee would zoom to 50 to a dollar was found misplaced. The rupee stood its ground soaring Indians pride around 31 to a dollar throughout.

From passive recipient of foreign direct investment (FDI), India geared to invite it from all sources. The word has gone round the world that something new is happening in India and it is worth taking note of. Despite the campaign in a section of the media that India was sold out to the IMF and the World Bank or that the Indian Budgets were dictated to by the multilateral agencies, the government kept its cool. The stiff IMF conditionalities obviously attracted by the state of health of Indian economy in 1991, despite attack by ill-informed and obviously prejudiced, if not jaundiced view of the economic reform, the government to its credit, went ahead with structural reforms programme which is expected to yield some return soon, if not already started doing so in a small measure.

The experience has taught a lesson to decision-makers and that is that they should not waver in their decision despite at times ill-informed criticism in the most virulent form emanating from certain quarters or because of a temporary setback. At times the attack is ideological, at other times, it is propelled by vested interests of one kind or the other. What is needed is unswerving determination and political will to go ahead with what is considered the right policy for the country.

The taste of pudding is in eating. Though three-year period is too early to judge the long-term impact of the policy, the broad indications are clear: the country is on the right track.

One, the country's foreign exchange reserve has touched a record level of $ 19.57 billion on May 27. This has to

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be viewed in the background of the June 1991 crisis when the reserves were not adequate enough even for six weeks' imports. And not all of the reserve is built through borrowings from multilateral agencies as is sought to be made out by certain quarters. India's exports have picked up with a growth rate of around 20 per cent and indications are that this will be maintained. Foreign Direct Investment (FDI) has been going up and approvals for collaboration has been of the order of $ 3 billion so far. This is against an average of $ 200-million to $ 300 million a year over the last few years.

Secondly, the significant development of the switch over to the market economy has been that the industry in India is no more anxious to build up inventory of raw materials and components fearing shortages at high cost. They import only when they really must. Obviously, import being costlier, first they have necessarily to search out indigenous components or raw materials to reduce costs before venturing out to import. Otherwise, the cost will be high reflecting in the prices of the final product in a competitive market. The shift from fiscal control to market monitoring

mechanism has kept the Indian industry on its tenterhooks which is how it should have been all these years. True, there will be some mishaps here and there which cannot be helped.

The change has also thrust enormous responsibility on the domestic industry to produce quality goods of international standards at reasonable (and affordable prices) and put the consumer in the forefront. The change also meant individual initiative and entrepreneurship will no more be at a discount at the policy level in the government. The change has let a whiff of fresh air edging out the tired, and the old, and freeing industry of the fetters of quota, control and regulation.

Private initiative will be the engine of growth and the government policy will be to encourage and promote it whether it is in the private or the public sector. For the first time thus the private sector will no more be considered outcaste and kept at arms length and there will be parity.

The three-year experience has also taught the powers-that-be a lesson that there is more to reforms than theoretically attractive propositions. And it can no longer tinker with policies to suit a particular short-term advantage. The vested interests in industry have also come to believe (though they have as yet not given up the hope of bringing the old regime back) that it would be in its own interest to fall in line without reservation. The initial silence and later regrouping to test waters have proved that the Indian industry has a long way to go before understanding the import of the economic reforms package initiated three years ago. They should understand that the era of behind-the-scene manipulation is over.

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All these do not mean that everything is rosy on economic front in the country. It cannot be in a country of India's size and magnitude. The government is faced with millions of competing priorities demanding immediate attention. Yet, every citizen would regret that our priority has been lopsided that we tave more avid interest in peripheral matters which have no abiding impact on the country from a long-term point of view. Yet the reforms programme is one on which millions of the poor would hope that not beyond a foreseable day, they would get a square meal a day. Their hope should not be shattered and their sacrifice should not go waste. The silver line in the sky is that the message has gone home that this is the last chance India has got to make a mark in economic development in an increasingly unequal world with growing protectionist walls and non-tariff barriers. ❐

The author is a veteran economic journalist.

There can be no security or real peace if vast numbers of people in various parts of the world live in poverty and misery. Nor, indeed, can there be a balanced economy for the world as a whole if the undeveloped parts continue to upset that balance and to drag down even the more prosperous nations. Both for economic and political reasons, therefore, it has become essential to develop these undeveloped regions and to raise the standards of the people there.

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(ii) RANGANADI HYDRO ELECTRIC PROJECT (405 MW) IN ARUNACHAL PRADESH.
(iii) KATHALGURI GAS TURBINE PROJECT (291 MW) IN ASSAM.
(iv) KOPILI HYDRO ELECTRIC PROJECT (STAGE-I EXTN) 100 MW ASSAM.

THE 84 MW. AGARTALA GAS TURBINE PROJECT IN TRIPURA IS SCHEDULED TO BE TAKEN UP DURING VIII TH PLAN. PERIOD.

THE FOLLOWING PROJECTS ARE PRESENTLY UNDER INVESTIGATION

(i) RANGANADI HYDRO ELECTRIC PROJECT, (STAGE-II) 100 MW IN ARUNACHAL PRADESH.
(ii) DIKRONG HYDRO ELECTRIC PROJECT, 100 MW IN ARUNACHAL PRADESH.
(iii) PAPUM PAM HYDRO ELECTRIC PROJECT, 150 MW IN ARUNACHAL PRADESH.
(iv) KOPILI HYDRO ELECTRIC PROJECT (STAGE-II EXTN) 25 MW IN ASSAM.



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Director Public Relations, Punjab

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Issues In Globalisation

Dr. P.D. Hajela

In view of what is happening at the global level, economic autarky and isolation would be harmful to any nation's interest today, says the author. However, analysing various aspects of globalisation he has raised certain issues which make interesting reading.

WITH scientific and technological knowledge of the world expanding so fast that we now differentiate between knowledge-based production and material-based production, with all the built-in resource availability and efficiency of the former, economic autarky and isolation would be harmful to any nation's interest today. It has to link itself to the dynamics of global technological change both for modernising its production and for creating an ethos in which the compulsions of technological upgradation could be sustained.

This way of looking at globalisation should raise no eyebrows. Even workers concede that technological upgradation is unavoidable if their productivity, real wages and levels of living have to grow. While the same or slowly rising stock of capital can add to workers productivity through disembodied technological change, a rising capital stock opens up possibilities of embodied technological change as well. Both ways of raising productivity can be stimulated through globalisation; only that disembodied technolgical change involving a higher productivity of traditional capital may involve more non-economic factors like change in work ethics, greater nationalistic sentiments, a larger concern for everbody's welfare while embodied technological change with a growing stock of new capital would involve modernisation, technological diffusion and adaptation.

There is nothing exclusive about these ways of raising productivity. Both of them can be simultaneously operated. It is unclear if global competition, in a highly heterogenous world, with large differences in infrastructural facilities, unequal availability of information, sharp differences in the stages of development of various countries and restricted mobility of factors like labour and capital, can go very far. In fact, the manner the theoretical positions in regard to why international trade takes place, is side-stepping the principle of comparative advantage, and how trade relations are being state-managed, even manipulated, suggests that there is no competition of the kind we have been used to talking about in economics in general and international trade theory in particular.

Market Of Oligopolies

Thus it is not a free trade market competition of the neo-classical variety which globalisation would imply. It would be the market of oligopolies duly supported by fiscal and monetary concessions, and full political and diplomatic backing of their governments to capture as large a share of foreign markets as possible. The legitimacy of such state intervention in a democarcy would be the expansion of ones 'own' industries, and the cornering of 'rents' originating from deliberately created market imperfections.

In a sense what could emerge would be competition between mercantilist postures of different governments each trying to maximise rents accruing to its producers. Since the developed countries have the advantage of the momentum of an earlier technological start , a developing country like India will have the unenviable task of persuading higher rent earners to share their technology with it, so that it also can, using that technology, increase its share in the total rents available at given levels of world trade! The argument is that when national economies compete amongst themselves, they will naturally increase total world output and total volume of international trade.

Two Aspects

But there are two aspects of these positions which are worth noting. One is that with an internal recession already in place in many developed countries, it may not be unlimitedly true that rent seekers will compete their rents out with a larger and larger output. Secondly, oligopolies can either increase their rent or increase their output in which case they would not be

much interested in enabling other countries to learn their technology and to expand their outputs. A country can try to outwit in competition but that is precisely the point: there is no free competition. Further cost advantage as a basis of competition is a function of improvements in productivity and modernisation and that is where a few countries who command technology advantage would create handicaps for their rivals.

At least one thing appears clear. While the handicaps of technology transfer are battled, the potential for disembodied technological change should not be ignored. This may require a large measure of political effort based on consensus in favour of globalisation. There seems to be too much of the belief that competition will automatically do the trick. As we have seen, when we face a world with nations still clinging to mercantilist postures and industrial enterprises prone to be rent seeking with full state backing, competition assumes a very deceptive form.

It is unclear if global competition, in a highly heterogenous world, with large differences in infrastructural facilities, unequal availability of information, sharp differences in the stages of development of various countries and restricted mobility of factors like labour and capital, can go very far.

What implication does globalisation have for the role of the state in India? It is clear that India will have to remain a mixed economy if for no other reason then for backing the market to get a larger and larger foothold in the realm of modern technology.

State's Role

What has been the role of the state in the mixed economy which we were trying to maintain earlier?

The state's role for reaching the world markets was through export promotion to raise resources for import substitution including the technological mix of that substitution. The technological parameter was never missed; only the modality for technological upgradation was not one of globalisation; or shall we say more specifically, not one of technological upgradation through international competition. Even at that time, increases in productivity via disembodied change were not barred. Somehow we did not put much focus on it even though we were encouraging labour using exports to earn foreign resources. True, our textile exports were facing handicaps from the mercantilist postures of developed countries which we will face even after globalisation. But there is no doubt that we did not do as good in this direction as for example the South Koreans had done in the earlier phases of their globalisation offensive.

Ignored Imperatives

But there was another side to our mixed economy. Conscious of the fact that we were a labour surplus country and that we needed capital goods and infrastructure to utilise that labour to generate an employment intensive growth, we planned massive investments in these sectors and also gave extensive support to the small scale sector. In fact through investments in power, irrigation and transport, the former two constituting a particularly overwhelming proportion of state investments as well, we converted agriculture from a food grain deficient economy into one of food grain self-sufficiency. The public sector had to assume commanding heights to change investment patterns in directions required by a labour surplus social reality; only it ignored some other imperatives like wage goods, fiscal and monetary measures which would make the demand pattern correspond to the desired investment pattern and also raise aggregate resources in a non-inflationary manner, building up an ethos for techonological upgradation in both the industrial and agricultural sectors. These imperatives were expected to enable our mixed economy to achieve a less wasteful and more effective employment generation and poverty removal in the country. That did not happen which was unfortunate. However, state intervention, as suggested above, would be unavoidable even for achieving globalisation; only it will do far less in the direction of unemployment and poverty removal than it did in the earlier mixed economy.

At least one thing appear clear. While the handicaps of technology transfer are battled, the potential for disembodied technological change should not be ignored.

Further, earlier the attempt to protect ourselves against foreign competition deprived us of the compulsion of competition and yielded rents which in turn lulled our producers into technological stagnation. Now, with the mercantilist-protectionist postures still common in the world, the attempt will be to prevent the 'foreigner' from running away with that rent through technological upgradation. But what about employment generation and removal of poverty?

Significant Lesson

One significant lesson that we have to learn from the previous mixed economy is that after commandeering the economy to a change in the composition of output in favour of capital goods, we supposed that supply

of essential goods and services would automatically become abundant. Food grain supply did increase but because of massive public intervention through power, irrigation and credit and not automatically; the supply of the rest like cheap shelter, clothing , health, education, transport was left basically to remain demand induced. And therefore did not so increase as to assure non-inflationary eradication of poverty and unemployment. We had, so to say, very partial or narrow view of the requirement to change investment pattern and the economy's product mix and proceeded on the assumption that an investment pattern integrating capital and wage goods was unnecessary. If unemployment and poverty existed, we could have a plethora of programmes of public expenditure without bothering about dovetailing them into a proper wage goods strategy in addition to a capital goods and infrastructure strategy. In consequence even though expenditure on these programmes rose, it caused far more inflation and far less removal of unemployment and poverty than we wanted.

It is clear that India will have to remain a mixed economy if for no other reason than for backing the market to get a larger and larger foothold in the realm of modern technology.

If globalisation accentuates poverty, as is widely feared, our own capacity to deal with the situation will be reduced for the reason that now even the little leverage which economic planning provided with its partial concern for investment pattern and composition of output would disappear. In case the Planning Commission is made to engage in indicative planning which is a euphemism for market forecasting, this is most likely to happen. In such a background, an emphasis on monetary expenditure for employment generation programmes would end up in employment illusion and inflation reality rather than the other way round.

The point being made is that the mixed economy emerging from globalisation could be even more removed from the solution to the problem of poverty than the earlier mixed economy. And since state intervention is expected to benefit many and not a few, the new mixed economy could be even more difficult ot sustain. The further point which is being made is that the earlier economy—the planned mixed economy which was clearly a fairly meaningful Indian experiment—could not deliver the goods to the people because while there was a deliberate and conscious investment strategy to change the supply of capital goods and infrastructure, the supply of essential goods for the people was left to be a demand-induced phenomenon.

How precisely will indicative planning cope with this problem when its more thorough counterpart, namely, target planning could not, is a major issue which globalisation would have to tackle.

A Pre-requisite

An aspect of globalisation which provides it with legitimacy is insufficiency of resources. After all, capital is a pre-requisite for both the raising of the level of investment and also for modernising production. The latter would generaly involve capital deepening particularly if labour productivity is to be raised. In fact while we had conceded the unavoidability of foreign capital soon after the launching of the second Five Year Plan itself, we had gone about the job with import-substitution-based-export-promotion, thinking in a way, rightly, that export surpluses earned this way would be the best foreign capital we should have. That did not work. We have now opened the economy for foreign equity participation and foreign portfolio investment and can take satisfaction from the fact that there has been an unexpected inflow of foreign capital into the country. But whether these translate into export surplus is yet to be seen.

Three Considerations

There are three considerations which would need to be kept in view here. If foreign investments are eyeing our large middle class market, they may not be interested in exports from India in which case their profits repatriation would reduce rather than increase our export surplus. Secondly, in case portfolio investments are in the nature of hot money more than stable capital prone to fly on the wings of speculation, they could create great uncertainty in respect of the rate of exchange and foreign resources which we could really depend upon for long term investments.

State intervention, would be unavoidable even for achieving globalisation; only it will do far less in the direction of unemployment and poverty removal than it did in the earlier mixed economy.

It may be pointed out here that such capital movements could be aggravated also because in totality the recession in the richer countries and a persistent current account balance of payment defict amongst a majority of them greatly limits the availability of global capital resources. Recent reports of the increase in the flow of such resources to China resulting in a decrease to Indonesia, Singapore and Malaysia, are a case in point.

A third consideration equally significant is the fact that such capital

resources from abroad could be inflationary unless the internal saving-investment framework had the necessary capacity for their absorption. In plainer language that means a rising saving-investment resulting in a larger output so that when foreign money is converted into our currency, the resulting increases in money supply do not raise the price level. Somehow in India, there is no evidence that since the introduction of globalisation and accrual of large foreign capital, the savings investment ratio has been climbing up. On the contrary, there are indications that the ratio might have actually climbed down a bit.

We can, of course, hope that things would look up. But not of themselves, for there is no way to argue that a mere freeing of constraints on consumerism would assure a higher saving-ratio than before.

In a way what is being suggested is that even when globalisation increases the inflow of foreign capital, the sustainability of that flow will also depend on our capacity to raise our savings to national income ratio. Our efforts to globalise should not be on the assumption that foreign resources obviate the necessity of maximising our own resource mobilisation, otherwise we might be repeating the error of the past when we forgot that over a long period our surplus on current account had also to be raised for foreign debt redemption and to add requisite foreign saving to internal saving. Of course earlier export promotion was not backed by import liberalisation, now it is. However earlier we had a little more reliance on comparative cost advantage and labour-intensive exports; now less, because of the desire to catch up on value-added items. But unless massive efforts at export promotion and building up a current account surplus, presently underway, succeed, we may in the manner of the past land ourselves in another balance of payments crisis.

One significant lesson that we have to learn from the previous mixed economy is that after commandeering the economy to a change in the composition of output in favour of capital goods, we supposed that supply of essential goods and services would automatically become abundant.

The author is former Vice-Chancellor, Allahabad & Sagar Universities.

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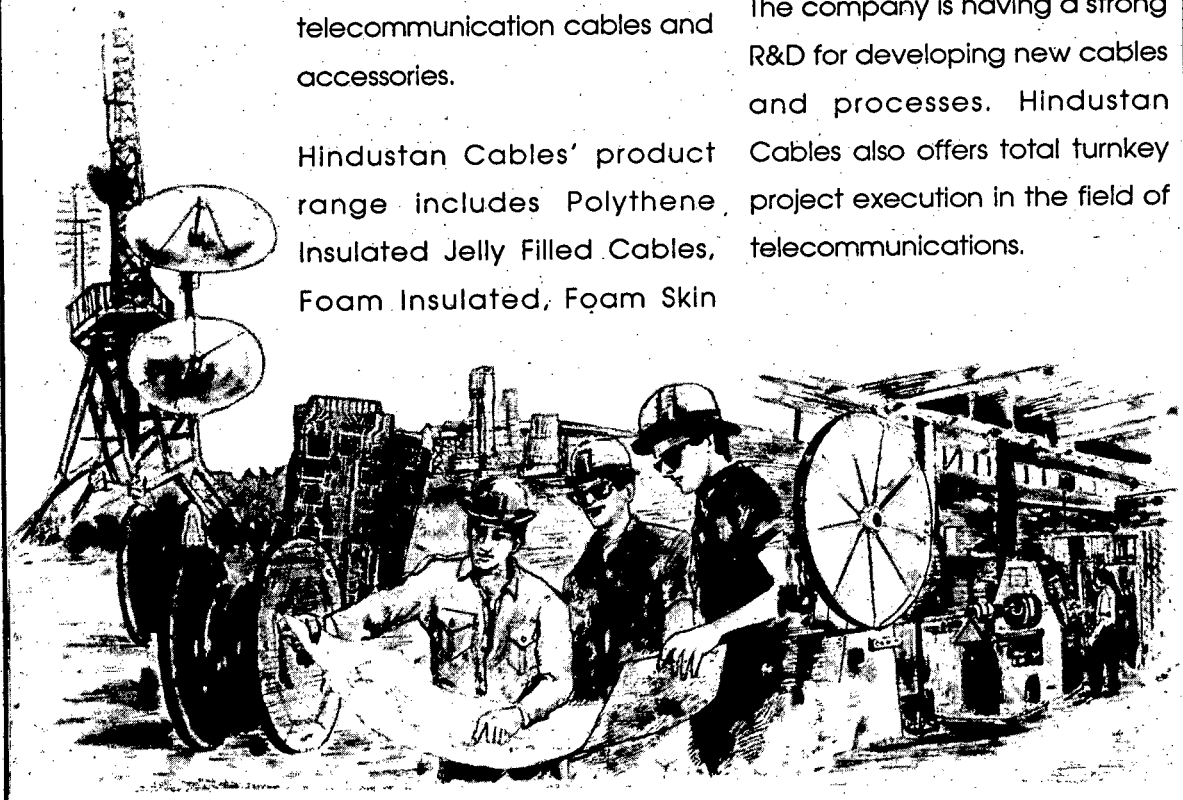
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New Economic Policy And Technology Management

Prof. P.V. Indiresan

Though technology development is a prime driving force behind economic progress, yet in our country it suffers from such drawbacks as risk of catastrophic failure and cultural tradition, says the author. A new approach is needed to effectively tackle both of these problems, he suggests.

THERE is no such thing as a free lunch: that is a basic law of economics. However, every law has an exception. In this case, as Joel Mokyr (1990) argues, technology development offers an exception—for a given quantity or quality of product, technological innovation reduces the consumption of material , capital and labour. In other words, the output from each one of these factor inputs is increased through technology development. Such multiplication of output is free lunch indeed. In effect, technology development shifts the supply curve downwards. That, as Fig. 1 shows, moves the supply-demand equilibrium in such a manner that (a) real prices decrease and (b) GNP increases. Thus, technology development leads to a double benefit. A little reflection will show that there is no other way of securing such a dual advantage. That is how technology development has become the prime driving force behind economic progress.

Admittedly, the primary force that drives entrepreneurs is profit. As indicated above, technology development is a dual source of profits: that is why successful entrepreneurs have been keenly interested in intechnology. That has not been the case in India, because some industrialists have found that ample profits may be obtained through (a) monopolization, (b) speculation, (c) tax evasion, and (d) smuggling. Conditions in India are such that technology development has not been equally profitable. So, the Indian practice has been to flog any available technology to death, retain it long after it has become obsolete everywhere else. A typical example is a particular brand of car which is being kept going though its technology is half a century old. Such a practice is commonplace in India. That is, once he gets hold of some technology, the Indian entrepreneur has little interest in its further development—he has other simpler ways of garnering profits.

Technology development suffers from a major drawback: risk of catastrophic failure. As a rule, Indian policy makers have made no provision to insure industry against such risks. On the contrary, enterprises have been effectively prevented from retaining the profits that result from successful technology development.

New Economic Policy

The New Economic Policy (NEP) that the Government of India launched three years ago has four components: competition, privatization, liberalization and globalization. Competition directly eliminates monopoly profits. In order to promote privatization, private investment should first be made attractive. That will require low tax rates, which in turn will make tax evasion less worthwhile. Likewise, liberalization removes controls and thereby a major source of speculative profits. Finally, globalization will inevitably lead to low customs tariffs—hence the gains from smuggling. In this manner, ideally, the NEP should be expected to eliminate the traditional sources of profit; force technology development to become the only worth while source of profit. Unfortunately, ground reality is quite different. As such technology development is yet to become a major source of profit for Indian entrepreneurs. Such obstacles to NEP—and to technology development—have deep cultural roots in our country.

Culture And Technology Development

According to Mokyr, the following three conditions should be satisfied before a culture will support innovation and development:

1. A cadre of ingenious and resourceful innovators who are both willing and able to challenge

their physical environment should be available.

2. Economic and social institutions have to encourage potential innovators by presenting them with the right incentive structure.

3. Diversity and tolerance should prevail in society to enable technological creativity overcome entrenched vested interests that might incur losses if innovations are introduced.

In other words, innovation and technological progress are unlikely in a society in which people are physically and intellectually malnourished, are superstitious, or are extremely traditional.

Cultural tradion is a second obstacle to technological progress in India. As a reaction to age-old social cultural injustice, the cult of reservation has become the rule not only in education and employment, but a basic principle in every sphere including industrial policy. In fact, when top industrialists, like those of the "Bombay Club" demand "a level playing field", they too are actually advocating a policy of reservation!

Long suppressed cultural repression could not but generate forces of reaction to negate the principle of competition which is the bedrock of

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NEP. As a result, while on the one hand, technology development needs the best minds, on the other, equity insists that the weakest be encouraged at the expense of the competent. Likewise, it has become incumbent to bleed promising sunrise enterprises in order to provide blood transfusion to hopeless sunset industries. So, technology development is not merely a problem of technology management, not even an economic one, as much as it is a cultural one.

In brief, before technology development can take root, the fear of competition among educationally backward groups, and the apprehension that innovation will render traditional workers jobless, should be removed.

Thus technology development in India has to contend with two major problems:

1. profits from dubious commercial practices are larger and less risky than those obtainable from technology development;

2. market forces, particularly the beneficial forces of competition, are negated by the fear of personal ruin.

Insurance Against Technology Failure

One of the interesting measures introduced in the latest budget is the 125 per cent offset for any R&D expenditure incurred by an industry through an approved project in a research institution. Unfortunately, industrialists tend to visualize R & D as feasible only in rarefied, extremely expensive institutions. In fact, there is an R&D project to fit every purse, and also to meet every situation. More important, R&D is not meant for making profound discoveries; instead, it is normally quite mundane—leading only to micro improvements rather than macro inventions. Without such minor but *continuous* changes, both the product and the process will remain static, and become obsolete to the extent technology advances in its own inexorable path.

The 125 per cent scheme is based on a fundamental misunderstanding of the basic economics of R&D: The cost here is not that of financing R&D but that of risk of catastrophic failure. What industry needs is not financial concessions but insurance against failure. The scheme as suggested will reduce the cost of R&D by some 10-15 per cent, but if the R&D fails, the loss remains near total. That is a risk which an Indian industrialist is unwilling to accept. Then, we need a new kind of a scheme which, instead of providing a subsidy, offers insurance against failure. That is, we need an entirely

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different approach that will bridge the gap between the laboratory model and the marketable product; also the gap between a usable product and the skeptical market. For this purpose, the following is suggested:

1. When a laboratory comes up with a new idea, it is verified for technological feasibility by an agency such as the DST, and simultaneously checked for commercial viability by a venture capital agency,

2. If both are satisfied, an industry is identified to convert the laboratory model into a marketable product: the responsibility at this stage shifts from laboratory to industry.

3. Even at this stage, development is treated as a public good and the cost is largely borne by the state.

4. When a marketable product is ready, a venture capitalist underwrites, say, one year's production by advancing the manufacturer the cost price (rather than the sale price) of such production.

5. The manufacturer offers the new product to customers free for one year on a *trial* basis—on condition the customer provides a detailed performance analysis.

6. If the product is satisfactory, the customer pays the venture capitalist the sale price—the difference between the sale price received and the cost price paid is therefore the profit of the venture capitalist. If the product is not usable, it is returned to the manufacturer who then repays the venture capitalist the advance he had received. The consequential loss of interest is the risk borne by the venture capitalist.

This is a scheme which finely balances risk and opportunity costs. There is an incentive for everyone, and a penalty too for bad performance.

Fear Of Competition

The social equity problem too needs a new approach, a more efficient solution than reservation. The most powerful pressure of this type comes from the job market. The basic question here is; how to empower backward groups to get their due share of the fruits of progress?

Technology development is not merely a problem of technology management, not even an economic one, as much as it is a cultural one.

The primary problem is, backward class aspirants fail to qualify even for entry. That happens because, aspirants are many, but jobs are few. So, as a rule, entry academic level is made higher and higher until the number short-listed becomes manageable. Thus, a normal quality fifth class pass may be enough for a bus conductor's job, yet only graduates may be considered! This policy is an administrative convenience, designed to help the masters and not the needy aspirants. It is socially iniquitous, economicaly inefficient.

This practice of raising entry academic qualifications is iniquitous because, the poor and the backward do not have the stamina to stay on in schools, let alone attend colleges. So, relatively, many more of the poor get disqualified than the well to do. The system is loaded in favour of the forward sections up-front. Further, those selected are grossly over-qualified; so, their training is equally grossly under-utilized.

Suppose the rule is changed such that: (a) qualification for entry will be the barest minimum acceptable, (b) no preference and zero premium is allotted for any higher academic experience, and (c) those who qualify will be placed in a queue and will get automatically selected when their turn comes. Such a system may be called QMQ—Queuing with Minimum Qualifications. In such a case, entry is NOT refused to any one who has barely attained the minimum acceptable academic level B. As seen from Fig. 2 that will maximize the numbers of the backward that will qualify. Selection also is assured to all those with the bare minimum qualifications—provided one has patience to wait in the queue!

The procedure is patently non-discriminatory and hence free from social stress. It is effective wherever the work does not need champions, and a minimum degree of ability or skill is enough: that goes for over 99 per cent of jobs, and hence takes care of almost everyone. Further, there are three other consequential benefits:

1. increased certainty of job entry at a comparatively low level will induce the poor to persevere and not to drop out of schools; the dropout rates will tend to follow a curve like "bb" in Fig. 2 instead of curve "aa"—raising thereby the chances of the poor even more;

2. as quality of elementary education becomes important there will be increased social pressure to maintain educational standards—that will correct a glaring lacuna that has gravely hurt human development in India;

Fear of retrenchment in sunset industries is another impediment to the proper implementation of New Economic Policy and a road-block in the path towards technological progress.

3. the artificial pressure that exists at present for higher education will tend to be replaced by rational choice.

Labour In Sick Industries

Fear of retrenchment in sunset industries is another impediment to the proper implementation of NEP, and a road-block in the path towards technological progress. The basic issues are:

1. technology development saves labour and hence, for a given output reduces the demand for labour,

2. technology development demands new types of skills, and makes old skills obsolete.

The first problem is partially overcome when there is economic growth. In fact, as a general rule, new employment created by technology development exceeds jobs lost in sunset industries. However, that is no consolation to those whose skills have become obsolete. Then, the basic problem is not job creation, but re-training. As a corollary to this problem, labour should be re-trainable. That too is a cultural problem.

In India, entrenched labour treats

wage not as an exchange for work done, but as a rent; that is, the job is property, and wage is rent payable whether there is work or not, whether work has been done or not. What is more, it is also expected that the rents should perennially increase in the form of increments and promotions—once again whether the economy can sustain it or not. Such a privilege is not sustainable and has led to the kind of dire distress seen all over India.

A better and more logical alternative is to have a system of paid continuing education, say, for one month each year. That will keep labour up to date and generate multiple skills too. Such well trained labour, runs little risk of loss of livelihood and will be far more secure than in the present system where sick industries are kept artificially breathing at the cost of both economic growth and technological development.

It has not yet been realized that this kind of training is a public good; that it rarely profits the employer to organize such training. On the other hand, contemporaneous labour is a national asset. Hence, it should be the responsibility of the State to meet the costs of such training. At present, that cost is deemed unaffordable, but it will be less than what the State is paying at present directly and indirectly. Also, the government has no clear idea of how to organise such training.

Receptivity To Innovation

Obviously, these suggestions will have to be developed in greater detail. They may not solve all problems nor rectify any one of them completely, but they are likely to mete out justice for better than at present—and do so without introducing artificial distortions. These suggestions have been made to indicate that interesting alternative solutions are available if only there is a will to seek them. That is, the problem is not the impossiblity of finding feasible solutions but the impossiblity of getting people to listen. That is another kind of cultural problem. The threat to technology development lies not in ill-equipped laboratories, nor in inadequate finance for technology development, as much as it does in prejudice—cultural, political, administrative and even intellecutal—the kind of prejudice that promotes the infanticide of new and strange ideas. ❐

The author is an eminent scientist.

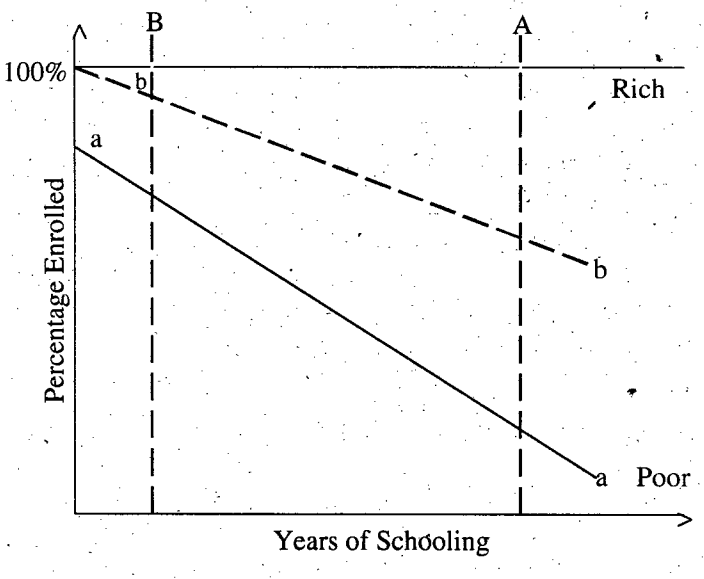


Fig:2 Minimising Entry Level From Arbitrarily High Level A to Minimum Acceptable Level B (a) Increases Proportion of the Poor who Qualify; (b) Raises Enrolment Rate From aa to bb.

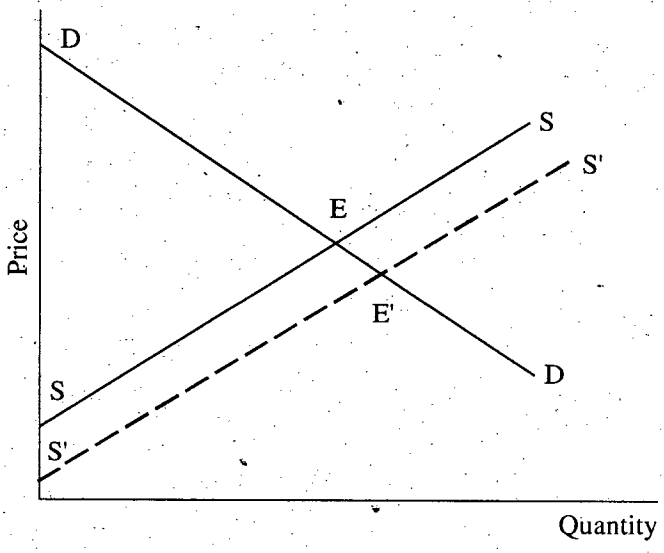
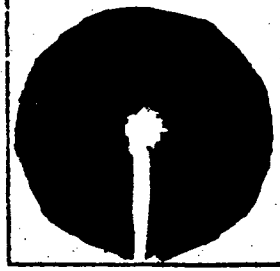


Fig:1 Lowering supply curve from SS to S'S' Shifts Market Equilibrium from E to E'—Lowers price and increases Quantity.

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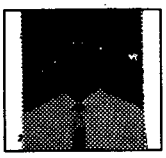
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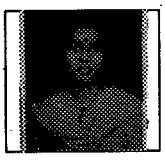
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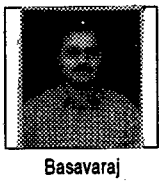
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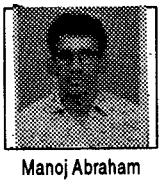
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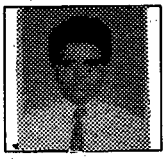
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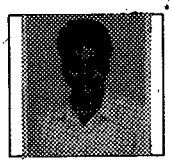
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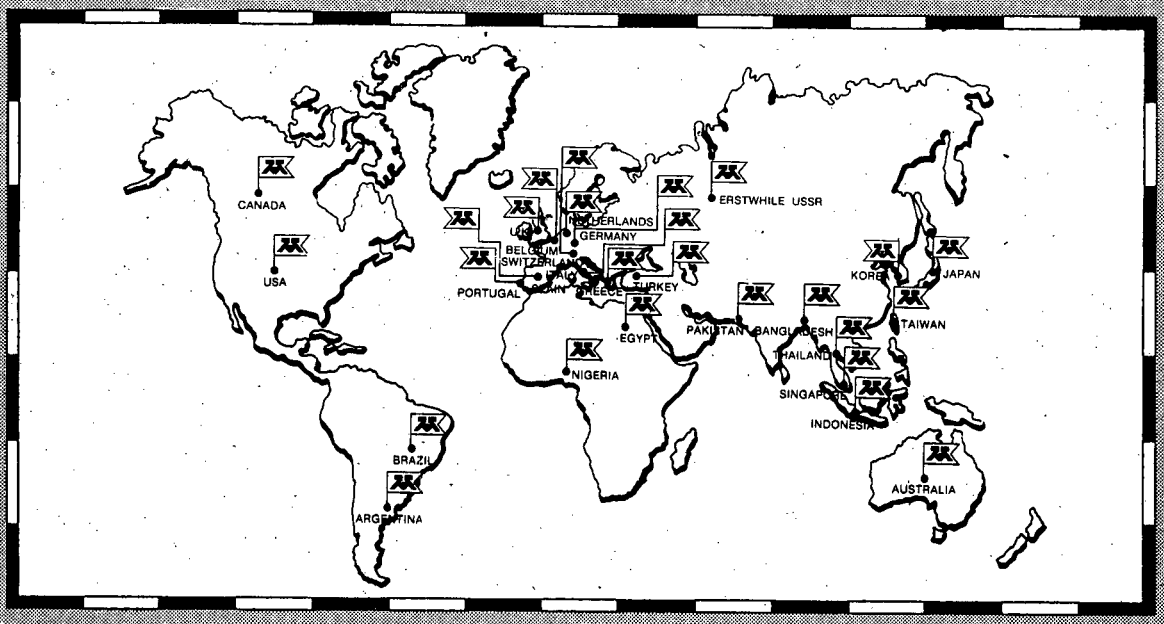
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GATT Accord And Agricultural Exports

Surinder Sud

The Indian agriculture with its tremendous inherent export potential stands to gain by the GATT accord, which would expand the market for Indian farmers, says the author. For it, the stringent sanitary and phyto-sanitary measures would have to be ensured first as envisaged in the accord. Apart from giving export-orientation to production, necessary amendments are also needed in various trade laws to help the farmers and traders, he feels.

THE impact of the historic GATT accord would indeed be more dramatic on agricultural trade than in other spheres. This is because there have so far been no rigid rules and principles to guide the global trade in farm goods. The major players in the world market have managed to manipulate it to suit their vested interests through domestic and export subsidies and tariff and non-tariff barriers. The GATT agreement would, for the first time, bring it under an international discipline.

Close scrutiny of the GATT accord indicates that its positive impact on agriculture in developing countries may outweigh the negative aspects. Predominantly agricultural countries like India which have managed to develop a strong research and development base of their own need not fear much. The level playing field likely to be provided to them in the international market of agricultural goods with the implementation of the new GATT provisions should, in fact, help them increase their exports.

There is, however one rider to it. These countries would have to improve the production efficiency of their farm sectors to be able to compete in the international market. Besides, the quality of the produce, too, would have to be improved substantially to conform to the global standards which have already been set by the developed countries which have so far dominated the international market.

Export Potential

The Indian agriculture, which has tremendous inherent export potential thanks to its vast diversity of products, and varied agro-climatic conditions, stands to gain in particular. Globalisation would expand the market for Indian farmers, it is felt. But the country would have to cope with the stringent sanitary and phyto-sanitary measures envisaged in the accord. Besides, conscious efforts would have to be made to give a distinct export-orientation to production. Various trade laws would have to be amended and new ones introduced to enable traders function effectively in both domestic and international markets. Fresh investment should be made in those sectors where the country has an edge over the other players in the world market. Fortunately, efforts seems to be already afoot in some of these areas.

The Commerce Ministry, which represented the country in prolonged negotiations that led to the finalisation of the GATT accord, feels that it would result in significant expansion in world trade in agricultural commodities. "India should be able to increase its own exports by US $ 1.5 to two billion annually in addition to the normal growth", the Commerce Minister, Mr Pranab Mukherjee stated in Parliament. This estimate is based on the assumption that reduction in export subsidies on agriculture by the developed countries would make Indian agricultural exports more competitive in the world market. The Minister had also pointed out that despite their strong reservations regarding permitting the import of rice, even countries like Japan and South Korea had agreed to allow market access for rice to other exporting countries. Experts believe that several other agricultural commodities, including sugar, which have been subsidised by many countries, would now find a place in the international bazaar.

New Provisions

The trade in farm goods has de

facto been excluded from the earlier GATT system through specific exemptions. There were no curbs on domestic support as well as export subsidies. Several kinds of non-tariff barriers had also been imposed by major players in international market to gain an advantageous position vis-a-vis smaller players.

The present GATT accord, on the other hand, has elaborate and well defined provisions for guiding global trade in farm goods. It envisages the subsidised volume of exports to be reduced by 21 per cent while the budgetary support for export subsidies in terms of value to be cut down by 36 per cent over a period of six years from the date of enforcement of the new provisions.

On imports of agricultural commodities, the provision of the GATT is clear: market access can be restricted only for balance of payments considerations and not for protection of domestic agriculture. Elaborating it further, the accord lays down that such restrictions on imports must be price-based alone so that all non-tariff measures including quantitative curbs would have to be converted into their tariff equivalents. It makes it incumbent for all countries to provide a guaranteed minimum market access to imports which would be three per cent of domestic consumtpion to start with and would be expanded to reach five per cent over a period of six years.

Close scrutiny of the GATT accord indicates that its positive impact on agriculture in developing countries may outweigh the negative aspects. The level playing field likely to be provided to them in the international market of agricultural goods with the implementation of the new GATT provisions should, in fact, help them increase their exports.

For developing countries, however, the minimum market access commitment would be less, at two-thirds of what is specified for others—that is two per cent to begin with and then rising to 3.33 per cent over a longer period of ten years. Significantly, it stipulates that the actual market access (meaning imports) cannot, at any stage, be less than actual average annual imports during the period 1986 to 1988.

AMS

In the case of agricultural subsidies, the GATT agreement requires calculation to be made by each country regarding Aggregate Measurement of Support (AMS) separately for product specific and non-product specific subsidies. For developing countries, a limit of 10 per cent has been stipulated separately for these two kinds of subsidies below which there is no obligation to make any reduction. The countries having aggregate measure of support in excess of 10 per cent are required to reduce the present level of domestic support by 20 per cent.

For all the countries, the expenditures on general government services are excluded from the purview of calculation of AMS. For the computation of non-product specific subsidies, the inputs to be considered are: fertilisers, agricultural credit, electricity and irrigation water.

The calculations made by the Commerce Ministry show that the AMS for non-product specific subsidies in India works out to between 2.9 per cent and six per cent depending upon the various possible sets of assumptions. Since the agreement provides for exemption from reduction commitment to input subsidies provided to low income and resource poor farmers, the effective AMS in the country would come to only around two per cent. This is based on the premise that about 30 per cent of the land is owned by small and marginal farmers.

Subsidy Factor

The provision in the GATT agreement regarding the cut in subsidised volume of exports also in budgetary support for export subsidies would, most probably, make goods of developed countries costlier, improving the cost competitiveness of Indian products. The developed countries would also have to cut down agricultural subsidies beyond the 10 per cent level. This would further push up their cost of production of farm commodities. India, on the other hand, does not have to do anything of the kind as its subsidies at present are well within the prescribed limits for most products. Indeed, theoretically, there is no bar on India on introducing limited export subsidies, if it so desires, to gain an added advantage on this count.

The trade in farm goods has de facto been excluded from the earlier GATT system through specific exemptions. There were no curbs on domestic support as well as export subsidies. The present GATT accord, on the other hand, has elaborate and well defined provisions for guiding global trade in farm goods.

Besides, it is provided in the accord that during the period of implementation developing countries shall not be required to undertake commitments in respect of internal transport and freight charges on export shipments. It also lays down that the provisions of subsidies to reduce the costs of marketing exports of

agricultural products including the cost of international transport and freight will not apply to the developing countries during this period.

Phyto-Sanitary

Of the various provisions of the GATT, the stipulations regarding the sanitary and phyto-sanitary measures are causing concern to India. This is because these provisions may be used as non-tariff barriers for impeding exports from India and other developing countries.

To harmonise sanitary and phyto-sanitary procedures, it is provided that contracting parties shall base their sanitary and phyto-sanitary measures on international standards, guidelines or recommendations where they exist and generally adopt a transparent quarantine policy.

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However, actually some safeguards are also provided in the agreement to prevent the misuse of these provisions. While recognising the right of countries to protect human, animal or plant life or health, the agreement enjoins upon them to ensure that sanitary and phyto-sanitary measures are based on scientific principles applied only to the extent necessary. This, in a way, should help ensure that these measures are not used as a disguised restriction on trade.

In any case, India cannot escape from improving its sanitary and phyto-sanitary measures and introducing a sound, uniform and transparent system in this regard. Such a move is, in fact, both necessary and desirable. It will indeed be in the long term interest of the country. Even the domestic market would stand to gain in the process.

Advisory Committee

Fortunately, the government seems to be alive to the constraints as well as opportunities emanating from the GATT accord. This is reflected in the move to set up a scientific advisory committee, headed by the well known agricultural expert, Dr. M.S. Swaminathan, to study the immense potential for the growth of agreement in the post-Uruguay phase of rule-based trading regime. The committee includes secretaries of the Ministries of Commerce, Agriculture, Agricultural Research and Education and Department of Biotechnology as members. It also has representatives from the private sector like ITC, Hindustan Lever, Tata Tea, Indo-American Hybrid Seeds, United Planters Association of India, the Federation of Indian Chambers of Commerce and Industry (FICCI) and the Federation of Indian Exporters Organisation.

The committee has been asked specifically to suggest measures necessary to achieve the following objectives:

— To take advantage of the emerging trade opportunities following the world trade agreement in plantation crops, agricultural commodities and aquatic products.

— To re-orient research strategies at the production and post-harvest levels, especially packaging, so as to meet the current and emerging ecological and consumer quality considerations for export promotion.

— To improve exports and simultaneously provide opportunities for skilled employment to rural women and men in areas such as horticulture, high value products, health foods and production of high quality seeds and planting material.

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— To evolve methods whereby research done by various institutions can be shared and a common strategy formulated.

— To formulate a policy framework for promotion of new technologies in plantations and agricultural exports.

Horticultural Exports

Boosting farm export has been declared as a priority area under the new agricultural policy aimed broadly at exploiting the lucrative world market for the benefit of the rural people. Horticulture has in particular been chosen to be a thrust area for raising production as well as exports. The optimism on gaining a foothold in the global market of these products emanates as much from the agriculture sector's inherent potential as from factors like geographical proximity to major consuming centres of West Asia, Far East and even Europe.

Indian horticultural exports at present suffer from over-dependence on a few products—onions and okra amongst vegetables and mango in fruits. This basket can easily be widened even before the new GATT accord is enforced. The signs of this happening are already visible. Indian grapes have found their way to the dining tables in European homes. There are several other fruits which can be exported with a bit of marketing effort. These include banana, litchi and even some non-traditional ones such as chikoo, ber, pomegranate, custard apple, etc. India enjoys an advantage in terms of quality of many of these fruits. For instance, some of the world's best varieties of banana are found in India.

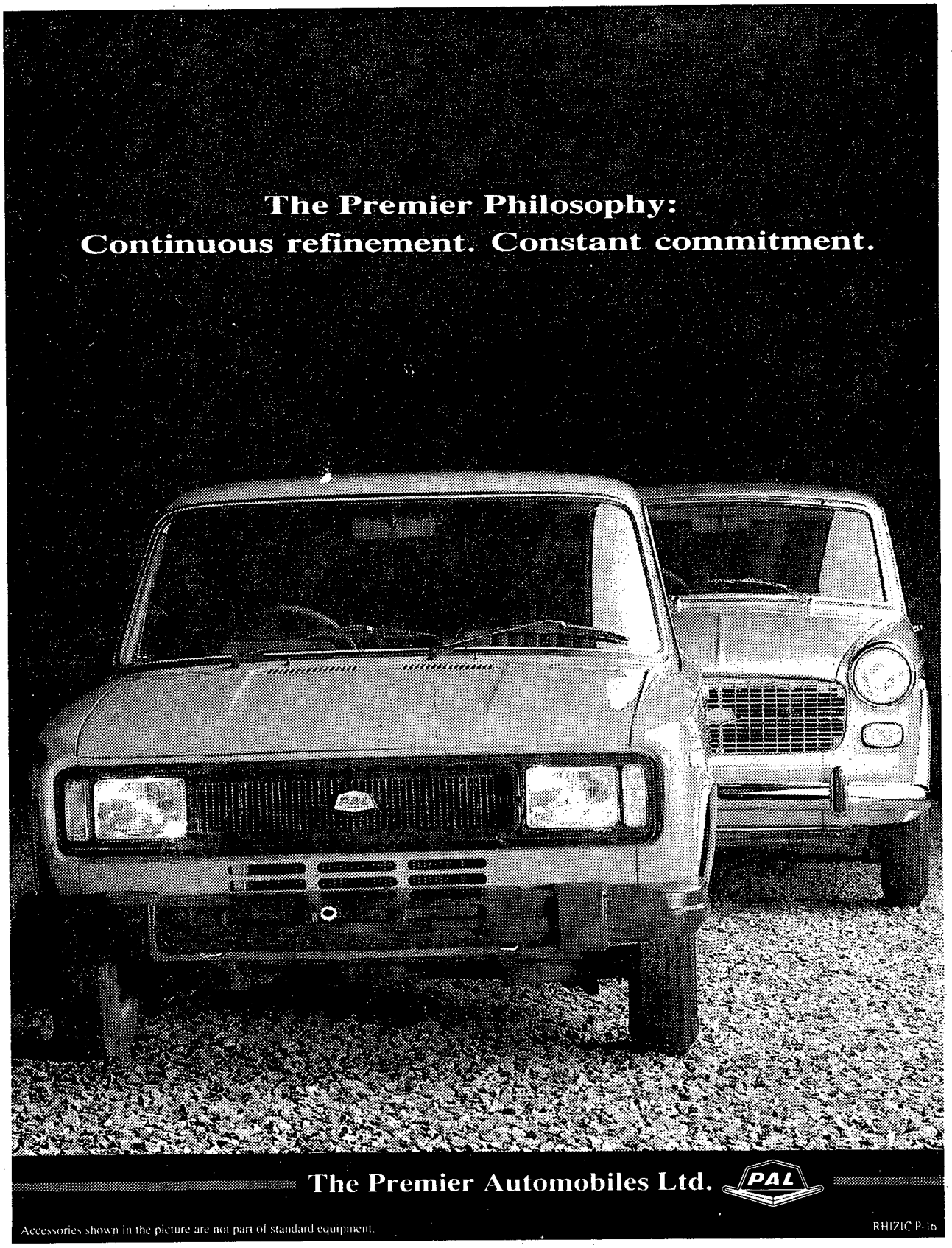
The vegetables in which India can manage to have an edge over its competitors in the export market include onion, potato, okra, bitter gourd, chilli and some other seasonal vegetables. It also has the capacity and ability to organise export-oriented production of some non-traditional but expensive vegetables like asparagus, celery, bell pepper, sweet corn, etc. Organically grown Indian vegetables and other farm products can be introduced in the international market.

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Presently, most of the fresh fruits and vegetables are destined for West Asia with small quantities going to meet the demand of the ethnic population in the U.K. and elsewhere. With the level playing field likely to be available after the implementation of the GATT accord, it should be possible to enter the more attractive European Community market besides the countries like Malaysia, Singapore and Japan in the East. In bulky stuff like vegetables, India can gainfully increase its market share in neighbouring countries like Bangladesh, Sri Lanka and Mauritius which have been the traditional outlets for Indian onions and potatoes. ❐

The author is Agriculture Editor, Business Standard.




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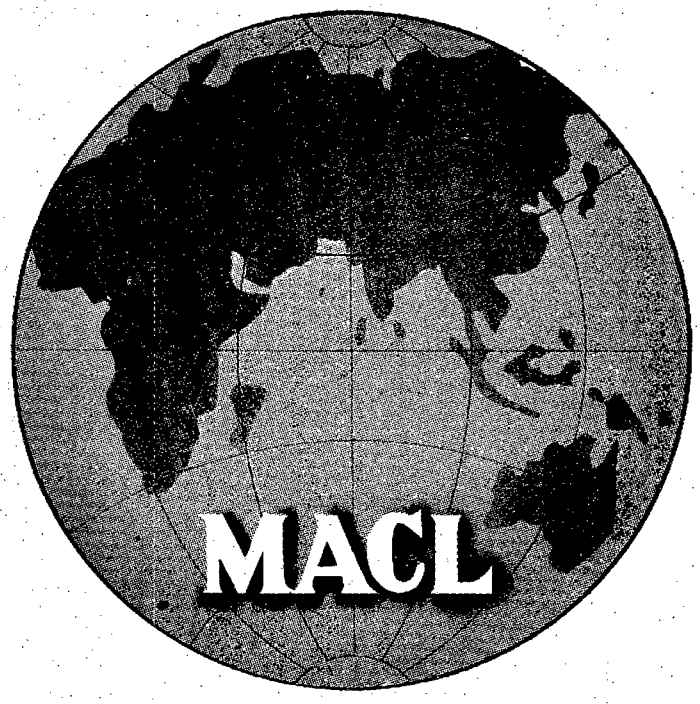
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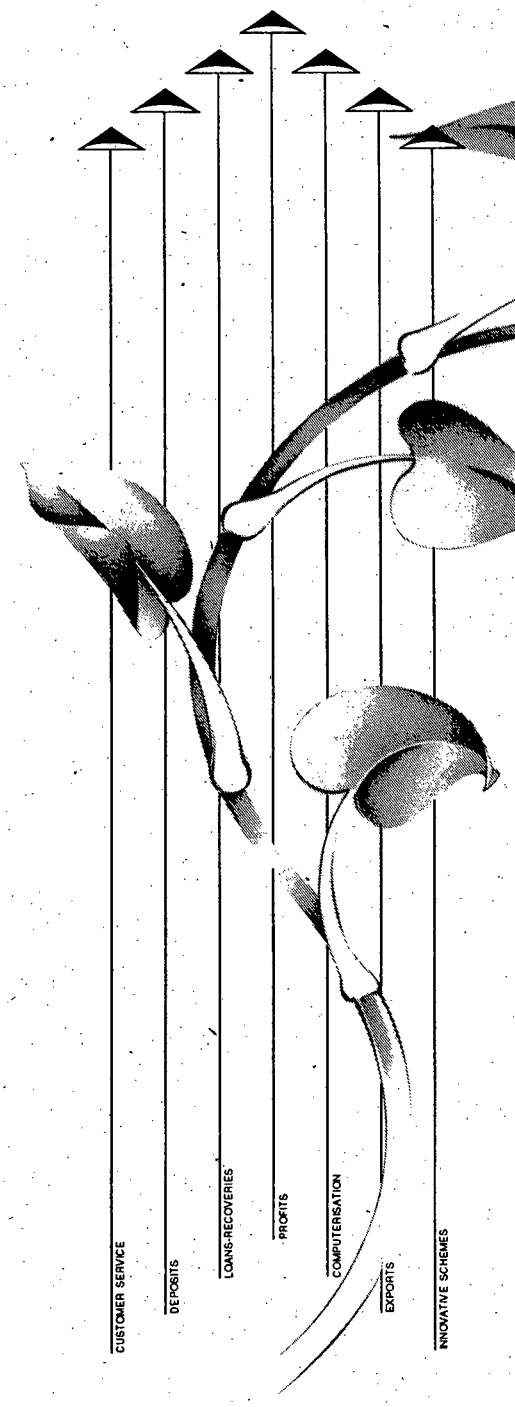
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