Golden Age to Globalisation

(*7000 years of Indian Economy*)

DAYA KRISHNA

Foreword by D.B. Thengadi

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प्रजासुखे सुखं राज्ञः प्रजानां च हिते हितम् ।
नात्मप्रियं हितं राज्ञः प्रजानां तु प्रियं हितम् ॥

In the happiness of his subject lies the king's happiness; in their welfare his welfare. He shall not consider as good only that which pleases him but treat as beneficial to him whatever pleases his subjects.

Arthashastra {1.19.34}

Foreword

Shri Daya Krishana has rendered a signal service to the country by writing this National economic history of 7000 years.

For the purpose of this thesis, it is not necessary to go into the details of the definition of the term 'nation'. Just as an individual, a nation – an aggregate of individuals too has an individuality all its own. Like individuals, nations have also their distinctive traits and features. For the present purpose, it is sufficient to realise that national identity or national self-hood has two distinct characteristics – collective unity and collective singularity.

Economics is a subject in which every common man should be interested. But that does not seem to be the case today. Because, economic ideas and concepts have been elitised by the westerners. The ideas are taken out of the reach of common men and are converted into harmonic forms. This leads to cognitive dominance. If de-elitised, most of the economic concepts will become intelligible to masses .

This thesis of Daya Krisna is meant for common man. It is not merely for a few intellectuals. He has made maximum efforts to de-elitise economic concepts.

History is an account of events, especially of those that form the story of any human group. It is a continuous methodical record of important or public events, especially those connected with a particular country or period. Historian is a writer of history or one who is learned in history. We have seen so far histories of different nations as well as of the world. Prof. Stephen Hawking has written even "A brief History of Time". Though history can be described as pure and simple narration of the past events, it is not so easy to write history properly.

Communists all over the world were known to present (or distort) history so as to suit their ideological convenience. They did it with religious fervour. But our Anglicised Indians could not suspect that Britishers would write (and distort) history with a view to promote their imperialistic designs. Even their world-histories were only euro-centered. Narration of past events must be faithful. Even national self-glorification should be eschewed . It should generate neither undue inferiority complex nor undue self-complaisance.

Till recently, in case of the history of any nation, there used to be a great stress on only its political aspect, victories and defeats in battles and wars, ascensions and dethronements, revolts and revolutions, successes and failures of different forms of Government, etc. Political history-writing in our country used to be lop-sided. Being Delhi-centered, it ignored even great events and personalities from distant parts. For example, our Southern heroes like Poolithevan (1715-1768); Muthuramalinga Vijaya Raghunatha Sethupathy (1760-1809) ; Velu Nachchiyar (1750-1796); Marudhu Pandiyar (1748-1801); king Bhaskar Sethupathy (1868-1903); Pandiththurai Thevar (1867-1911); and a Prominent lieutnant of Netaji Subhash Chandra Bose – P.V. Muthuramalingam Thevar (1908-1983). How many students of history are acquainted with their names and deeds?

How many standard books on history mention the names of Katta Bommu (Andhra), Velu Thampi and Pazhashi Raja (Kerala), or even Champakraman Pillai ?

(Pazhashi Raja had fought against General Welsley, who subsequently became Duke of Wellington after defeating Napoleon; Champakraman Pillai was the leader of Indian revolutionaries who tried to mobilise Germany and others in Europe in favour of Indian freedom, during the first world war.)

Though the stress on political aspect of history continued, it was subsequently realised that only political history of any nation cannot present a comprehensive and integrated picture of the entire national scenario during any given period. Hence the need for economic history, social history, religious history, etc. No one aspect of national life can be dealt with in isolation. This is true about all aspects – political, religious, cultural, civilisational, and also economic.

History is like a lamp on the threshold - it illuminates both the sides. While it is true that no two situations can be exactly alike, it is also a fact that correct solutions to the present problems can be more efficiently worked out with the help of historical parallels. Great leaders of thought and action in the past had realised this fact. They could build up future because they had mastered the past. While history without futurology is fruitless, futurology without history is rootless.

For writing history of any aspect of national life, the approach of the author must be holistic. For example, in his learned article 'Wasteful Expenditure and Islam', syed Thanvir Ahmed says, "It is, therefore, evident that wasteful expenditure cannot be successfully curbed through Government policies alone. What is required is that people themselves should decide not to indulge in such wasteful expenditure. For this to happen, some other force is required and that force is the force of religion. Faith in Almighty and the fear of Him can act as the greatest deterrent."

Dr. Masood Hasan wrote, "The conventional economics has been taken for granted as a panacea to the numerous Socio-economic problems inspite of its repeated failures from time to time......... All this occurred due to this or that interpretation of the economic paradigm suiting to the changing environment and treating the economic problems in isolation, while they were to be tackled taking into account the entire social system. The economic policies merely stimulating material growth with value neutrality are bound to lead to the occurrence of several problems in the economy."

Similarly, can a mere political history of Europe during a period between 1914 and 1939 help us in tracing the real and the basic reasons for both the world wars? Certainly not. Because the reasons were basically economic.

Peter Drucker once observed that the science of management is as old as man himself. This is true about economics also. From the scholarly writings of Dr. M.G. Bokare, Dr.,V. R. Panchamukhi, or Dr. S.K. Chakravarti it becomes evident that Indians were aware of the rudimentary laws of economics even during Rig Vedic period. Long before the westerners recognised economics as a distinct discipline, Kautilya wrote his 'Arthashastra' which gave a jolt to their pre-conceived notions about the economic history of Bharat. 'Artha' stands for material well being, as well as for the means of securing such well being, particularly wealth. Claude in his review of management thought recognised Kautilya's contribution as "most comprehensive work on organisation and management of human affairs."

While western economics accepts Darwin's Law of the survival of the fittest, Kautilya's stress is on the 'arrival of the best to lead the rest." Indian economics has as its goal the highest welfare of all members of society, i.e. 'Sarvodaya' - and not merely 'the greatest good of the greatest number. Sarvodaya offers fullest scope to every individual for his fullest development according to his aptitude, so as to fully utilise all faculties of all individuals for the collective cause of the nation. It inspires every individual to progress always from "constraint to freedom, from credibility to faith, from status to contract, from bigotry to toleration, from blind fatalism to human dignity." It leads automatically to self perfection, professional excellence, character building, value based development of mind, overarching unity of humanities, science, fine arts and technology, and integral personality with full grown skills of head, heart and hands.

According to Bharatiya concept, 'Artha' should be based on 'Dharma'. Many will be surprised to know that in his Foreword (to a book written by Shri Shriman Narayana) from circuit House, Dehradun, on May, 25, 1964, Pt. Jawaharlal Nehru wrote:

"In India, it is important for us to profit by modern technical processes and increase our production both in agriculture and industry. But, in doing so, we must not forget that the essential objective to be aimed at is the quality of the individual and the concept of Dharma underlying it." Artha must be based on Dharma and culminate in 'Moksha'. This is the holistic Bharatiya approach. And to equip individual citizens to play this role effectively has been, traditionally, the responsibility of our national education policy. Education was expected to fulfil total developmental needs of the country and to facilitate simultaneously complete unfoldment of potential, talents, faculties and aptitudes of every individual.

On the contrary, the approach of western economists used to be fragmentary. They had not realised that in this globally interconnected world, physical, biological, psychological, social, political, economic, cultural or ecological phenomena are all inter-dependent. They treated economics as an independent, autonomous subject, isolated from the rest of the totality. They cannot integrate with their quantitative economic analysis the qualitative factors leading to the understanding of the ecological, social and psychological dimensions of economic activity. They did not take cognisance of the findings of the psychological research on people's behaviour as income earners, consumers and investors.

Fortunately, the process of rethinking is afoot in the west itself. Their scholars are becoming sceptic about the soundness and utility of their orthodox economics. Claude Alvares (from Goa) had asserted that western paradigm cannot be accepted as universal model of progress and development. Now, doubts are being expressed in the west whether western paradigm is helpful for the west itself. There is a growing demand for evolutional of indicators for personal and social happiness as well as for social pathology.

The need for social indicators had been first emphasised by such prominent social scientists as Bertram M. Gross of Wayne State University, Eleanor Scheldon and Wilbert Moore of the Russell Sage Foundation, Daniel Bell and Raymond Bauer of Harvard. This view was also endorsed by Daniel P. Moynihan, once a white house advisor; senators Walter Mondale of Minnesota and Fred Harris of Oklahama, and several former cabinet officers of U.S.

Western economists were determined not to devise social indicators, because they may prove to be hurdles in the process of profit maximisation. But it is noteworthy that two officers of the world Bank undertook the task of quantifying the social cost of industrial pollution in India during the year 1992. The figure they arrived at was 9.7 billion dollars.

Pollution, of course, is one of the many factors. But the point is that, after appropriate efforts, its cost could be quantified. The plea that such indicators are not amendable to monetary measurement and, therefore, materialistic yardsticks amenable for monetary measurement should alone be accepted as standard and sufficient, is no longer acceptable to many western scholars. On the contrary, Professor Schegeto shoru of Tokyo University floated the concept of 'Net National Welfare' (NNW). Shegeto defined it as "Gross National Product minus costs of social pathologies." Lionel Jospin of France said, "Market economy? Yes; Market society ? No." What is more important is that many of the western scholars are now appreciating the merit of holistic, integrated thinking, and the demerit of the current compartmentalised thinking. For example, in his "Open secret of Economic Growth", David Marcord Wright observed: "The fundamental factors making for economic growth are non-economic and non-materialistic in character. It is the spirit itself that builds the body."

Some of the western scholars are now warning against the unrestrained advance of science and technology and demanding constitution of a 'Technological Ombudsman.'

All knowledge is essentially holistic. Its compartmentalisation is only for the convenience of understanding.

The holistic approach in economics includes not only the study of our own economic past; it also includes comparative study of foreign economics. Japan, defeated and crushed after the second world war, seemed to have no hope of regeneration. But it rose again, competing against the then most prosperous country, United States. How it could happen? What factors helped Japan in this process? Explaining just one of the many factors, Kenichi Miyashita and David Russell furnish us with the relevant information about how Japan scored a point over U.S. (Inside Japanese Conglomerate : 'Keiretsu').

"So many American companies were not studying Japanese business as thoroughly and systematically as the Japanese were studying them, and very few American executives seemed to have more than the vaguest idea how Japanese business worked. Although a handful of U.S. managers may read up on how to bow correctly before a visit to Tokyo, not one in a hundred is assigned to learn about the structure and influence of the Government bureaucracy, the role of the big 'city banks' and the trading houses, and the most basic 'geography' of Japanese business — the 'Keiretsu' ..... Not knowing the fundamentals of how they do business is a sign of carelessness, and carelessness is one step away from failure."

While Japan's is an encouraging example, we are very much aware of depressing examples from various developing countries. To cite just one example. The currency turbulence caused by the actions of the foreign currency traders for maximising their profits, which gave a rude shock to national economies of South east and East Asian countries.

He had further studied in depth Freud's concepts of alienation and existentialism in psychology which helped Marxism, after the demise of Marx, in elevating his economic determinism to the status of the collective socio-economic problem.

Needless to add that he was at home with authors from Plato and Aristotle downwards, which are studied today by all serious students of political science, economics and sociology.

He had also studied Vedas, Upanishadas, Aranyakas, Puranas, Ramayana, Mahabharata, Kautilya, Shukra ,Various Smritis and other ancient literature on economics. His intellectual penances enabled him to visualise internal humanism ((Ekatma Manava Darshan), which is the modern, 'Yuganukul' manifestation of Sanatana Dharma.

The west has no such eternal, dependable point of reference. It has, therefore, to move often from crisis to crisis.

After the fall of communism, the votaries of capitalism hoped that capitalism will be strengthened. But they were disappointed. The marxist historian F.J Habsbaum (Hobsbaum) had termed 1945-89 the golden age of capitalism." And soon afterwards, Paul Samuelson, the Chief exponent of capitalism, said, 'No jury of expert economists can agree on a satisfactory solution for the modern disease of stagflation, many of their preferred cures may be as bad as the disease itself. That is why one can say that some young economist can win for himself or herself a Nobel Prize on the basis of an empirical or theoretical break through that will help the mixed economy cope better with the new scourge".

A search for the Third way is already begun. Their bravado can no longer conceal their downward march.

The economy of United States, for example, started going downhill from 1960 onward. The Omnibus Act of 1988 could not help the situation.

Jagadish Bhagawati, one of the world's top trade economists, had warned U.S. in may, 1991, that Super 301 would boomerang against U.S. itself because of the irrationality of using unilateral measures to expand market access. The only effective answer to super 301, he wrote, is a firm and total refusal to negotiate under the threat. "Only a united response by every body engaged in world trade will cut this cancer out of the system."

The process is just begun after so many years at Doha in November, 2001. People have understood the hollowness of the assurance that "a situation can never be visualised when the Indian industry and agriculture will be swamped by foreigners." On the contrary, long before the last September11, episode, American economists, politicians, and the broad public sensed decline in the U.S. economy. They were worried over the U.S.'s loss of competitiveness, the threat of the Japanese take over, the astronomical fiscal deficit, shockingly low rates of saving, and rising levels of unemployment and poverty. The dollar's special status is being eroded by the growing importance of Japanese and European currency blocks. Cumulative government debt is rising. In the near future, foreigners are likely to lose confidence in the dollar – US treasury bonds, stocks, real estate, firms. Signs of a growing social crisis are clearly visible.

The attempt of U.S. to establish its economic Imperialism is not from the position of strength. Various attractive slogans are given. Social clause, labour standards, environmental standards, etc. In practice what they mean? Take example of labour standards.

The ultimate goal of G-7(8) countries is to rob the poor countries of their comparative advantage in labour costs. Any debate that touches on labour standards ultimately touches on labour costs. "There is no intention to stick to a well defined set of minimum standards for human rights. The attempt is to go beyond that and deal with wages and working conditions.

The most impressive slogan is 'Globalisation'. Who are raising this slogan? The very same people who conducted genocides in different countries! What about those who could not be killed? Such original inhabitants of America say "when they came to our shores, they had the book in their hands, and we had our lands. Now we have their book in our hands and they have our lands."

For such people to propagate globalisation is the height of audacity.

What is the strategy of their globalisation ? As Amartya Sen, a noble laureate in economics has said, the central question cannot be whether or not to make use of the market economy. It is not possible to have a prosperous economy without its extensive use. But that recognition does not end the discussion but only begins it. Market is one institution among many. Aside from the need for proper public policies within an economy (related to basic education and health care, employment generation, land reforms, credit facilities, legal protection, women's empowerment and more), the distribution of the benefits of international interactions depends also on a variety of global arrangements (including trade agreements, patent laws, medical initiatives, educational exchanges, facilities for dissemination of technologies, ecological and environmental policies and so on.)

Before we try to form any opinion on the process of globalisation, which is being professed by IMF-World bank, it is critical to understand the important basics of economics. In an ideal economy there is no profit or loss. Whatever will be produced in an ideal economy will be sold at a price that covers all the applicable costs. In other words, in an ideal economy, there is a fair distribution of the benefits of improved productivity or development. Though it is not possible to have such an ideal economy, it is important to realise that we should strive towards the direction of ideal economy to ensure that the benefits of development spread to as many people as possible in the world, by minimizing the aberrations which are not conducive to such an approach in our economy.

Let us take the present system of international economy. While there can be no generalization, broadly, any product that the third world buys, pays for the unit labour cost at 12 times that of the unit labour cost prevailing in the third world. In effect, the West buys cheap and sells expensive when trading with the third world. The present system of international trade is tilted highly in favour of the developed countries and continues to encourage capital flight from the third world. As long as there is selective restrictions for movement of people and the goods, international economy continues to be tilted highly in favour of developed countries.

When such an adverse condition is already prevailing in the international trade, what exactly is the implication of the kind of globalisation professed by IMF-World Bank? No person is more competent than Mr. Joseph Stiglitz, former Chief Economist of World bank and who has been awarded Nobel Prize in 2001, for his contribution to economics, to comment on the policies professed for poor countries by the World bank. Stiglitz's observations can be summed up in the following paras. The World Bank hands over the Minister of every poor country seeking the assistance, the same four-step programme.

1. Privatisation. Rather than objecting to the sell-off of state industries, some politicians of the state – using the World Bank's demand to silence the critics - happily flogged their electricity and water companies. One could see their eyes widen at the possibility of commissions for sharing a few billion off the sale prices. US backed oligarchs stripped Russia's industrial assets, with the effect that national output was cut nearly to half. US treasury view was - this was great, as we wanted Yeltsin reelected. We don't care if it was a corrupt election.

2.Capital Market Liberalization after the Privatization. In theory, this allows investment capital to flow in and out. Unfortunately, as in Indonesia and Brazil, the money simply flows out. Stiglitz calls this the "hot money" cycle. Cash comes in for speculation in real estate and currency, then flees at the first whiff of trouble. A nation's reserves can drain in days. And, when that happens, to seduce speculators into returning nation's own capital funds, the IMF demands that these nations raise interest rates to 30%, 50% and 80%. The result was predictable, said Stiglitz. Higher interest rates demolish property values, savage industrial production and drain national treasuries.

3. At this point, the IMF drags the gasping nation to step three: a market based pricing – a fancy term for raising prices of food, water and cooking gas. This leads, predictably, to step three-and-a-half: what Stiglitz calls the IMF riot. The IMF riot is painfully predictable. When a nation is down and out, the IMF squeezes the last drop of blood out of it. They turn up the heat until, finally, the whole cauldron (boiling vessel) blows up – as when the IMF eliminated food and fuel subsidies for the poor in Indonesia in 1998. Indonesia exploded into riots. The Bolivian riots over water prices last year. In last year's Interim Country Assistance strategy for Ecuador, the Bank several times suggests – with cold accuracy – that the plans could be expected to spark 'social unrest'. That is not surprising. The secret report notes that the plan to make the US dollar Ecuador's currency has pushed 51% of the population below the poverty line. The IMF riots (and by IMF riots I mean peaceful demonstrations dispersed by bullets, tanks and tear gas) causes new flights of capital and government bankruptcies. This economic arson has its bright side for foreigners, who can then pick off remaining assets at fire sale prices. A pattern emerges. There are lots of losers, but the clear winners seem to be the Western banks and US treasury.

4. Now we arrive at step four: Free trade. This is free trade by the rules of the World trade organization and the World bank, which Stiglitz likens to the Opium Wars. That too was about 'opening of markets', he said. As in the nineteenth century, Europeans and Americans today are kicking down barriers to sales

in Asia, Latin America and Africa, while barricading their own markets against the third world's agriculture. In the Opium Wars, the West used military blockades.

Today, the World bank can order a financial blockade, which is just as effective and just as deadly. Stiglitz has two concerns about the World bank-IMF plans. First, he says, because the plans are devised in secrecy and driven by an absolutist ideology, never open for discourse or discussion, they undermine democracy. Secondly, they don't work. Under the guiding hand of IMF structural assistance, Africa's income dropped by 23%. Did any country avoid this fate? Yes, said Stiglitz, Botswana. Their trick? They told the IMF to go packing. Siiglitz proposes radical land reforms and attack on the 50% crop rents charged by the propertied oligarchies worldwide. Why didn't the World Bank and IMF follow his advice? If you challenge (land ownership), that would be a change in the power of the elites. That is not high on their agenda.

In Stiglitz's own words, the IMF, in theory, supports democratic institutions in the nations it assists. In practice, it undermines the democratic process by imposing policies. Officially, of course, the IMF does not impose anything. It 'negotiates' the conditions for receiving aid. But all the power in the negotiations is on one side - the IMF.

No doubt, developing countries including India, have their own problems. Long back, developing countries had become aware of their problems, such as debt service burden, worsening terms of trade, declining resources availability, increasing inaccessibility to the markets of developed countries, heavy dependence on developed countries for trade, technology and investment. There were a few scholars who could look at these issues from the perspective of a social scientist, who could combine with ease insights from economics with those from sociology, social and political history and philosophy. They advocated that effective cooperation among developing countries is an appropriate strategy for increasing the pace of development in the third world. They said that southern countries themselves had substantial potentialities, which could be harnessed for the mutual benefit, not only in the areas of trade, but also in the areas of technology and investment. The need for increased South-South cooperation was felt by all. It was felt that it would be quite possible to benefit from trade conflicts within the developed countries through an effective South-South cooperation.

But the efforts in this direction were haphazard. The report of the South Commission said, "one of the chief shortcomings of South-South cooperation has been weak organization and lack of institutionwised technical support, both at the international level and within most countries." The report of the South Commission, which worked under Dr. Manmohan Singh, is illuminating.

In India, some experts had already forewarned that in absence of firm Swadeshi policy, there would be mis-direction of our economy. Swadeshi in industry must include capacity to innovate our own industrial prototypes and more genuine R & D, even if it means a little less rate of profit for the time being. Swadeshi also must mean a policy that helps creation and expansion of gainful work.

While dealing with multinationals, it must be remembered that usually there is a gap between what the foreign companies state in the agreements and their actual implementation. Multinationals should be required to disclose their formulas they are so secretive about. In case they refuse to do so, they should be asked to quit or dilute their equity to lesser percent. Equality before law should be ensured for both Indian and foreign companies.

All negotiations with foreign companies must be on equal footing, keeping in view the national self interest; they should be preceded by open tenders and public debate. All agreements should be fully transparent, taking the people and the Parliament in full confidence.

The World Trade Organization

The World Trade Organization was established on 1-1-1995. On April 1, 1994, the Uruguay round, the eighth in series of trade negotiations under the auspicious of the General Agreement on Tariff and Trade, came to a close. 105 countries had participated in the discussions. Out of these, 94 were GATT members. After more than eight years of negotiations, the final round was concluded at Marakesh in Mexico on 15th April 1994. This agreement formally came into force on January 1, 1995, and became fully operational on January 1, 1997. Uruguay round included about 60 agreements and to become a member of WTO, a country had to accept all these agreements in their totality and without any exceptions or reservation. (It is not known whether representatives of India who officially committed India to WTO regime had studied these documents). The Government of India had not taken Parliament or people into confidence before joining WTO. But having joined it, they started vigourous propaganda in favour of that organisation, which they claimed represented the process of 'Globalisation'. The WTO also had promised, among other things, greater exchange stability, expansion of trade, sustainable economical growth, correction of external imbalance, adequate flow of concessional financial and real investment resources, flow of technology and expansion of market access. Anyway, it seems, the leaders of Government of India were convinced that 'Globalisation' was the destination of mankind.

And, what is more important, there was no alternative now to globalisation! To achieve this noble object all members agreed to eliminate the 'trade distortionary' policy interventions, the tariff and non-tariff measures, subsidies and incentives as per directive of the WTO. Subsidies were to be reduced drastically. The condition of domestic content stipulation and the export-import link imposed on the foreign investment flows had been pronounced as 'GATT inconsistent'. When Americans introduced the term 'globalisation' many of our countrymen welcomed it. They could not make out the difference between American 'globalisation' and our 'Vasudhaiva Kutumbakam'. In fact, these are two entirely different concepts. Our concept envisages the whole world as one family, theirs aspires to make the whole world ' one market' for the benefit of United States.

(Even otherwise, the westerners have always mistaken uniformity for unity)

In keeping with the western thinking, our leaders encouraged the idea of disinvestment. Disinvestment, they thought, was the best remedial measure for industrial sickness. The state should function only as a facilitator of development by providing infrastructural facilities and other support mechanism, without in any way participating in the economic activities. They suffered from the euphoria of marketisation. They refused to take into consideration the experience of some developing countries which showed that the state had been playing a very crucial role in making the market behave in a manner suited to the national interests of their economies. They ignored the lessons of Japanese experiment. In Japan, government decides how many firms should be in a given industry and sets out to arrange the desired number. The leaders of our government allowed themselves to be dictated by the market i.e. the vested interests, who could easily win over the bureaucracy. They also did not understand the danger of excessive growth of bureaucratization.

No doubt, we are opposed to governmentalisation of industries. The government which wields political power should not be allowed to monopolise economic power also. The concentration of both, the political and the economic power in the same hands leads to the worst type of dictatorship. But it does not mean that we should allow unrestrained marketisation. We have to strike a balance between governmentalisation and marketisation taking into account the experience of Britain where governmentalisation was first introduced by the anti-governmetalisation government and of Germany where the socialistic laws were first enacted (in selected cases) by a confirmed anti-socialist leader, Prince Bismark. Nation-builders have to think of political ralities, not economic theories. Even Lenin had to introduce his New Economic Policy, which was inconsistent with Marx. Our seers and sages realised that, "just as an individual, a nation too has an individuality all its own. Individuals and nations in all parts of the globe have distinctive traits and features, each of them having its own place in the scheme of universe. The different human groups are marching forward, all towards the same goal, each in its own way and in keeping with its characteristic genius. The destruction of special characteristics, whether of an individual or of a group, will, therefore, not only destroy the natural beauty of harmony, but also its joy of self-expression. Evolution of human life also, which is multifaceted one, is retained thereby."

Hence their efforts for the evolution of one world family, enriched by the growth and contribution of different national cultures, and evolution of 'Manav Dharma' enriched by perfection of all the religions including materialism. The spiral type development of human consciousness as developed by Pt. Deendayal Upadhyay is beyond the comprehension of the westerners because they can not even imagine the nature of the cosmic truth that "All is one."

Being materialistic, they have developed their concept of 'globalisation' which would, they hope, culminate ultimately in Westernisation of the world. For this purpose, all economies of the world must be integrated with the American economy. The Americans present this to the developing countries as TINA i.e. "There is no alternative."

Their propaganda influenced the minds of Indian intellectuals who thought it inevitable to follow every lead given by Americans.

Our westernised educated people did not take into consideration the fact that our values of life are entirely different from those of the westerners. Their values of life, as stated by the Commission on Global Governance are based upon some preconceived notions about economic ideologies – i.e.free market, liberalisation, privatisation etc. as the values of optimum governance. They want these values to be universally applicable in all stages of development. Our values flow from Dharma. The confused thinking of our intellectuals is due to the tendency to accept everything western as standard.

There is a growing feeling now that WTO is not indispensable. Regional and sectoral arrangements, sectoral agreements on financial services, information technologies and telecommunication, and other such measures can render WTO dipensable.

There is also a feeling that the WTO agenda should not include subjects for which different UN organisations are already working.

Gullibility of Indian Representatives at the negotiation table in earlier stages must have given a pleasant surprise to the representatives of the developed countries.

Chitra Subramaniam's book "India is for Sale" gives a number of examples how these negotiations were carried with least seriousness. For a long time, India's GATT wing in Geneva was headless. For a long time, the enormous task of defending such critical issues like textiles, environment, investment and social clause was left to two individuals. The US delegation comprised a battery of international lawyers, specialists in patents, specialists in trade matters, especially in specific subjects such as biotechnology, environment etc. India never invited representatives of trade and industry to join the delegation. Neither the specialists. Ministers visiting Geneva during those days had no time to coordinate their efforts on issues as critical as trade or investment. The degree of cynicism that marks some of our top bureaucrats can be gauged from the comments of one of the Indian Commerce Secretaries who took part in WTO negotiations. Commenting on TRIPs regime to a journalist in Geneva he observed, "This is not good for India. In fact the whole Uruguay Round package is loaded against us. But I would have retired by the time most of it comes into effect. So, I am not really concerned. Don't quote me on this."

The same book quotes comments of representatives of other countries. For example, one of them said, 'Trade is the business of buying and selling. India negotiations have given that word new meaning.' A senior European negotiator at the WTO compared Indian attitude with Mother Teresa. It looks like Mother Teresa has drafted India's trade script. It says, 'give, give, give, till it hurts.

Mrs. Subramaniam quotes another interesting incident. When negotiations were going on about TRIPs, a particular bureaucrat was giving tough time to US negotiators. A phone call was made to Delhi and within minute of that call the Indian minister called the Indian negotiator and changed his brief. India changed its course midstream. Minister pleased United States at the cost of his own country. American negotiators joked in private in Geneva that 'the Indian government should be sent a million dollar cheque for calling this representative home.'

Article 1.1 of the final WTO Act defining 'subsidies' has pointed out, it cannot be considered a subsidy if actual levies paid by the industry on import of raw materials and their conversion to finished products are refunded. Article 3.1 lists prohibited subsidies and includes subsidies which are in excess of the amount exempted. Also disallowed are those which are in excess of duties levied on imported inputs for exported products. The view of EC that all subsidies that are offered in the form of DEPF, duty drawback, income tax concessions, are not allowed, is wrong. But, we have not put up a fight for this right.

The EU seeks to classify the incentives by the government to Indian exporters as subsidies and to levy anti-dumping duties on goods supplied by them. The EU also targeted industrial promotion scheme launched by the states and also state guarantees given to private loans for anti subsidy and anti-dumping duties. (They conducted anti-dumping probe on polyethylene terethalate (PET) film imports while imposing provisional countervailing (anti-subsidy) duty on these Indian PET films.)

Wherever their goods are competitive, they find a way to shut their markets on Indian goods. India faced their probe regarding its exports of textiles, seafoods, blankets, cotton type bedlinen, unbleached cotton fabric, fasteners, polyethylene sacho, etc. EU's commercial policy constraints, quantitative restrictions, technical barriers, anti-dumping and anti-subsidy investigations, barriers from sanitary and phyto-sanitary measures to packaging requirements and quotas, all these are thwarting access of Indian products to the EU market.

GATT required India to lower import duties, remove constraints on consumer goods imports, reduce qualitative restrictions on imports of agricultural products. The system of protection through import restrictions and high tariffs is permissible for some countries but objectionable for others. As a result of the reduction in import duty there started competition between foreign imported goods and domestic non-ferrous metal products, tyre manufactures and paper products. The CII has been against the duty free import of capital goods sector. CII has estimated that the indigenous Capital goods industry had lost on conservative estimate orders worth Rs. 5000 crores already and the whole manufacturing base is in jeopardy. Local industry has to pay excise, sales tax, octroi, turnover tax, while imported goods are allowed completely duty free. Similar is the case of machine tool industry and manufacture of genetics, boilers etc.

Small-scale industries are the worst sufferers. Their units are being closed every day and millions of their employees thrown out of employment. Uptodate figures of both are not available with the government or the Laghu Udyog Bharati, for the simple reason that every day brings new danger to this sector.

There is a question of reservation of 836 products for small sector. If these products are freely imported, why large-scale manufacturers be not allowed to enter these reserved areas? In fact, instead of doing away with the reservation policy, we should bring all the reserved products of SSI under QR restrictions.

Our big and small industries come from trading community and they would lose no time to sell their manufacturing establishments to foreign investors and multinationals and convert themselves as dealers or traders of such foreign products. Already, there are takeovers, mergers and acquisitions of Indian companies by MNCs.

Our common people do not understand the strategy of aggressive foreign capital. It is the strategy of Joint ventures. We know the nature of joint ventures in our country. We are acquainted with arrogance of foreign partners in joint ventures. It is not correct to say that India cannot survive without heavy doses of foreign money from foreign partners. The case of Modi Xerox Ltd. And Xeros Corporation US, Hindustan Motors and General Motors, Honda and the Hero group, Mahindra and Mahindra Ford. This is only by way of illustration. The EU must be aware of the existence of Amcham in India. It has as its members about 300 purely American Companies in our country.

(Our case cannot be compared with that of China. China allowed foreign direct investment to reign it. But, the Chinese authorities strictly retained their control over the policies they followed. China has not allowed arrogance and assertiveness of multinationals in any area.)

In a number of other matters, India is discriminated against. For example:

1. While we are forced to reduce our tariffs and face non-tariff barriers, the developed countries maintain high peak tariffs for our exported products.
2. The extent and intensity of non-tariff barriers against our exports have increased significantly. Article 15 of anti-dumping Agreement requires that developed countries should explore constructive remedies before imposing anti-dumping duties against the exports of developing countries. This they have never even tried to follow. On the contrary, Article is used against India's exports of iron, textiles, and chemical products.
3. They want to force us to remove all quantitative restrictions and have the most liberal import policy. In that case, why any foreign country should invest in India and undertake manufacture here when they can export their products from their own country on a nominal tariff?
4. Under TRIMs Agreements, there is a clause called Performance Requirement. Now you cannot put a condition to foreign investor about indigenisation, export performance, dividend balancing, etc. Compliance with this requirement will mean that no benefits will come from foreign investment, such as transfer of technological skills, knowledge, utilisation of domestic resources, ancillary development, etc. You only open your markets for foreign companies without any obligation on them to do anything for the economic development of your country. Foreign investment of this type will only result in balance of payment crisis.
5. They are seeking to remove all barriers for foreign investment, both equity and portfolio. Hence, their introduction of this new issue of the legal right to invest.

The European Union wants the right to invest in any country or industry, in any manner. It would be against our sovereignty. As a sovereign country we have a right to decide whether to allow foreign investment or not. It must be in areas where we need it. And on our terms. If they do not agree, they need not come. They are coming for their own benefit. And after the prospects of profit making are over, they are going to follow the strategy of fleeing geeze, as they have done elsewhere. But if it does not benefit our country in any way why should we allow it? They cannot have a legal right to invest anywhere and in any manner. Should we offer the most favoured nation treatment to them? Should the foreign investor be accorded national treatment at the cost of national industries? In fact, foreign direct investment should be allowed only in those sectors which would significantly contribute to the growth of ancillary industries, income generation, employment creation, technological advance, information sharing and export earnings. The investing country should, as a moral obligation, give market access in their country to appropriate Indian goods.

For ensuring fair competition between the foreign and local goods and services, a special law will have to be enacted, which should, among other things, take cognizance of the problem of foreign and local trade marks, copy rights and patents. We will have to enact special laws on the model of US, EU, Japan and Australia. The law-makers must take into consideration fundamental structural changes in the world economy since the collapse of the International monetary system, followed by two price hikes in 1973 and 1979 and the emergence of debt crisis in the developing countries.

For the purpose of law making, the item which deserves utmost attention is Agriculture. It is obvious that the removal of quantitative restrictions on import of farm products may totally destroy Indian agriculture. The Parliamentary Standing Committee has observed in its report on agricultural policy that the inequitable nature of WTO treaty was working to the detriment of farmers while the newly framed agricultural policy was silent on how this aspect could be dealt with. We can cite the constitutional provisions which declare agriculture to be State subject and converting all commitments of the Government of India under the WTO into 'best endeavour commitments' like what the USA does in matters concerning State subjects under the constitution of USA. This will have the effect of dropping the agreement on agriculture altogether so that, so far as India is concerned, it ceases to be a multilateral and binding one. But, till consensus on this position becomes possible, the Government of India should act under the Article XI.2 (i.e. of GATT 1949) and restrict the import of agriculture products in any form, from any farmer/producers in any country, where the farmer/producer owns agricultural land in excess of the ceiling limits on such land in India. If the Central government does not do this, the State governments can under the Constitution of India, ban the sale of imported items produced in land-holding abroad, which is in excess of the ceiling limits in the respective States.

A word about a possible misunderstanding. There is an erroneous impression in some quarters that all American citizens want to exploit the developing countries for their own benefit. This is far from the truth. Only the vested interests in US and other developed countries are guilty of this crime. And, these vested interests do not hesitate to exploit their own countrymen also. Organizations of workers and consumers in US are opposed to such policies of the government (Those who ridiculed Ivan Illich who condemned the American concept of 'development' four decades back, are now realising the soundness of his warning.)

Common American citizens have taken cognizance of the miserable plight of Mexico, some Latin American countries and the much trumpeted Asian Tigers. They are realising the hollowness of deceitful slogans like globalisation and liberalization.

The forum of the anti-G, 'The Other Economic Summit' comprises humanitarian intellectuals from developed as well as developing countries.

We may have our own drawbacks. But, if we consider their present condition, our representatives at WTO have no reason to carry inferiority complex. We want them to treat us on equal footing, but as a preparatory step for this, our representatives must have a conviction that we are actually on equal footing. Their (Westrners') bravado notwithstanding.

The WTO, IMF, WB or any external power centre should not be allowed to erode or destroy our sovereignty. 'Sovereign' is generally defined as "Supreme in power" or paramount.

Let us take example of United States. It has signed WTO agreement subject to many provisions. One important condition put by US is, since the US Congress is a sovereign body, all required legislative changes are subject to such legislation being passed by the Congress. Other countries were not allowed to give such conditional consent. US President has assured the Congress that when the decisions of the WTO Dispute Settlement Machinery go against the US, they will be reviewed by US Justices. If they find the decision unfair, the US has unilaterally reserved for itself right to walk out of the WTO. The rule makers are not going to tolerate being over-ruled. Many of the US laws, like Section 301 of US Trade Act clearly violates WTO agreement. But the US has found the ways of providing legitimacy to the controversial provisions of its Trade Act of 1974, viz. Section 301 to 310 which provide rights to US to take unilateral action against any country. In a landmark judgement in January 2000 by the Dispute Settlement Panel of WTO on dispute involving US and European Community, the Panel has given a decision in favour of US that these laws of US are WTO compliant. This is one of the landmark ruling, for it allows US unilateral action against countries that are seen by US administration to be undermining its trading interests, conveniently bypassing the multilateral system. What makes the ruling of panel more significant is the fact that no less than sixteen (16) nations including India joined the dispute as third partner.

Our sovereignty is being progressively eroded. Who is responsible for it? WTO? or US? Or other developed countries? No, our own inferiority complex is responsible for this. Sovereignty of the country can be safe and secure only in the hands of rulers who dedicate themselves to the task of nation building. WTO curtails sovereignty of all its member countries, except United States. Consequently, it has to adopt double standards on various issues.

In the name of globalisation, capital is to be given unhindered mobility, crossing all national borders. But the same mobility will not be granted to labour. This is nothing but a restrictive practice like non tariff barriers to trade. Of course, it is obviously in the interest of USA.

India faced unfair tariff and non-tariff barriers in steel, textile, clothing and labour products. We must not accept further reduction in tariffs. On the other hand, we should demand substantial reduction of tariffs by developed countries on India's labour-intensive and low technology products.

Under TRIPS, we have to provide 20 years product-patent rights on all products, against 14 years under Indian Patent Act. This will apply to Pharmaceuticals, agro-chemicals and food products. Many western companies have started taking patents of our traditional knowledge and local products like haldi, neem, basmati etc. We have to fight to save and protect what is inherited by us.

Under the name of Patent Acts, which are to be on the model of US Patent Act, there is misappropriation of biological and genetic resources and traditional knowledge of the developing countries. Strange is the American process of justice. The Rice Tec, the Texas Company, trying to patent Basmati, traditionally, a strictly Indian product, and the US Patent and Trade Marks Office obliging the Texas Company by granting it patent of Basmati. Mr. X making a gift deed of Mr.Y's property in favour of Mr.Z. The WTO provisions of patents is non-sensical. Presently, protection to geographical indication covers spirits and wines. But such protection is not extended to Indian products originating from specific regions that were nurtured by knowledge and tradition built by communities over decades and centuries. For example, Basmati, Darjeeling tea, Nilgiri tea, etc.

In many agreements, measures like sanitary and phyto-sanitary measures were used as non-tariff barriers to trade. The US has found out ways other than tariffs for protecting its industries by prohibiting imports from other countries.

There has been indiscriminate imposition of anti-dumping duties on India. But some laws of US, such as US Anti-dumping Act and US Copy Right Act are against WTO principles. Anti-dumping duty on the price of Japan's NEC computers, more than 150% anti-dumping duty on China's honey are some examples of US justice.

Indian textiles and clothing exporters are hit hard by the 'Preferential Trade Bill' passed by US Senate on November 4, 1999.

Very often, the term 'built-in agenda' is used. We are acquainted with their agenda. But for India, what it should mean is – agriculture, service sector, review of earlier WTO treaties, greater market access to India's agricultural products in European Union and US, methods of protecting textiles under the framework of safeguard measures, freer movement of labour abroad, GAIs visa for service providers, correction in imbalance and defects in the existing WTO agreements, faster removal of US and EU quotas on textiles, more transparency in the imposition of anti-dumping duties, changes in the TRIPS and TRIMS agreements, elimination of the clause of performance requirement in the TRIMs agreement, transfer of technology and information, and first and foremost, implementation of earlier commitments. Will it be palatable to the bosses of WTO?

Their built-in agenda will be distinctly different. For example, circumvention of the commitments on subsidy reduction in agriculture. They would insist on capital convertibility, which will mainly favour the Treasury Wall Street Complex of the US.

One of the existing ridiculous provision is that the question whether India is under a serious balance of payment situation and whether it can adopt some of the special policy measures to deal with the crisis, is to be determined not by the Government of India, but by the American dominated Committee or Councils of WTO.

Most of the WTO affairs are secret. NGOs and individuals have no access to many of its documents. The WTO must be more open and more transparent. Secret decisions in Green room will not be tolerated by developing countries for long.

It is difficult to say whether we have any firm National Economic Policy, - though it must be said that for the first time after the formation of the WTO our representatives at the WTO ministerial conferences at Seatle and Doha played a very commendable role.

For national reconstruction, it is necessary that policy-makers should refrain from what Marx termed as 'Journalistic thinking'. The need to acquire up-to-date information on all relevant subjects through mass media is indisputable. But, unfortunately, the type of Ramnath Goenka, Sadananda, Frank Moraes and Pothan Joseph is becoming rarer.

Our developmental thrust should be on self reliance, based on local resources, local labour, local capita, local management skills, local talents, local methods in tune with social and cultural realities and local entrepreneurship. Scarce natural resources should be sparingly but efficiently used.

The old practice of appointing foreign consultants when equally competent Indian consultants are available, should be discontinued.

Obviously, in order to stabilise and improve the state of an economy, it is imperative to redefine our relationship with WTO, World Bank, IMF and multinationals and resolve to become self reliant in the immediate future. International Economic Order is desirable, but it must be on the basis of equal footing. There should be no erosion of freedom and sovereignty of any nation, big or small. If the developed countries refuse to give treatment of equality to developing countries within WTO, the later should quit WTO and form second WTO (of the developing countries) to fight the onslaught of economic imperialism of the developed countries.

In economic field, as in all other fields, much depends upon the ideal we place before ourselves. Pt. Deen Dayal Upadhyay insisted that our goal should be national self-reliance, which of course, presumed give and take with other countries on equal footing. It seems, our present policy-makers consider this goal as impractical, and, therefore, unattainable. But our idealists do not endorse their view. In his India 2020, our world known scientist Dr. Abdul Kalam claims that "a developed India by 2020 or even earlier is not a dream. It need not even be a mere aspiration in the minds of many Indians. It is a mission we all can take up – and accomplish."

"Ignited young minds, we feel, are a powerful resource. This resource is mightier than any resource on the earth, in the sky and under the sea. We must all work together to transform our 'developing India' into a 'developed India' and the revolution required for this effort must start in the minds." National will, obviously, is the pre-requisite.

H.G.Wells says, "all empires, all states, all organisations of human society are in the ultimate, things of understanding and will. There remained no will for the Roman empire in the world, and so it came to an end."

Those who term their defeatism as 'pragmatism' cannot envisage the miraculous strength of idealism. Albert Schweitzer says, " The power of ideals is incalculable. We see no power in a drop of water. But let it go into the crack of a rock and be turned into ice, and it splits the rock; turned into steam it drives the pistons of the most powerful engines. Something happens to it which makes active and effective the power that is latent in it. So it is with ideals."

Shri Daya Krishna, by any standards, is a genius. He has brought to bear on this subject his vast and varied knowledge of all aspects of economic policy making, including planning.

Late Dr. Dhananjay Rao Gadgil would have been happy to go through this work.

Shri Daya Krishna has earned the gratitude of all patriots by this monumental work.

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Preface

The most Important fact of the world history is that India had been the richest country of the world for an astonishingly long period of about nine millennia upto the battle of Plassey in 1757 AD, after which the British ruled India for 190 years upto 1947. The period of 7000 years before Christ is known as the Golden Age of India and is described in chapter 1 of this book.

The archaeological discoveries at Harappa and Mohanjeodaro had started a process of research which pointed to the fact that people of India had the highest civilisation during the time around 7000 BC.

Dr. Jean Francois Jarrige, a renowned French archaeologist, who was with the team that excavated Indus Valley sites in 1963, and has since continued this work, says: "in terms of archaeological achievements, we are on the fringe of a revolution that will prove that vegetation and domesticity of animals had existed in Indian sub-continent around 7000 BC, as against the earlier findings that put the date around 4000 BC.

Mohenjeodaro and Harappa gave clues to the Indus Valley civilisation which flourished between 2600 BC and 1600 BC, and was characterised by sophisticated urbanism. Spread over an area of about 250000 square miles, it spawned at least 70 surprisingly uniform cities, with amenities like covered drainage. The inhabitants of these cities practised proto-Hindu rituals.

The deciphering of about 2000 Seals has resulted in some very important conclusions, which call for major revisions in the history books. The theory of Aryan invasion stands shattered; the cradle of civilisation is not Mesopotamia, but Vedic India; and Sanskrit language has been found to be of unknown antiquity.

Because of the Seals, we can say that Harappans were Vedic Harappans. Vedic Aryans of the Saraswati heartland had created the Harappan civilisation. And the time of Rigveda should go back to fifth millennium BC

Harappan relics dating back to 4500 BC confirm the belief that Gujarat had been on the forefront of trading activities in the Harappan era.

Spiritual Guru

In addition to being the richest country of the world, India had also been the spiritual guru and the seat of learning for the people of the world. Today over 400 million Buddhists in the world are living testimony of the spiritual, cultural and religious hegemony of India, which had lasted for a long period of time.

Hindu and Buddhist pioneers had carried the torch of religion and culture to China, Japan, Korea, Indonesia, Malaysia, Philippines, Ceylon and even to Mexico, Peru Gautemala in far off South America. A hundred Ayar Brahmins ruled a 2500 miles long empire in South America until 1532 AD. About 3500 years back, Syria, (ancient Surya) had an empire of the Sun and her Aryan rulers had names such as Ishwar Datt, Vidya datt and Chander Datt. About 1500 years before Christ, Vedic Gods were worshipped in almost whole of West Asia including Turkey, Syria, Iraq and Israel.

The Arthashastra

India had also developed a most scientific and elaborate system for running the government and managing the economy as is evident from Arthashastra, which is world's first comprehensive book on economics and politics. This book was authored by Kautilya, a sage politician and mentor of Chandragupta Maurya, who ascended the throne of Magadha in 321 BC.

Arthashastra gives directions in the form of laws for the three main activities of the time viz. Agriculture, cattle rearing and trade. Arthashastra also includes laws for the tax policy; money and coinage; public sector and private sector; state monopolies and private enterprises.

Arthashastra visualises the king having stringent control over the economy, which needs an efficient administrative machinery. The Arthashastra gives the structure of administration of an ideal state which includes 34 Adhyakshas or Chiefs.

According to Arthashastra, there are four great aims of human endeavour (purushartha) viz. Dharma, Artha, Kama and Moksha, and the first three lead to the fourth. Dharma not only signifies an absolute and immutable concept of righteousness, but also includes the idea of duty, which every human being owes to oneself, to one's ancestors, to society as a whole and to universal order. In its widest sense, Dharma is law – moral, spiritual, ethical and temporal. Every individual, whether the ruler or the ruled, is governed by his or her Dharma. To the extent the society respected Dharma, society protected itself, and to the extent society offended it, society undermined itself. Everything in Indian polity – the rights and duties of rulers, ministers, priests, and people – is governed by the concept of Dharma.

Artha follows Dharma and it has a much wider significance than merely wealth. The material well-being of individuals is a part of Artha. Kautilya says: "The source of livelihood of men is wealth." He then draws the corollary that the wealth of a nation is both the territory of a state and its inhabitants who may follow a variety of occupations. The state or the government has a crucial role in maintaining and promoting the material well-being of a nation and its people. Therefore, an important part of Arthashastra is the science of economics including starting of productive enterprises, taxation, revenue collection, budget and accounts.

According to Arthashastra, it is the duty (Dharma) of the king to take suitable measures for promoting trade. He fixed prices of various goods and commodities for trade within India and in foreign countries in such a way that margin of profit for the traders remained between 5 and 10 percent of their costs.

The large exports of spices and high quality consumer goods produced by Indian artisans, coupled with the low margins of profit, resulted in a large and growing demand for Indian goods in foreign countries. This flourishing trade was the cause of India's famous prosperity lasting for about nine millennia.

The low profit margins of Indian traders meant substantial incomes for the foreign importers of Indian goods. In Europe, the financial and military power of a king was largely determined by the value of his trade with India. The king of Spain was the strongest king in Europe because of the largest share of trade with India. He was also called the "Pepper king" because of his monopoly of the sale of pepper imported from India.

And, it was the king of Spain who made the largest efforts for finding new trade route between Europe and India, when the old trade route had become hazardous due to the emergence of Ottoman Empire.

And the trade with India, due to the involved high profits, was the cause of wars among the European countries.

Chapter 2 titled "The invasions" relates to the long period of over 2000 years upto 1757 when the British took over the rule of India, after the battle of Plassey.

The world famous prosperity of India caused several invasions to take place. During the last 2500 years, there have been two long periods of 700 years each when Hindus living in the region watered by Indus and its tributaries were under the political domination of foreign invaders. During the first period of 700 years upto 500 AD, North-western India had several invasions. The Bactro-Grecian and Parthian, the Yuchis, the Kushans and the

Huns came as invaders but got absorbed into Hindu Society. During the second period of 700 years upto 1757, all invaders were Muslims and they had invaded India as a part of their strategy for spreading Islam. Muslim rule in India had lasted for 567 years upto1757.

India remained the richest country of the world during the 567 years of Muslim rule, because activities for the production of wealth were not affected by the change of the government or the change of religion of some of its people. Consequently, India's trade with other countries continued to flourish and remained a good source of income for its people.

Stupendous amounts of wealth in the form of precious metals, jewels, jewellery and coins had been taken out of India by the Muslim invaders. But, this did not diminish the wealth and prosperity of India. According to Nicolo Conti, "in 1420, the banks of Ganges were lined with one prosperous city after another, each well designed, rich in gardens and orchards, silver and gold, commerce and industry."

Around the middle of Eighteenth century, India had 25 percent share in the world trade. Every country in Europe was eager to have trade relations with India. For this very purpose, Vasco da gama discovered the sea route to India and landed at Malabar coast in 1498. And, for this very purpose, Thomas Row had come to Jahangir's durbar in 1608 with a letter from the king of England.

Shah Jahan's treasury was so large that it filled a space of 150000 cubic feet with gold, silver, jewels and jewellery. This very large treasury was an important reason for Aurangzeb launching the military campaign for conquering South India. The campaign had lasted 26 years and had ended in failure and the consequential death of Aurangzeb.

Clive, visiting Murshidabad in 1759, had reckoned it as equal to London in terms of extent, population, and wealth. He wrote that palaces in Murshidabad were much bigger than those in Europe, and its people were richer than the people in London. According to Clive, "India was a country of inexhaustible riches."

Tried by Parliament for helping himself too readily to India's wealth, Clive gave an ingenious defence. He said that in India he had found opulent cities and crowds of rich people eager to offer him bribe in order to escape indiscriminate plunder. Bankers threw open before him their vaults piled high with jewels and gold. Concluding his defence he said: "At this moment, I stand astonished at my moderation."

Concentration of Wealth

Though the tempo of economic activities in India had remained unimpaired during 567 years of Muslim rule, there was a continuing trend for the concentration of wealth among Muslims. This was the result of several policies pursued by the Muslim rulers.

The happy sequence of irrigation following the extension of cultivation, which had continued during the reign of Hindu kings, came to an end with the Muslim invasion of India. The first and foremost duty of Sultans was to extend the borders of their kingdom through continuous military expeditions. Allauddin Khilji collected half of the earnings of the farmers as the tax. He said: "If the empire has to stay, farmers should be exploited." The policy of realising large taxes and not paying any attention towards extension of irrigation facilities resulted in a very large proportion of land remaining without irrigation. This situation resulted in a very low productivity of land, and, consequently, smaller employment opportunities and incomes in the rural areas. While incomes of farmers (mostly Hindus) declined, the incomes of jagirdars (mostly Muslims) continued to be high and rising steadily.

The invading Muslim armies frequently resorted to torching of Hindu settlements with a view to making people flea and extending the area of their control. The uprooted people took shelter in the forests, and the consequential clearing of forest land for habitation and cultivation reduced the forest area. The Hindu families rehabilitated in this way, however, lived life of extreme poverty and perpetual hardship.

All lucrative jobs were given to local Muslims and the Muslims coming from other Muslim countries. And the various economic inducements given to the newly converted Muslims increased the chasm between the Hindus and the Muslims.

The trend for concentration of wealth among Muslim jagirdars, nawabs, military personnel and the nobles gathered momentum during the last hundred years of Mughal rule. Around the middle of eighteenth century, thus, about 8000 Muslim families out of a population of about 160 million, collected over one-third to one-half of the gross national product of India.

Conversion of Hindus

Muslim rulers showed great zeal for converting Hindus to Islam. The Quran, the Hadis, the Hadiya and Sirat-un-Nabi all the four important works of Islam direct the faithful to convert the non-Muslims to Islam. The Hadiya is quite explicit about the legality of Jihad against infidels even when they have not taken the offensive.

Large Immigration

In addition to conversion of Hindus, immigration of Muslims continued for about 500 years because of the encouragement of the Muslim rulers in India. Consequently, the Muslim population, which was only 3 percent of the total population in 1400, had risen to be 22 percent of the total population at the end of Muslim rule in 1757.

Chapter 3 is about the Colonial rule of the British, which lasted for 190 years upto 1947. The British had taken over the government of India from the Marhattas and Sikhs i.e. Hindus, who formed about 4/5 of India's population. Therefore, the British considered Hindus as their opponents and made several moves for helping the Muslims with a view to using them as a counter force against Hindus. With this policy of divide and rule the British used all their ingenuity and resources for exploiting India and increasing the volume of the 'drain' of wealth from India to England.

In the agricultural sector, extremely exploitative means were adopted for raising the revenues. All industries were destroyed, including the world famous Shipping and Ship building industry. Railways were planned with a view to reducing the price of raw materials and promoting the sale of British products. During the 190 years of colonial rule of the British, India became an exporter of primary products and importer of manufactured goods. The British government facilitated the domination of foreign capital in India.

The aggravated conditions of poverty in rural areas and the destruction of industries in the cities resulted in an increased incidence of famines in India.

The British policy of patronising the Muslims and punishing the Hindus resulted in the Muslim population showing a growth rate which was much higher than the growth rate of Hindu population and was higher than even the high growth rate of Muslim population during the Mughal period. The British government created Pakistan for punishing the Hindus and rewarding the Muslims. The division of India has meant a great set back for the economic development of both India and Pakistan.

But, an incalculably great harm to India had been done by the British rulers by introducing the Macaulay's system of education, which was designed for "creating a class of Indians, who were Indians only in blood and colour, but English in tastes, opinion and intellect." And, at the time of independence, the British handed over the reigns of power to one such person – Pandit

Jawaharlal Nehru, who, having been educated in England, was a true example of the class of Indians visualised by Macaulay.

Nehru wanted to carve out of India, a mini England comprising the urban areas of the country, where people could have a living standard comparable to the standards in western societies. For that purpose, he adopted the Russian model of growth, which had been developed in 1922 for solving the problems of Russia during that period. How the adoption of this model had caused immense harm to the economy and to the people of India is described in chapter 4 titled "Fifty Years After Freedom."

The policies pursued in India in accordance with the Russian model resulted in a financial crisis of unprecedented nature in 1990, which compelled India to sign the GATT agreement which called for a globalisation of the economy and a free movement of trade. But GATT's perception of globalisation and free trade is proving harmful for India on account of the increases in unemployment, closing down of small industries and import of agricultural products. This has been described in chapter 5 titled 'Globalisation'.

Chapters 6 to 12 comprising part II of the book give a review of the working of Ninth Plan (2002-07). Chapter 6 indicates the shortfalls in irrigation and power during the Eighth Plan period and describes Ninth Plan targets of growth and the macro parameters viz. Savings, fiscal deficit and the incremental capital Output ratio(ICOR)

Chapter 7 on agriculture describes how agriculture had suffered because of the adoption of Russian model and the consequential neglect of agriculture and irrigation and the PL 480 imports. It also shows how the change in government policies in the mid-sixties ushered in the green revolution in India, and how, in spite of the huge stocks of foodgrains with the government, the problem of rural poverty and starvation deaths remained unsolved.

The chapter gives a detailed account of the genesis, growth and functioning of the PDS. Significantly, the reforms initiated in 1992 had bypassed agricultural sector which accounts for 2/3 of India's workforce.

Chapter 8 describes the industrial policy reforms and major initiatives taken through the announcement of industrial policy in July 1991. It describes the trends in industrial growth and analyses the factors responsible for the trend. The chapter also gives information in regard to the Public Sector, Disinvestment, Privatisation, small scale industries and industrial sickness.

Chapter 9 on Public debt gives information on total liabilities of the Government of India since 1950-51 and gives detailed information on internal debt, expenditure on Administration, interest payment, and subsidies.

Chapter 10 on External Sector gives trends in the growth of India's exports and the world exports. It gives a critical analysis of the seven sources of investment. It gives information on the growth of India's external debt and the top 15 indebted countries of the world. It analyses the trends in Foreign Direct Investment in the Developed and Developing countries of the world. It also gives information on the Mergers and Acquisitions (M&A) of enterprises in the world and how it has taken the form of an economic war between America and the European Union.

Chapter 11 on Unemployment gives an account of the genesis and growth of unemployment in India. It describes the Ninth Plan approach for tackling the problem of unemployment, indicates the extent of its failure and also gives the reasons thereof, on the basis of the 55th round of the NSSO survey on Employment trends in India.

Chapter 12 on poverty describes the extent of poverty and the trends in poverty estimates over the years. It describes the Ninth Plan approach for eradication of poverty and gives the poverty line in rural and urban areas of the states. It gives statewise estimates of poverty for the period 1997 to 2012. The chapter also gives information on the number of poor in China and India and a comparative view of the economies of the two countries.

The last two chapters on unemployment and poverty show that even after a long period of over 50 years of freedom India has not been able to solve the problem of poverty and has lagged far behind China in this regard. This failure is entirely due to the fact that while China had evolved and implementd a Swadeshi model suiting its needs, India has continued with foreign models – first the Russian model and now the Washington model in the form of WTO.

India had joined WTO in 1992 on the terms of WTO because of the compulsions caused by the financial crisis of 1991. But China joined WTO in 2001 after a long and protracted fight which compelled the WTO to accept China as a member on the terms set by China.

India had joined WTO without getting the approval of the Parliament. In the elections held in 1997, people of India threw out the congress government which had signed the GATT agreement.

In 1997, the NDA government took over the government of the country. But, unfortunately, there has been no change in the approach of this new government in so far as WTO is concerned. "WTO compatibility" remains the guiding principle for the formulation and approval of the economic policies of the government. WTO is guiding and controlling the economic policies of the government by exploiting the widespread craze among the bureaucrats for landing a job in the international organisations. If this state of affairs continues then the day is not far off when the Parliament of India will be reduced to the status of a debating club and all important decisions will be taken by the bureaucrats as per directions of the WTO.

The old colonial powers, having organised themselves as the G-7 countries, are using the unlimited money power and resources of the 60000 MNC and their 800000 affiliates in the world for the recolonisation of the poor countries of the world. Money power has replaced military power as the instrument for colonisation.

Globalisation is only a means for restoring to the old colonial powers their old prerogatives of having assured market for the sale of their products and investment of their capital.

The greatest opposition to this globalisation has been found in the Industrialised Countries because over 90% of the workers there are employed in the industrial sector which has been losing millions of jobs every year due to the downsizing and M&A of the enterprises being carried out by the MNCs for the purpose of maximising their profits. The growing anger and hostility of the millions of unemployed in the world manifested itself at the time of the G-7 meeting in Genoa held in July 2001, when demonstrations by about 100000 persons from all over the world had resulted in scenes of violence of unprecedented scale.

Many books on globalisation written by eminent thinkers and writers of the West have pointed to the basic flaws in the perception, precepts and performance of the WTO.

Shri D.B. Thengdi, the eminent thinker and writer, who is also the founder of Bharatiya Mazdoor Sangh and Bharatiya Kisan Sangh, had been closely watching the trend of the deliberations of Uruguay Round of GATT negotiations, which resulted in the formation of WTO. He considered the setting up of the WTO a great danger to the sovereignty of India and other developing countries of the world. Therefore, In 1992, i.e. much before the formation of WTO, he had founded the Swadeshi Jagaran Manch for apprising the people of India of the dangers inherent in the setting up of WTO.

Shri D.B. Thengdi was requested to give the Foreword for this book. In spite of an indifferent health and an extremely busy schedule of tours, he has been kind enough to give an exhaustive and illuminating Foreword, which has considerably enhanced the value of the book. I am very much indebted to him for this favour.

April 2002

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PART I

GOLDEN AGE TO GLOBALIZATION

Chapter One

The Golden Age

INDIA HAS been the richest country of the world for an astonishingly long period of over 9000 years extending right upto the middle of the eighteenth century, when the victory of the British in the battle of Plassey (1757 AD) resulted in the beginning of the British rule in India.

The archaeological discoveries at Harappa and Mohenjeodaro had started a process of research which pointed to the fact that people of India had the highest civilisation during the times around 7000 BC.

Dr. Jean Francois Jarrige, a renowned French archaeologist, who was with the team that excavated Indus Valley sites in 1963 and has since continued to work in this field, says: "In terms of archaeological achievements, we are on the fringe of a revolution that will prove that vegetation and domesticity of animals had existed in Indian subcontinent around 7000 BC, as against the earlier findings that put the date around 4000 BC."

There are many common features between the first neolithic settlement of Mehargarh in Pakistan and the early villages of the late 8th and early 7th millennium BC of Central Asia. The general process of socio-economic development shown by the successive periods follows a pattern consistent with the general cultural sequences of the settlements of the 7th and 6th millennium BC in Western Asia. Even if we do not rely excessively on this argument, we cannot ignore the fact that there is a series of early radiocarbon dates which support such an assumption. Dr. Jarrige believes that we are getting into a more important period when our understanding of the Indian sub-continent is going to be changed to show that early influences were multidirectional between the sub-continent and Near East.

Mohenjeodaro and Harappa gave clues to the Indus Valley civilisation which flourished between 2600 BC and 1700 BC and was characterised by sophisticated urbanism. Spread over an area of 250000 square miles, it spawned at least 70 surprisingly uniform cities, not only in its core regions of present day Pakistan and Western India, but also in areas with which it was having trade.

The cities were planned settlements and all citizens, irrespective of social class, seem to have shared amenities like covered drainage. It means we were building better cities 5000 years back. There were no open sewers as are found in Indian towns these days.

Inhabitants of these towns practised proto-Hindu rituals. The deciphering of about 2000 Indus Seals discovered from the excavated areas has resulted in some very important conclusions, which call for major revisions in the history books. The theory of Aryan invasion stands shattered; the proto-Dravidians are found to be a myth; and the cradle of civilisation is not Mesopotamia, but Vedic India. Also, a version of the story of Rama existed 5000 years back and it was known both in India and West Asia. And, the Sanskrit language has been found to be of unknown antiquity. It was certainly not brought to India by invading nomads in the second millennium BC.

Because of the Seals we can say that Harappans were Vedic Harappans. Vedic Aryans of the Saraswati heartland had created the Harappan civilisation. And, Rigveda must have been quite ancient by the time of the Harappan civilisation i.e. 3100 - 1900 BC. So, the time of the writing of Rigveda should go back to fifth millennium BC.

Harappan Trade

In a major archaeological achievement, Harappan relics dating back to 4500 BC have been unearthed from Bagasra near Rajkot in India. The excavations have yielded a large quantity of different varieties of semi-precious stones stored at different places within a walled area which indicates the importance of the industrial products and the nature of the trade in that area. It confirms the belief that Gujarat had been on the forefront of the trade activities in the Harappan era.

Apart from the trade of industrial products, it has been found that the economy of the area had been dependent upon agriculture, stock-raising and fishing. The inscribed seal found from the sight is said to have played an active role in authenticating commercial consignments.

The excavations have revealed a fortified settlement spreading over about two hectares of land, which is believed to be an important trading centre of the Indus Valley civilisation, contemporary to Dholavira in Kutch and Lothal in Saurashtra.

The massive five metre thick fortification wall of the settlement was built of mud bricks on stone foundation and was occasionally braced with large blocks of stone. The height of the wall varies from 3 to 5 metres. This well-protected settlement had come up for the purpose of exploiting the easily available natural resources like marine gastropod shells (shanks) and semi-precious stones of the area.

The economy of the settlement was based on industrial production and trade of utilitarian and lapidary items like beads, bangles of shell, semi-precious stones and faience (- a synthetic glaze-like material formed by heating a mixture of powdered quartz with soda and some colouring agent).

Other important items connected with trade and recovered from the settlement included large pear-shaped black-slipped jars, which are believed to have been used for over-sea transportation of goods. Some of these vessels have been recovered from several third millennium BC sites in the Oman Peninsula. Clay matching tests have shown that these jars had their origin in Indian sub-continent.

The black-slipped jar shreads discovered from Bagasra are sure indication of trade contacts of the Harappans with overseas Bronze-Age settlements of the third millennium BC, especially those of the Oman Peninsula. Tapping the rich copper deposits of Oman might have been the major attraction for the Harappans. This is indicated by the recovery of a number of household copper implements and tools including heavy chisels, punch points, knives, a hoard of copper bangles and a small axe in a copper pot.

The advantageous geographical position was the reason for this site emerging as a conduit for the transportation of materials and movement of communities from one region to the other. Also, the site was a meeting point for divergent cultural traits of all the three major cultural regions. The settlement seems to have survived upto about the first half of the second millennium BC(1700 BC) i.e. even after the decline of the urban way of Harappan life, by the end of the third millennium (2000 BC).

Findings of 2001

In May 2001, the National Institute of Ocean technology (NIOT) had made a declaration about the finding of an ancient city some 30 kms. off the Gujarat Coast in the Gulf of Cambay. The ruins lying 40 meters under the sea were spread across 9 kms. stretch on the banks of an ancient river bed which even had signs of masonry dam. The submerged city bore striking similarities to Indus Valley civilisation sites in the mainland. One of its structures, the size of an Olympics swimming pool, had a series of sunken steps that looked like the Great Bath of Mohanjodaro. Another rectangular platform was 200 m long and 45 m wide – as big as the acropolis found in Harappa. A larger granary-like structure made of mud plaster and extending to 183 meters was also discernible. There were also rows of rectangular basements that resembled the foundations of crumbled homesteads with outlines of a drainage system and mud roads. The artefacts recovered included polished stone tools, ornaments and figurines, pottery, semi-precious stones, ivory and the fossilised remains of a human vertebra, a jaw-bone and a human tooth. A fossilised log of chopped wood has been dated to 7500 B.C. by the National Geographical Research Institute (NGRI) in Hyderabad.

These findings have far reaching implications in terms of understanding the growth of villages and cities in the world. The period between 7500 and 5000 B.C. had been the period of radical transformations in Society. Popularly known as the Neolithic or New Stone Age, it was the beginning of the end of the hunting as a way of life and saw the invention of the ploughshare that brought revolution in farming. It produced food surpluses that could support large settlements which crystallised into civilisations.

During this extremely creative period, societies developed a vast range of skills including pottery, the use of polished stone tools and the domestication of animals. The technological marvel of the wheel opened up a range of innovations. According to S.R. Rao, India's most experienced marine archaeologist, the new findings would make Cambay the oldest settlement in India. The findings should lead to a paradigm shift in the basic premises of Indian history

Findings at Cambay put an end to the theory that civilisation had spread to the West Asia, to the Indus and thence downwards to India. Cambay means that civilisation primarily arose in the Indian sub-continent from the genius of its own people.

INDIA TODAY the premier weekly of India, made the Cambay findings the subject of the cover story of its issue dated 11-2-2002. It called Cambay World's oldest city. The Harvard university historian Richard Meadow, an expert on South Asian Archaeology, believed that a neolithic site in Cambay would "be very much in line" with developments in Mehargarh and West Asia during that period. The Archaeologists believe that the Cambay findings will reveal the missing link between the two lots of our ancestors, the hunter and the farmer. The Cambay ruins under the sea are said to be lying on the banks of an ancient riverbed, which can be the river Saraswati.

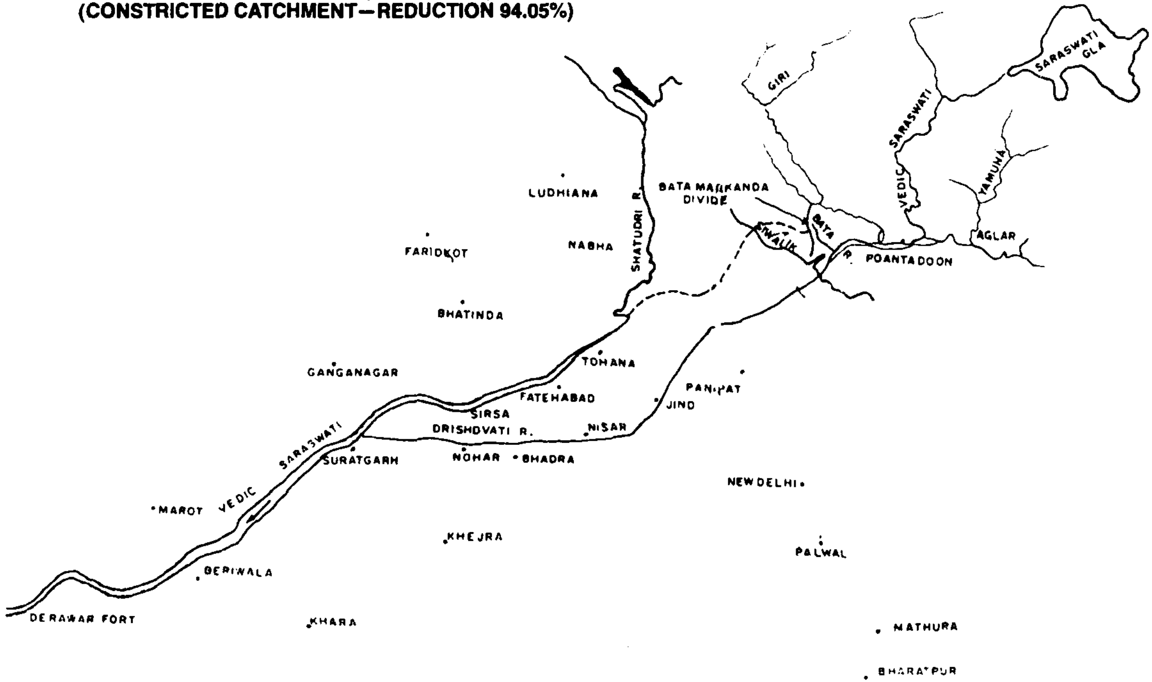
Saraswati River

As stated above, Harappans were Vedic Harappans and were part of the large number of settlements around Saraswati river. According to archaeological evidence, the river Saraswati had sustained a maritime civilisation and a metal-based economy, with about 1200 ancient settlements on the river basin, which lasted for a millennium.

Around 3000 BC, a great geophysical event took place. The river Chambal (now called Yamuna), captured the Saraswati river at Paonta Sahib and took it to meet the Ganga river at Prayag near Allahabad. And, then, around 2000 BC, another momentous geophysical event took place. The River Sutlej (Shatadru) which was a tributary of the Saraswati river (meeting at Shatrana, Punjab), migrated westwards and joined the Indus river. These two major events in a span of a millennium, led to the drying up of the mighty sacred Saraswati river and the migration of people away from the banks of the Saraswati river Eastwards and Southwards.

The mythical river Saraswati has several references in Rigveda,

CONSTRICTED VEDIC SARASWATI (MARKANDA) CATCHMENT
(CONSTRICTED CATCHMENT—REDUCTION 94.05%)



and, according to Mahabharata, Balarama had made his pilgrimage from Dwarka to Mathura on river Saraswati. The palaeo-channels of the river have been substantially traced by using archaeological evidence, Geographical Information Systems (Remote Sensing in particular), hydro geology and other technologies.

Intensive research, especially after independence, has established three points:

> First, the Saraswati was a mighty and perennial river around 3000 BC when the Harappan civilisation flourished. Flowing from the Har-ki-dun glacier of the Himalayas in West Garhwal, it reached Gulf of Khambat near Lothal via the little Rann and the Nall Lake near Ahmedabad. Thus, Gujarat was an island in the second millennium and it was possible to travel on the Saraswati river from the gulf of Khambat to Mathura, via Lothal, Dholavira, Ganweriwala, Kalibangan, Banawali, Paonta-Saheb, Rakhigarhi and Indraprastha (modern Delhi).
>
> Second, as shown by the Hymns of Rigveda, and Archaeological evidence, the river sustained a maritime civilisation and a metal-based economy, with about 1200 settlements on the river basin, which lasted for a millennium. Mohenjeodaro was an island between the river Sindhu and Saraswati river in Sind. Ganweriwala (Bahawalpur province) and Rakhigarhi are sites as large as Mohenjeodaro. Soma, the celebrated process of Rigveda has been interpreted as the processing of electrum gold-silver quartz. The civilisation was a remarkably homogeneous maritime civilisation as evidenced by the artefacts unearthed from Tigris-Euphrates to the Ganga-Yamuna Doab. The location of settlements showed a marked preference for alluvial plains.
>
> Third, around 1500 BC, Sutlej river which was flowing into the Saraswati river at Shatrana, took a U-turn at Ropar

and migrated westwards. Yamuna had drained Saraswati of the waters flowing into it, perhaps due to the continuing rise of the Aravalli ranges and deepening of the erstwhile Chambal. The sandstorms also submerged parts of the riverbed near Jaisalmer-Pokarna in the Thar desert. The settlement pattern extending over a period of 1500 years, resulted in an Eastward movement of people into the Ganga-Yamuna Doab and Southward along the coastline.

The confluence of Saraswati at Sangam in Prayag is, therefore, not mythology, but is based on ground truth. Similarly, the popular belief that Saraswati disappeared in the sands and went underground is also based on ground truth.

Besides Gujarat, the Western coast of India had been another scene of great maritime and commercial activity in the ancient times. The Jatakas, Periplus of the Erythrean Sea and the works of Strabo and Pliny mention India's flourishing trade with Babylonia, Egypt, Greece and Rome, even as early as during the sixth century BC. The leading ancient ports were Sopara, Kalyan, Thana and Agashi. The exports included birds, beasts, horses, ivory, cotton goods, spices, cereals, jewels, jewellery, gold and silver. The famous old city of Ophir, known for its gold and precious gems, sandalwood and peacocks, is located by historians somewhere on the western side of India and is identified with ancient Sopara near Mumbai.

Spiritual Guru

In addition to being the richest country of the world, India had also been the spiritual guru and the seat of learning for the people of the world. Today, some 400 million Buddhists living in China, Japan and several other countries of the world, are living testimony of the spiritual, cultural and religious hegemony of India, which lasted for a long period of time.

There was a time when India had her cultural empire in the whole of South-East Asia. Hindu and Budhist pioneers had carried the torch of religion and culture to China, Japan, Korea, Indonesia, Malaysia, Philippines and even to Mexico, Peru and Guatemala in far off South America. A hundred Ayar Brahmins ruled a 2500 mile long empire in South America until 1532 AD. About 3500 years back, Syria (ancient Surya) had an empire of the Sun and her Aryan rulers had names such as Ishwar Datt, Vidya Datt and Chander Datt. About 1500 years before the birth of Christ, Vedic Gods were worshipped in almost whole of West Asia including Turkey, Syria, Iraq and Israel

China

China accounts for more than half of the 400 million Buddhists living in the world. Hundreds of Indian philosophers, teachers and Buddhist missionaries went to China and played a crucial part in cementing religious and cultural relations between China and India. Of all these people, special mention should be made of Bodhi Dharma, the founder of Zen (Dhyana) sect of Buddhism. He came from Kanchipuram, the capital of Pallava kings of South India, and was the third son of a ruler of Cochin. Bodhi Dharma, known as Daruma in Japan, carried with him the mystic fragrance of white lotus in Buddha's hands.

To a Western mind, the mysterious ways of Bodhi Dharma, and his relinquishing the body after Nirvikalpa Samadhi for nine years, are not easy to understand. This great teacher inspired artists, writers, soldiers, statesmen, and even the hard-boiled merchant classes of China and Japan more than any other sage had done in the preceding centuries.

The message that Bodhi Dharma preached in China has spread to every home in the far-east, and, after 1500 years of his Nirvana, it is now spreading to far-off places in America, Canada and capitals of Europe, as is evident from the popularity of Zen philosophy in these countries. Students of Bodhi Dharma's teachings are flocking in large numbers to the international Zen University in Kyoto, the ancient capital of Japan.

China was also thirsting for the teachings of Buddha. A large number of Chinese scholar-pilgrims came to India for acquiring an understanding of the teachings of Buddha. Out of the 109 scholar-pilgrims identified so far, 37 had died during the travel and 6 had died in India, making a death toll of 39 percent. This high rate of mortality is understandable in view of the extremely hazardous route of the travel.

Of the pilgrims who could return to China after completing their travels in India, FAHSIEN and YUAN CHWANG have been the most successful. It was a miracle that they survived all the hazards of deserts, mountains and seas. Only their thirst for knowledge, their religious fervour, their love for India, their conviction, fortitude and courage, sustained them throughout their pilgrimage.

According to Hu HSIH, ex-Ambassador of China to USA, "India conquered and dominated China culturally for twenty centuries, without ever having to send a single soldier across her borders. This cultural conquest was never imposed by India on her neighbours. It was all the result of voluntary learning, voluntary pilgrimage and voluntary acceptance on the part of China."

Japan

Buddhism, which originated in India about 2600 years back, spread throughout China for five centuries and, then, in the sixth century, it made a rapid conquest of Japan. There are over 100 Buddhist sects in Japan and there are 75000 Buddhist temples. Out of a total population of 123 million, about 75 million are Buddhists. Majority of Japanese believe both in Buddhism and their ancient religion Shintoism. They are generally taken by their parents to be blessed in Shinto shrine at the time of birth, but are given Buddhist funeral after death.

For centuries, the whole of Eastern Asia, from Burma to Japan, was united with India in the closest ties of cultures and religion. There was a living communication of hearts through common religion, philosophy and thought. A famous Japanese scholar once wrote: "If I were to write the history of Japanese thought, it would be the history of Indian thought. This is equally true of our Gods and pagodas from the Himalayas to Horuji."

Nowhere in the world is India more known and better loved by masses than in Japan. India is known in Japan as Tenjiku (paradise). Japan is a treasure house of Hindu Gods and Buddhist deities. Japan has the best Zen monasteries in the world. Burma, Vietnam, Combodia, Sri Lanka are all predominantly Buddhist countries.

The Arthashastra

In addition to having an exalted position in regard to the spiritual matters, India had also developed a most scientific and elaborate system for the mundane matters relating to state, viz. running the government and managing the economy. This is evident from the Arthashastra, which is world's first comprehensive book on economics and politics. This book was authored by Kautilya, a sage politician and mentor of Chandragupta Maurya, who had ascended the throne of Magadha in 321.BC.

According to Arthashastra, there are four great aims of human endeavour (Purushartha) viz. Dharma, Artha, Kama and Moksha, and the first three lead to the fourth.

Dharma not only signifies an absolute and immutable concept of righteousness, but also includes the idea of duty, which every human being owes to oneself, to one's ancestors, to society as a whole and to universal order. In its widest sense, Dharma is law - moral, spiritual, ethical and temporal. Every individual, whether the ruler or the ruled, is governed by his or her Dharma. To the extent the society respected Dharma, society protected itself; and to the extent society offended it, society undermined itself. Everything in Indian polity - the rights and duties of rulers, ministers, priests and people - is governed by the concept of Dharma.

Artha follows Dharma and it has a much wider significance than merely wealth. The material well-being of individuals is a part of Artha. Kautilya says: "The source of livelihood of men is wealth." He then draws the corollary that the wealth of a nation is both the territory of a state and its inhabitants, who may follow a variety of occupations. The state or government has a crucial role in maintaining and promoting the material well-being of the nation and its people. Therefore, an important part of Arthashastra is the science of economics which includes starting of productive enterprises, taxation, revenue collection, budget and accounts. A balance has to be maintained between the welfare of the people and augmenting the resources of the state.

This presupposes two things: maintenance of law and order and an adequate administrative machinery. Maintaining law and order involves not only the detection and punishment of criminals, but also upholding the fabric of society. The state has a responsibility for ensuring the observation of laws concerning relations between husband and wife; inheritance; rights of women, servants and slaves; contracts; and civil matters. Further, there have to be laws to avoid losses to the state treasury and to prevent embezzlement or misuse of power by servants. Therefore, dandniti is an integral part of Arthashastra.

The excessive responsibilities of state for promoting economic well-being and preserving law and order demand an equally extensive administrative machinery. Any text on Arthashastra has to contain details of the organisations of the civil service as well as the duties and responsibilities of individual officials.

A ruler has three-fold duties in regard to the internal administration of the country. They are: raksha or protection of the state from external aggression; palana or maintenance of law and order within the state; and, 'yogakshema' or safeguarding the welfare of the people.

Arthashastra is also the 'science of politics'. It is the art of government in its widest sense. The subjects covered include administration; law and order and justice; taxation, revenue and expenditure; foreign policy; defence; and war. Its three objectives follow one from the other: promotion of the welfare of the subjects leads to acquisition of wealth, which, in turn, requires acquisition of new territories.

Arthashastra considers the welfare of the people as of crucial importance for the king. It says:

> **"Prajasukhe sukham Ragyah prajanam cha hite hitam.**
> **Natmapriyam hitam ragyah prajanam tu priyam hitam."**

In the happiness of his subjects lies the happiness of king; in their welfare his welfare. He shall not consider as good only that which pleases him, but treat as beneficial to him whatever pleases his subjects.(1-9-34).

Arthashastra has many verses dealing with welfare of the people, and also animals. Kautilya precisely identified the persons who need protection of the state and prescribed remedies ranging from free transport on ferries to protection during the battles. Arthashastra prescribes the quantum of rations for the males, females and children, as also for elephants, horses, cows, bullocks, camels, donkeys and dogs.

For women, there are several laws for their protection and giving them their due rights. In regard to remarriage and right to property, women had a position which was much better than that in the subsequent periods of Indian history. Women were included in the class of persons whose problems were to be looked into by Judges suo moto. Many aspects of protection granted to women were due to their inclusion in the list of people who needed protection of state because they were helpless and were easily exploited.

The Arthashastra is world's oldest treatise on the economic administration of a state. It gives directions in the form of laws for the three main activities of the time viz. Agriculture, cattle-rearing and trade, which generated resources for the state. The Arthashastra includes laws for the tax policy; money and coinage; public sector and private sector; state monopolies; and private enterprises. Arthashastra accords the greatest importance to agriculture and gives technical details about agriculture. Land is classified into five classes viz. arable, forests, reservoirs, mines and others. There are laws for all the various economic activities viz. animal husbandry; forestry; fisheries; mining; manufacturing; liquor industry; salt industry; textile industry; and trade.

Agriculture

Agriculture and animal husbandry began to be developed in India during the pre-Vedic times. Rigveda has several references to hundreds and thousands of cows; to horses yoked to chariots; to race-courses where chariot races were held; to camels yoked to chariots; to sheep and goat offered as sacrifice; and to the use of wool for clothing. The famous Cow-Sukta (Rv.6.28) indicates that the cow had already become the very basis of rural economy. In another Sukta, cow is deified as the mother of Vasus, the Rudras and the Adityas, as also the pivot of immortality. The Vedic Aryans had large forests for securing timber, plants and herbs for medicinal purposes. The farmers' vocation was held in high regard. In social ranking, farmers were considered next to Brahmins, and the entire village administration was in the hands of leading farmers who were known as "Kutumbin" from which the word "Kunbi" is derived.

India had developed expert knowledge in forestry in addition to the fields of agriculture and animal husbandry. Tree plantation and preservation was one of the fundamental articles of Hindu religion. Indian culture from its very inception had grown under the shades of trees where the Rishis dwelt. Different kinds of trees and their importance in life, for use as well as for beauty, were studied with care.

There is ample evidence testifying to the expert skills in raising crops of wheat, gram, pulses, sugarcane, indigo, cotton, pepper and ginger, and in growing fruits like pineapple, oranges and mangoes.

Irrigation

India's prosperity in olden times was mainly due to prosperity in agriculture, which, in turn, was due to kings taking special care for providing irrigation facilities to the cultivated lands. Rigveda and Atharveda include several references to irrigation and various means and methods used therefor. Providing irrigation to the cultivated lands was the first and foremost duty of a king. Understandably, therefore, in the Sabhaparva of Mahabharat, Narad asks Yudhishter if he was attentive to the improvement of agriculture by digging tanks in the kingdom at proper distances so that agriculture might not have to depend entirely on rain. Also, in his discourse on administrative principles, Narada asks Yudhishter "Are large and swelling lakes excavated all over the kingdom at proper intervals, so that agriculture in your realm does not remain entirely dependent upon rains?"

The Arthashastra enjoins that the king shall construct reservoirs filled with water, either perennial or drawn from other sources. He was also required to provide such amenities as sites, roads, timber and other necessary things to those who would construct reservoirs of their own accord. There were co-operative institutions for constructing reservoirs. In the Vishnuparva of Harivamsa, there is a reference to the course of Yamuna being diverted through Brindaban by Balarama, apparently for agricultural purposes, because Balarama is characteristically represented as the wielder of the plough and the pestle.

Farmers in the Rigvedic era constructed channels for irrigation from wells, and, probably also from rivers. Artificial lakes for storing water were common in Southern India. Canal irrigation by constructing a permanent weir across a river, was, perhaps, not in use in ancient times. But, there was another method in use in places close to a hill, or undulating land. An example of this method exists in a dry part of Bankura district in West Bengal. It is a 16 miles long canal for storing rain water coming from the upper basins. It is associated with name of Subhankara, the celebrated practical mathematician. The canal is known as 'Subhankari Danda'. The word 'danda' pointing to the resemblance of the canal, alongwith its tributaries, with the trunk of a tree and its branches. It is an example of a remarkably accurate alignment over a wide tract of land.

Megasthanese mentions the irrigation methods employed extensively by ancient Indians. He writes: "The greater part of cultivated land is under irrigation, and, consequently, bears two crops in a year."

The Arthashastra mentions a special government official equivalent to a Superintendent of Agriculture who assessed land at varying rates, according to different methods of irrigation. Remission of taxes was allowed to those who themselves built tanks, lakes etc. or repaired ruined or neglected works of similar nature. Chandragupta Maurya maintained a regular system of canals and a special department for measuring lands and regulating supply from sluices.

Sudarshana lake was excavated by Pushya Gupta, the viceroy of Chandragupta, and its channels were completed by Asoka. It is one of the monumental works which still points to the great importance that used to be attached to irrigation in ancient times. In later times also, kings got many reservoirs made for irrigation purposes, the ruins of which are still to be found in Bankura, Midnapur and Birbhum in West Bengal.

Megasthanese mentions a class of officers, distinguished from those entrusted with the administration and the military, who superintended the rivers, measured the land and inspected the sluices so that everyone had an equal supply of water.

According to Wilcox who has done valuable research in this subject, much larger and more extensive irrigation works were carried out in ancient times than had been constructed during thousand years of India's slavery.

Land Revenue

Land Revenue in Ancient times, as in modern times, was based on income from land. In other words, revenue was rated according to productivity and kind of soil, and it varied between 1/12 to 1/6. Arthashastra and Smritis had stringent rules about leaving a good producers' surplus and also a classification of soil on the basis of fertility and differential assessment. The system of measurement and survey and differentiation of soil according to productivity indicated that land revenue assessment was not permanent and was revised at intervals. Megasthenese says that Maurya officers were concerned with the measurement and supervision of alluvial deposits for revenue purposes.

Available evidence points to the existence of an organised system of land survey as hinted in the Arthashastra and also to a realisation of the great schemes of Arthashastra to keep a record of land like the Doomsday Book of the William the Conqueror of England.

Administration

Arthashastra visualises the king having stringent control over the economy which needs an efficient administrative machinery. The Arthashastra gives the structure of the administration of an ideal state which includes 34 Adhyakshas or Chiefs, as given below. Out of 34 Adhyakshas, 7 have been considered as officials related with industry. They have been mentioned at S.No. 3 to 8 and 16 of the list. They are the chiefs for the departments dealing with mining and metallurgy; metals; mint; mines; salt; precious metals and jewellery; and textiles.

All the officials are called Adhyakshas, but all of them do not get the same emoluments. There is a salary scale of 1000 panas per annum for all Adhyakshas, but the Adhyakshas for the manufacturing establishments were given a much higher salary of 12000 panas. This means a special treatment for the manufacturing activities. Under the departments mentioned under Industry, the most important one is that of textiles. Responsibilities of the chief textile Officer are spelt out in details. Indian made textiles of cotton, silk and wool were of a very superior quality and they fetched good prices in silver and gold all over the world. The cotton textile were made of the finest yarn of more than 2000 counts, and were an item of luxury in the whole world. Some 2000 years back, Egyptian mummies were wrapped in Indian muslin.

1.1 LIST OF ADHYAKSHAS

(in textual order)

		Equal to
1.	Mahalekha Nireekshak	Chief Comptroller and Auditor.
2.	Nagvanadhyaksha	Chief Elephant Forester.
3.	Kosadhyaksha	Chief Superintendent of Treasury.
4.	Aakaradhyaksha	Chief Controller of Mining and Metallurgy.
5.	Lohadhyaksha	Chief Superintendent of Metals.
6.	Lakshanadhyaksha	Chief Master of the Mint.

7.	Khanadhyaksha	Chief Superintendent of Mines.
8.	Lavanadhyaksha	Chief Salt Commissioner.
9.	Suvarnadhyaksha	Chief Superintendent of precious metals.
10.	Koshtagaradhyaksha	Chief Superintendent of Warehouses
11.	Panyadhyaksha	Chief Controller of state trading
12.	Kupyadhyaksha	Chief Superintendent of forest produce.
13.	Ayudhagaradyaksha	Chief of Ordnance.
14.	Pauthavadhyaksha	Chief Controller of weights and measures
15.	Manadhyaksha	Chief Surveyor and time keeper.
16.	Sulkadhyaksha	Chief Controller of Customs and Octroi.
17.	Sutradyaksha	Chief Textile Commissioner.
18.	Sitadhyaksha	Chief Superintendent of Crown Lands.
19.	Suradhyaksha	Chief Controller of Alcohol Beverages.
20.	Ganikadhyaksha	Chief Controller of Entertainers.
21.	Sunadhaksha	Chief Controller of animals and slaughter
22.	Navadhyaksha	Chief Controller of Shipping.
23.	Pattanadhyaksha	Chief Controller of Ports and Harbours.
24.	Go-Adhyaksha	Chief Controller of Crown herds.
25.	Asvadhyaksha	Chief Commander of Cavalry
26.	Hastyadhyaksha	Chief Commander of Elephant Corps.
27.	Rathadhyaksha	Chief Commander of Chariot Corps.
28.	Pattyadhaksha	Chief Commander of Infantry.
29.	Mudradhyaksha	Chief Passport Officer.
30.	Vivitadhyaksha	Chief Controller of Pasture Lands.
31.	Dhyutadhyaksha	Chief Controller of Gambling.
32.	Samasthadhyaksha	Chief Controller of Private Trade.
33.	Bandanagaradhyaksha	Chief Superintendent of Jails.
34.	Devatadhyaksha	Chief Superintendent of Temples.

Ship Building Industry

Ship-building has been a great industry of India. Indians have been sailors for the past 6000 years. The art of navigation was born in river Sindh. The very word navigation is derived from Sanskrit words Nav and Gati. And the word vessel is derived from the Sanskrit word Yanpatra which means sailing pot.

A peninsula cut off from the Northern world by the Himalayas and surrounded by vast expanses of water in the East and the West had to take to sailing and ship-building for exporting the surplus goods. There are numerous passages in ancient Indian literature which prove the early existence of navigation of Indian ocean and of trading voyages undertaken by Hindu merchants to distant shores. As early as the time of Polemy, in the second century AD, Indian ships sailed to Malaya Peninsula and Indonesia, not coastwise but across the Bay of Bengal. In the third century, horses were exported from India to Malaya Peninsula and to Indochina - an indication that there were ships of considerable size at that time. The recent discovery of a large metropolis in Cochinchina yielding Roman objects of second century AD testify to the intensity of sea traffic during those times.

When the Chinese Buddhist scholar Fahien returned from India around 400 AD, he embarked on a ship which carried more than 200 sailors and merchants and, which, therefore, must have been larger than the ships of Columbus and Spanish explorers. This ship sailed directly across the ocean from Ceylon to Java. From Java, Fahien travelled in another merchant vessel, which again carried more than 200 persons and sailed to China right across the Indian Ocean. Ships of that size able to cross Indian Ocean and China Sea with dangerous cyclones, could certainly cross the Pacific as well.

Yuktikalpataru written by Bhoja Narapati is a treatise on the art of ship-building. It mentions four different kinds of wood used for building ships and gives the names of different river-going and ocean-going ships.

Right from the dawn of history, Indians have been engaged in plying boats and ships; carrying cargoes and passengers;

manufacturing vessels of all types and dimensions; studying the stars and winds; and erecting light houses and building ports, wharfs, dockyards and warehouses. The Rigveda, written between 4000 to 5000 BC, makes several mentions of voyages in the ocean.

Arthashastra devotes a full chapter on the state department of waterways under Navadhyaksha or Superintendent of Ships. His duties included the examination of accounts relating to navigation, not only on oceans and mouths of rivers, but also on lakes and rivers. Fisheries, pearl-fisheries, custom on ports, passenger and mercantile shipping, control and safety of ships and similar other affairs, all came under his charge.

Famous historian Nicolo Conti wrote: "The natives of India build ships larger than ours, capable of containing 2000 butts and with five sails and as many masts. The lower part is constructed with triple planks in order to withstand the force of tempests. But some ships are so built that should one part be shattered, the other portion may accomplish the journey.

Historian Strabo says: "In the time of Alexander, the river Oxus was so easily navigable that Indian wares were conducted down through it to the Caspian and the Euxina sea and thence to the Mediterranean sea, landing finally in Rome. Perhaps, at that time, the Caspian Sea and Aral Sea, into which Oxus flows, were one. The discovery of the Caspian Sea trade by Pompey was the real cause of rivalry between Rome and Parthia. Because Armenia was receiving large quantities of Indian merchandise from the Parthian as well as Caspian regions.

Julius Caesar had contemplated deepening of the Ostia and Tiber and cutting a canal across the Isthmus of Corinth in order to facilitate Indian trade. But he was killed before the realisation of his plans. His successor Augustus, after conquering Egypt, established a prosperous sea-borne trade between Egypt and India and cleared Mediterranean sea of the pirates. A closer trade relationship was established between Roman Empire and India.

But, Roman Empire was unable to sell much of goods to India because it had to pay in terms of coins. A very large number of Roman coins have been found in India. Much of the Indian goods of luxury came to the notice of Romans after the death of Cleopatra, who greatly rejoiced in importing Indian goods of luxury.

The eminent Indian Archaeologist Dr. B.C.Chhabra says: "It may be a surprise even to an Indian today to be told that in the ancient world, India was in the forefront in the field of ship-building. Her ships flying Indian flags, sailed up and down the Arabian Sea, the Indian Ocean and far beyond. Her master-mariners led the way in navigation. Riverine traffic within the country, shipping along the entire length of India's coastline and on high seas, were brisk until as recently as the days of East India Company."

Metallurgy

Mining and Metallurgy have been among the strong points of ancient Indian technology. Considerable progress had been made in regard to the metallurgy of iron, copper and zinc, and the production of some alloys.

According to Yajurveda, iron (shyam ayas) was used from 1000 BC and steel (sara loha) came on the scene around 500 BC. The art of tempering steel, from which came the wootz steel and the famous damascus sword, had been perfected in India. The well-known iron pillar of Mehrauli at Delhi, over 23 feet tall, made of a single piece of iron and weighing about 6 tons, stands testimony to the then existing metallurgical expertise, which could not be matched by even the best iron founders of the West until about 1800 AD. The pillar has weathered over 1500 monsoons without a trace of degradation. This is so because it is chemically pure iron (specific gravity 7.81) consisting of iron 99.72%, carbon 0.08%, silicon 0.046%, sulphur 0.006%, phosphorus 0.114% and no manganese.

Copper had been mined and smelted around 300 BC. An elaborate and long drawn process was followed for producing bars of copper.

Zinc smelting activity in India has been traced to 100 BC. Zinc was extensively used in ancient and medieval India for making brass, an alloy of copper and zinc. Archaeological brass finds in Taxila dating back to 400 BC, show that the alloy was a product of fusion of copper and metallic zinc. The know-how for zinc extraction was given in Rasarnava and Rasaratnasamuchchaya. The design of the smelter and processing of zinc ore not only show a high level of engineering skill, but also a sound knowledge of (empirical) chemistry.

The technologies relating to mining and metallurgy include those for intricate art of ornamentation, metal carvings, bronze idol making, brass utensils and jewellery. Of these, gold and silver ornaments are known since the Vedic age and are proof enough of the superior, artistic, scientific and engineering expertise of ancient artisans, goldsmiths and colorists (rangwalas) who used natural chemicals (tamarind fruits). There are very few surviving pieces of jewellery belonging to the ancient and medieval periods, but a knowledge of their intricate designs, embedding of precious stones, and drawing of ultrafine gold and silver wires for weaving into silk fabrics, can be gathered from the murals, frescos, sculptures, metallic idols and the literary descriptions.

The practice of having bronze images for worship probably started in India with the Buddhists around 400 BC. South Indians preferred metal to stone for idols in temples and domestic altars. The Chola kings were great patrons of the works of art in bronze, and the excellence of Chola bronzes has yet to be surpassed by others in the world. Physical features, contours of face and limbs are religiously and rigidly fixed by the mathematical texts of iconography (Sulva Sastra, Silpa Sastra, etc.)

The copper implements from Gungeria in central India comprise in all 424 pieces of pure copper weighing 829 lbs., besides 102 ornamental laminae of silver belonging to distant antiquity. The presence of silver reinforces the belief that the ancient Indians possessed superior metallurgical and engineering skills. Extraction of silver from argentiferous galenas is a far more difficult operation than copper smelting.

Cotton And Muslins

Cotton was indigenous to India and it was from her soil that the knowledge about its cultivation had spread to the world. Indian adventurers took the seeds of cotton to many lands including China and Japan. Cotton reached Japan first and China received it after about 150 years. Hand-spun and hand-made Indian muslins were the pride of India. Egyptian mummies were wrapped in Indian muslins about 2000 years ago. India had flourishing trade with Arab countries and Egypt. The finest yarn produced in India was 2425 count.

Medicine

The earliest reference to disease and medicine in the Indian scriptures goes back to the Rigveda physicians, Aswinis, who come closest to the conception of medicine men. The Ayurveda, which means knowledge of life, is largely derived from the Atharvaveda. The science of Ayurveda aims at total welfare: physical, mental and even spiritual, and involves the study of causes, symptoms and cure. Ancient Indians had a good knowledge about the various health problems, medicines, therapy, physiology and anatomy, which prompted them to systematise their empirical knowledge within the confines of the existing dogmas of esoteric hypotheses. The science of medicine in ancient India really started with the theories and practices of Charaka, Susruta, and Vagbhata, known as Vridha-trayi (triad of ancients), the greatest physicians/surgeons of ancient India.

Charaka (80-180 AD) wrote his monumental Charaka Samhita when he was court physician to Kanishka. The treatise is a rich storehouse of medicinal lore and consists of eight sections: Surrasthana (general principles, philosophy,etc.); Nidanasthana (causes of diseases); Vimanasthana (taste, nourishment, general pathology); Sarirsthana (anatomy and embryology); Indriyasthana (diagnosis and prognosis); Chikitsasthana (treatment of diseases); Kalpasthana (pharmacy); and Sidhisthana (cure of the diseases). The treatise lists medicinal substances of animal origin (177), plant origin (341) and mineral origin (64), apart from cereals and legumes, natural waters, sugarcane derivatives, honey, milk and milk products, vegetables, oils, etc., of medicinal value.

Susruta (350 AD) wrote Susruta Samhita, which is perhaps the greatest among such treatise. It consists of eight sthanas, a thesis on the therapeutic properties of garlic and is more a treatise on surgery (hernia, cataract, and plastic surgery) than on medicine. Skin graft for a torn ear and rhinoplasty techniques were perfected by Susruta.

Vagbhata (610-685 AD) wrote Ashtanga Samgraha (eight branch compendium) in verse form which also lists drugs imported from Greek sources and medicinal plants grown in Persia.

Many of the phytal therapeutics mentioned in Ayurveda have been clinically proved to be effective. Examples are: reserpine, vinca alkaloids, colchicine, gum guggul, berberine, codeine, ajmalicine, digoxin, quinine, ginseng, shikonin, nicotine, active principles from Phyllanthus niruri and several others. The pathogenesis of several diseases mentioned in Ayurveda e.g. arterosclerosis, hepatitis, neoplasia of liver, viral diseases, diseases of aging (Alzheimer's syndrome, multiple sclerosis etc.) are broadly in line with those mentioned in modern allopathy.

Architecture And Sculpture

The art, architecture and sculpture of India have drawn many tourists to India. What is generally not realised, however, is the extent and quality of science and engineering that have gone into the creations - the visible symbols of the mastery of the ancients in these areas. Here again, concepts in science are inextricably enmeshed with empirical expressions of emotions and almost stylised forms of depicting different moods and objectives - be it architecture or sculpture.

The earliest references are in the Sulva Sutra mathematics (cord verses, 400 BC - 200 AD), a supplement to kalpa (ritual canon) dealing with the construction of vedis (sacred and sacrificial altars) by stretching cords between stakes. Theoretical principles governing arts and sculpture are described in Vedangas and Upvedas, but the main manuals of instruction are the Silpa Sastra (200 BC). Another theoretical exposition dealing with architecture and sculpture is the concept of ganyamana (reckoned measurement) to determine the proportions of a structure, especially in relation to its height. Ganyamana deals with certain basic parameters involved in the construction of buildings, columns or images. These are: (1) the five patras (objectives); (2) the six vargas (component parts of the constructed object); (3) Mana (the measure used); and (4) aya (movement of the dynamic factor in ganyamana).

A treatise of unknown authorship titled Mansara, belonging possibly to 500 AD, contains seventy chapters dealing with architecture in all its forms. It gives elaborate details on structural and sculptural dimensions of practically every construction. Site selection, orientation, inaugural rites, layout plans for buildings and townships, roads, bridges, ponds, temples, hospitals, assembly halls, cremation grounds and house-warming ceremonies are among the subjects covered. With such an abundance of concepts and empirical knowledge at their command, it is no wonder that the ancient and medieval Indians could create superb sculptures and temples of monumental beauty. The continuity of knowledge passed on from generation to generation is reflected in the Rajagopuram completed in 1987 at Srirangam in South India.

The artists of ancient and medieval India possessed extraordinary versatility and adaptive capability to combine the finer aspects of extraneous schools with their own theoretical grounding in scriptural sutra and sastra so as to leave for posterity their symphonies in stone. The language of their chisel speaks to this day, leaving us so overwhelmed by their sheer beauty that the theoretical rigors or the empirical practices involved in their creation seem to go completely unnoticed.

Mathematics

A very high level of mathematics was developed by Vedic Hindus, and the subsequent periods saw a further strengthening of this mathematical base. The Vedic Mathematician priest must have been a singularly awesome figure. He specialised in weaving threads of mathematics within a web of dogma and ritual. He almost "smuggled" the finer points of science and mathematics into the dictates of dogma. In his mathematical laboratory he assembled bricks of varying dimensions into geometrical shapes conforming to the rigid requirements of scriptural laws. In the process he and his tribe addressed difficult and sometimes bizarre geometrical problems and found solutions readily acceptable to the purist.

The Sulva Sutras are the main source for several geometric works of Brahmanic origin which mean a collection of rules concerning measurements. The oldest Sulva Sutra is that of

Baudhayana (600-500 BC) and it contains 525 sutras in three chapters. The other most important volume is the Sulva Sutra of Katyayana (400-300 BC) which formally states the Pythagorean theorem.

The range of information contained in these surras covers enumeration, arithmetical reckoning, fractions, properties of rectilinear figures, Pythagorean theorem, surds, irrational numbers, quadratic and indeterminate equations and so on. The canonical work of the Jains (600-300 BC), Ganitanuyoga, deals with mathematical principles; and others discuss number reckoning, fundamental operations, geometry, mensuration, fractions, equations and permutations and combinations.

From the beginning of the Christian era till about 450 AD, studies in mathematics were more concerned with astronomy, e.g. calculation of planetary motions, eclipses, astrological computations, but the medieval period witnessed a great surge of activity in mathematical sciences. Notable Indian mathematicians of that time were Aryabhatta (476-520 AD), Varahmihira (505-587 AD), Brahma Gupta (598-660 AD), Lalla (748 AD) Mahavira (850 AD), Manjula (932 AD), Sridhara (1028 AD) and Bhaskara (1114-1160 AD).

Aryabhatta's work (Aryabhattiya) on pure mathematics consists of 33 verses of highly condensed rules. Among other things, he explained the causes of solar and lunar eclipse; gave a formula for solving indeterminate equations, and calculated accurately the value of π (62832/20000). He was undoubtedly one of the greatest astronomer-mathematician of all time. Varahmihira, better known as an astronomer, is the author of Pancha Siddhantika, which summarises Indian astronomical knowledge of the time and Brihat Samhita which deals with astrology. Brahma Gupta wrote Brahma Siddhanta which contains several theorems and rules. Lalla wrote a brief theory on mathematics. Mahavira wrote Ganitasara Samgraha which includes Quadratic equations. Manjula , Sridhara and

Aryabhatta II also made some contribution to the existing knowledge of mathematics.

The Bakhshali manuscript of unknown authorship, dating around 300 AD and written on 70 folios of birch bark, was discovered in 1881. It contains illustrative examples and solutions for arithmetical, algebraic and geometrical problems. It also contains a small cross (like a plus sign) to denote negative value, and zero is shown by a dot. Bhaskara II (1114--1160 AD) authored Bijganita, a work on mathematics, Siddhanta Siromani on astronomy and Lilavati on algebra. His Chakravala (cyclic method) of solving indeterminate equations of second degree, $NX^2+1=Y^2$, $NX^2+c=Y^2$, is considered as "the finest thing achieved in the theory of numbers before Lagrange."

Vedic Indians developed an exhaustive vocabulary for naming numbers to facilitate calculations in addition, subtraction, multiplication and division. Yajurveda Samhita gives names to numbers as large as 10\12. Rigveda gives names of fractions such as ardha (1/2), tripada (3/4). Maitrayani Samhita mentions pada (1/4), sapha (1/8), kushta (1/12) and kala (1/16). Sulva Sutras use the terms amsa and bhaga for fractions.

Vedic mathematics devolved from Atharvaveda has the merits of speed, accuracy and quick verification. Solving long, complicated mathematical problems become a child's play through the use of Vedic Sutras. Vedic mathematics has evoked immense interest in Western countries. A CD-ROM version of Vedic mathematics may be soon introduced in Indian schools.

Chemistry

Chemistry in ancient India was largely restricted to making medicines, aphrodisiacs, poisons and their antidotes, dyes, glass, alkalis, acids and their metallic salts. Medieval age Indian chemists were popularly known as alchemists and they experimented extensively on transmutation of metals.

During 2500-1500 BC, closed pottery kilns generating temperature of 700-800 C were developed to smelt copper ores for making implements of daily use. It was also during this period that dyed cotton fabrics were used. The period of pre-Buddhist Vedic era upto 800 AD saw the emergence of mining of ores like copper, iron, gold, silver and lesser metals. The Atharvaveda discusses plants and vegetable products useful in the treatment of diseases and for the prolongation of life. Kautilya's Arthashastra also describes a comprehensive treatment of ores, minerals, metals, their extraction and working as also of the alloys. There were several treatise relating to the extraction, purification, sublimation, distillation and chemical processing of substances, the apparatus and equipment used, and related matters.

Fermentation

The most honoured legendary drinks of the Rigveda were the Soma and Sura. Sura was made from barley, wild paddy or grain mixed with molasses. A kind of Sura made from barley was called Kohola, which later combined with Arabic 'al' and came to be known as "alcohol".

Dyes and Dyeing

A piece of dyed cotton found in the ruins of Mohenjeodaro proved that the people of that time had acquired a very high order of knowledge relating to dyes and dying. Megasthanese writes of the large variety and brightness of the colours of the garments worn by Indians. In St. Jerome's Latin translation of Bible done in 400 AD, Job's wisdom is described "as enduring as the colours of India." All the colours used in dying were of natural origin and during the reign of Jehangir, more than 400 tints were produced through a judicial blending of colours.

Glass and Ceramics

In India, the use and manufacture of glass had started in the beginning of the first millennium BC. Glass factories flourished in Uttar Pradesh at the end of the First century BC. It was soda-lime glass with 7-8% aluminium oxide. Blocks of glass weighing over 100 pounds have been discovered from the sites of the factories in Uttar Pradesh. Objects made of glass have been found in 30 sites excavated so far. The most common objects are bangles, bracelets, beads and bowls. Various colours and hues of glass were produced and used mostly as jewellery. Black polished ware from ceramics, consisting mostly of bowls, decorative pots and jars had started being made around 600 BC.

Paper and Perfumery

Paper making had started in India during the first century BC. The materials employed were old clothes, old tents, the bark of certain shrubs and trees, etc. Making of perfumery had started in India during the medieval period. Many process steps for making perfumes are listed in the compendium Gandhasara. Twenty-five types of fragrant water and seven categories of aromatic substances are known to have been used in the making of perfumery.

Chapter Two

Invasions

THE WORLD famous prosperity of India caused several invasions of India to take place. The earliest known invasion took place around 6000 BC i.e. the time of Manu, the Aryan Patriarch. Indian tradition knows nothing about the so-called Aryan invasion of India, which is a story planted by Western historians. The original home of Ikshwakus, the first of the Suryavanshi Aryas, was at Ayodhya and that of Pururva, the first of the Chandravanshis, was at Pratishthan near Allahabad.

Asuras And Daivas

When the solar and lunar dynasties of Aryas had found a footing in the Ganges Valley, the whole of the region watered by the Indus and its tributaries had been occupied by Asuras, who were foreign people. During the time of a Chandravanshi king Yayati, sixth in descent from Manu, the territories between the Saraswati and the Sutlej were ruled by an Asura king Vishaparvan. The territory between the Sutlej and the Beas is even today known after the name of an ancient daitya king Jalandhar. Multan in Pakistan, was the capital of an Asura king Hiranyakshipu, father of celebrated Prahlada. The capital of another Asura king

Hiranyaksha was at Harrand, a town now in Dera Gazi Khan district of Pakistan. The remains of the civilisation discovered at Harappa and in Sind have been found to be quite similar to those found in Baluchistan, Southern Persia and Mesopotamia. This means that the whole of North-western India, Baluchistan, Southern Persia and Iraq were occupied by the people possessing similar culture and civilisation. In our old Indian tradition, these people were called Asuras.

The Aryans were called Daivas. The remains of the old city of Ashur have been discovered near Mosul in Mesopotamia. There was always a conflict between the Daivas and Asuras. In our ancient Sanskrit literature, this struggle is well known as the Deva-Asura sangram. In the Assyrian and Persian literature, the Daivas are described as something terrible and supernatural. This clash of cultures between the Aryans and the Asuras is quite well known in the history of ancient India.

The First Invasion

In the earliest Deva-Asura sangram, Chandravanshi descendants of Manu from Nahusha onwards, became engaged in the task of driving out Asura culture from the Indus valley region. The chandravanshi Aryans, also known as Induvanshis, succeeded in achieving their objective. The Asura rule in Punjab and other parts of north-western India was overthrown and their territory divided among the five sons of Yayati, namely, Yadu, Turvasu, Anu, Druhyu and Puru.

Malwa and Gujarat-Kathiawar were allotted to Yadu. Bundelkhand was given to Turvasu. Punjab and Sind were given to Anu. The trans-Indus region between the Indus and Hindukush and the Siestan came to Druhyu. The middle Gangetic regions between the Vindhyachals and the Saraswati and between Oudh and Rajputana were inherited by Puru.

Indu Desh

Yayati had extended the boundaries of his empire from the banks of Saraswati to the regions far beyond the Indus to the mountain ranges of Hindukush and the deserts of Seistan. His empire, thus, included the whole of the present-day Pakistan and Afghanistan and also certain parts of China, Russia and Iran. All these lands came to be called Indu Desh and the people inhabiting these territories began to be known as Indus or Hindus.

The Chinese pilgrim Twang-Tsang, who had visited India in the middle of the seventh century, also believed that the word Hindu is derived from Indu or Chandra and not from Sindhu, as the Persians or the Europeans believe it to be.

It, therefore, appears that the name Hindu is in commemoration of the miltary, political and cultural victories achieved by the Chandravanshi kings over the Asuras in driving them out of the North-western India.

The people of the Ganges valley had, thus, reclaimed culturally the people living in the region watered by the Indus and its tributaries. And, the result was that for a very long period of more than 5000 years there was no invasion of India from the North-west.

The Second Invasion

Around 500 BC, India was again invaded through the North-west by Darius Hastaspes, a successor of Cyrus the great. The region of Indus valley was again swamped by a foreign culture. A foreign language and script called Kharoshti were brought into the country by the Persian invaders. This script began to be used by people for their writing to such a great extent that even Asoka, who did so much for the propagation of Indian culture in the North-west, had his inscriptions in the region only in the Kharoshti script. But, the very term Kharoshti shows that the people at large had a deep aversion and contempt for the Kharoshti language. Literally, Kharoshti is made up of two words 'khara' and 'ushta' meaning the lips of an ass. Kharoshti, thus, meant a language coming as if, out of the mouth of a donkey. This is how the people expressed their hostility against the foreign culture brought into India by the Persians known by the names of Sakas, Pahlavas and Paradas.

In Punjab and Sind, the Persian domination lasted between 500 BC and 450 BC. In Baluchistan and Afghanistan, the domination, first of the Persians and then of Greeks, lasted upto 305 BC.

Again, the revivalist movement came into the north-west from the people of Ganga plains. At first, the Mauryas weakened the hold of Persian and Assyrian culture by spreading Buddhism. Later on came Guptas who transformed Buddhism into Hinduism and destroyed all remains of foreign culture in India. Vikramaditya finally drove out Sakas from the country. Our entire Puranic literature assumed its present shape during the time of Guptas, and the masterpieces of Indian drama and poetry were produced during the time of Vikramaditya. All these powers rose in the region watered by the Ganga and its tributaries. This struggle between Hindus and Persians was another Dev-Asura sangrm in which Hindus came out victorious.

By the time Alexander arrived on the banks of the Indus in January 326 BC, the whole of Punjab and Sind had been reclaimed from the Persians and the political and military power of Hindus had been re-established in these parts of India. In 305 BC, Hidus re-established their political authority even in Baluchistan, Afghanistan and the North-West Frontier-Province. From this time began the cultural reclamation of the people living in these parts of India. It is not known as to how far this objective had been achieved when in 206 BC Greeks again invaded India and, in the beginning of second century, occupied North-west India. But, at the time of Kanishka (120-160 AD), people of Sind, Afghanistan, Baluchistan, North-West-Frontier-Province, Kashmir and Western Punjab were Buddhists.

For a very long period of 700 years upto 500 AD, North-western India was the dumping ground for the foreign invaders. The Bactro-Grecians and Parthins, the Yuchis, the Kushans and the Huns came and settled in India. Different cultures and civilisations came into contact in the region watered by the Indus and its tributaries. A struggle of a serious nature, thus, continued in this region. Many of these foreign people turned Buddhists and many of them became devotees of Hindu gods such as Shiva and Vishnu. This absorption of foreign elements in Hindu society is attributable largely to the following two factors:

Firstly, Hindus always allowed full freedom to the individuals in regard to matters of theological questions, dogmas and creeds. The talk about 33 crore devatas is a figurative way of saying that under Hinduism each individual is free to worship a separate god of his own. In every Hindu family, different individuals are free to worship different gods. One member of the family may be an orthodox Hindu, another may be an Arya Samajist, or a Brahmo Samajist, or a Radhaswami, or a follower of Sai Baba.

Secondly, Hindus have been greatly successful in spreading their culture and civilisation. By means of Kathas, Kirtans, Raslilas, Nataks, Kumbha melas and festivals Hindus have been making their past achievements a matter of admiration and the stories of their national heroes became popular in the countryside. These different methods of presenting their culture effectively worked on the alien people, who came as conquerors and settled in India as its citizens. Those belonging to an inferior civilisation, coming from outside as invaders, soon became attracted to the gorgeous and splendid setting in which Hindu culture and civilisation was presented to the people.

As a result of the absorption in Hindu Society, many of the descendants of the foreign invaders are now some of the most important kulas or subcaste of the great Rajput community. Some of them are today included among the Gujars and Ahirs; and some of them belong to a subcaste of Brahmans. The conquerors, thus, were conquered by Hindu culture and civilisation.

Muslim Invasion

During the last 2500 years, there have been two long periods of 700 years each when Hindus living in the region watered by the Indus and its tributaries were under the political domination of foreign invaders. The first period ending with 500 AD and the second period ending around the middle of eighteenth century. As stated above, the foreign invaders during the first 700 years were all absorbed in the Hindu fold. During the second period of 700 years, all invaders were Muslim and they had invaded India as a part of the global strategy for the spread of Islam, which had been founded in Arabia around 625 AD. By the end of seventh century, Arabia, Persia, Syria and Mesopotamia had been conquered by Muslim armies, and their people had been converted to Islam en masse.

The invasion of India by Muslim armies was a part of the global jihad of Islam which meant spread of Islam by force. In Europe, Muslims attacked Spain in 711 and had conquered most of it by 715. Christians had driven Muslims out of Spain after a long war which had started in 1064 and ended in 1492. The Muslims, thus, ruled Spain for over 700 years.

In 712 AD, Muhammad Bin Qasim conquered some towns in Sind, and during his stay there for about three years, he also converted some people to Islam. After his return, however, those converted people returned to their former faith. By the end of the tenth century, very small pockets of Muslims were found in Sind, Gujarat and western coast of India.

Towards the end of tenth century, Mahmud Gaznavi was deputed by the Khalifa to resume the work of Jihad in India. He made a promise to Khalifa that he would convert the people of India to Islam through his yearly expeditions. Between 1000 and 1023 AD, Mahmud Gaznavi made fourteen attacks. He destroyed the Somnath temple in Gujarat in the vain hope that the Hindus would be demoralised and become Muslims. The region of Mahmud's attacks extended from Peshawar to Kannauj in the east and from Peshawar to Ahilwara in the south. During all his attacks he used several means for converting people to Islam. After each attack, Mahmud took away from India incalculable wealth in the form of gold and precious metals as also thousands of men, women and children as slaves. This astonishingly large booty tempted and motivated a large number of people to join him in his subsequent attacks on India.

Mahmud Gaznavi showed great zeal in converting Hindus to Islam because he considered it his religious duty as a true Muslim. The Quran, the Hadis, the Hadiya and the Sirat-un-Nabi all the four important works of Islam direct the faithful to convert the non-Muslims to Islam. The Hadiya is quite explicit about the legality of Jihad against infidels even when they have not taken the offensive. Mahmud Gaznavi died in 1030 AD.

Muhammad Ghori (1174-1206) began the process of establishing Muslim rule in India by capturing Bhatinda in 1190. In 1192, he invaded India with an army of 180000 and defeated Prithvi Raj Chauhan. Qutubuddin Aibak (a former slave) and Bakhtyar Khilji made several conquests in different parts of India. Qutubuddin Aibak founded the slave dynasty of rulers which lasted upto 1288. At the time of death of Qutubuddin Aibak in 1210, the population of Muslims in India was 4 lakhs, which was confined to pockets in Sindh, Gujarat, Bihar and Malabar.

During the thirteenth century, population of Muslims did not show any significant increase because all the energies of the Sultans were concentrated on preserving their acquisitions.

During the reign of Alaudin Khilji (1296-1316), however, Muslim population grew at a faster rate due to the spreading of the Muslim rule to almost whole of India. The Vijayanagar in the South had been formed for protecting Hinduism from the onslaughts of Islam. But, the Bahmani kingdom was also founded contemporaneously and it took up the work of converting Hindus to Islam as a part of the duty of a Muslim regime. By the end of fourteenth century, population of Muslims in India had risen to around 3.2 millions which formed 1.85 percent of India's population at that time.(table 2.1)

During the fifteenth century, Lodhi Sultans of Delhi followed a rigorous policy of conversions. Also, there was a spate of forced conversions in Sindh, Bengal, Gujarat and Deccan. In Kashmir, Sikandar Butshikan (1394-1417) destroyed a large number of temples and asked Hindus to choose between Islam and death. This resulted in a very large number of Hindus being converted to Islam.

The Muslim rule in India lasted for 567 years. Starting with the capture of Bhatinda by Muhammad Ghori in 1190, it ended with the battle of Plassey in 1757. The Muslim rule was followed by the British rule which lasted for 190 years between 1757 and 1947. (table 2.1)

Growth of Muslim Population

During the period of 750 years upto 1947, the population of Muslims had risen 24 times - from about 0.4 million in 1200 to 9.5 millions in 1947. Consequently, between 1200 and 1947,the percentage of Muslims in India's population had risen from negligible to 25 percent, the population of Hindus falling consequently from 100 to 75 percent.

The population of Muslims had continued to grow at a fast rate even when there was a fall in the total population of the country.

During the fifteenth century, India's population fell by 13 millions, but, Muslim population rose by 6 millions. It raised the ratio of Muslim population from 2 to 6 percent.

During the sixteenth century, India's population further declined by 20 millions, but, Muslim population rose by 6 millions. It raised the ratio of Muslim population from 6 to 10 percent.

During the seventeenth century, India's population rose by 20 millions and Muslim population rose by 5 millions. This share of 25 percent in the total increase in population was more than double of the ratio of 10 percent for Muslim population in 1600. It raised the ratio of Muslim population from 10 percent in 1600 to 12 percent in 1700.

2.1 MUSLIM POPULATION OF UNDIVIDED INDIA

—Yearwise 1200 to 1947

Year A.D.	Total Population (Millions)	Muslim Population (Millions)
1200	N.A.	0.4(neg.)
1300	N.A.	1.0(neg.)
1400	173	3.2(1.9)
1500	160	9.0(6.0)
1600	140	15.0(11.0)
1700	160	20.0(12.0)
1757	166	23.0(22.0)
1800	170	25.0(15.0)
1900	284	63.0(22.0)
1947	380	95.0(25.0)

Note: Figures in brackets show Muslim population as % of total population

During the eighteenth century, India's population rose by 10 millions and Muslim population rose by 5 millions. This 50 percent share in the total increase of population was more than four times of the ratio of 12 percent for Muslim population in 1700. It raised the ratio of Muslim population from 12 percent in 1700 to 15 percent in 1800.

During the nineteenth century, India's population rose by 114 millions and Muslim population rose by 63 millions, forming 55 percent of the total increase. This share of 55 percent in the total increase in population was about four times of the ratio of 15 percent for Muslim population in 1800. It raised the ratio of Muslim population from 15 percent in 1800 to 22 percent in 1900.

During the 47 years of the twentieth century, India's population rose by 96 millions and Muslim population rose by 32 millions. This share of 33 percent in the total increase in population was much larger than the ratio of 22 percent for Muslim population in 1900. It raised the ratio of Muslim population from 22 percent in 1900 to 25 percent in 1947.

2.2 MUSLIM POPULATION OF UNDIVIDED INDIA
(Century-wise)

End of Century	Increase (millions) total	Muslims	Muslims as % of Total poulation
Fifteenth	(–) 13	6(..)	6
Sixteenth	(–) 20	6(..)	10
Seventeenth	20	5(25)	12
Eighteenth	10	5(50)	15
Nineteenth	114	63(55)	22
Twentieth	96	32(33)	25

Note: Figures in brackets show increase in Muslim Population as percentage of increase in total population (Source: Indian Muslims: Who are they by K.S. Lal)

Reasons for Growth of Muslim Population

The very fast growth of Muslim population in India is the result of the cumulative impact of several factors, as may be seen from the succeeding paragraphs.

Non-violence of Buddhists

The basic reason for the growth of Islam in India has been the excessive emphasis on non-violence by the Buddhists who formed a large majority of people in the strategically important North-west region of India. At the time of Buddhist emperor Kanishka (120-160 AD), the entire North-west of India including Sindh, Baluchistan, North-West-Frontier-Province, Kashmir, Afghanistan and western Punjab were inhabited by Buddhist people. All these areas are now areas of Islam. The Pala kings of Bengal, who ruled between 740 AD and 1070 AD, were staunch Buddhists. During that period, East Bengal had become a centre of Buddhism. Now it is an area of Islam. The natural inference is that it was largely India's Buddhist people, not Hindus, who became converted to Islam.

The conquest of the strategic region of North-west by the Muslims paved the way for their further victories in the rest of the country. It took Muslims 400 years for conquering North-west of India. Thereafter, they took only 20 years for conquering the Ganges valley, and Allauddin Khilji took less than 10 years to conquer whole of Deccan and South India.

The reason for the fall of the North-west was the excessive emphasis on non-violence. For the Buddhists, non-violence was the supreme religion. Ahinsa Paramo Dharma. This view was in contradiction to the culture of India, where Rama and Krishna exhort a man to fight against what is evil and wicked. India's Ramayana and Mahabharata are the greatest epics describing war against evil. The reverence of Hindus for Rama and Krishna had inspired them to fight the forces of Islamic Jihad and defeat them after a very long fight lasting for over 700 years.

Mass Enslavement

During their military expeditions, Muslim rulers captured and enslaved large number of people including women and children who were converted to Islam. Continuation of this practice resulted in checking the growth of Hindu population and considerably raised the rate of growth of Muslim population. As a result of this policy, even ordinary Turks became the owners of slaves. This policy of mass enslavement continued during the reign of Khiljis and Tughlaks.

The practice of slavery was very much in vogue in the countries of origin of the attacking armies. Qutubuddin Aibak, a former slave, had founded the slave dynasty which ruled upto 1288.

Muslim rulers introduced slavery into India and made it an instrument for making large addition to the Muslim population. According to chroniclers, the status of a man was generally determined by the number of slaves he owned. Alauddin had 50000 slaves. Firoz Tughlak had 180000 slaves. A chronicler Ziauddin Barani gives details about the functioning of the slave market in Delhi. Such markets operated in other places also where batches of slaves were regularly received. Every day thousands of slaves were sold at very low prices.

The practice of enslavement was carried to South also. The first Bahmani king Alaudin Bahman Shah (1347-1358) brought a booty of 1000 dancing and singing girls from Hindu temples of Karnataka. In 1406, Sultan Tajuddin Firoz (1397-1422) captured 60000 youths and children from Karnataka. The number of persons thus enslaved aggregates to lakhs in view of the fact that the intermittent warfare between the Bahmani and the Vijaynagar kingdoms had continued for a long period of over 150 years.

In whole of India, millions of people had been converted to Islam through the instrument of slavery. Their descendants formed the bulk of Muslim population at the time of partition in 1947.

All this may sound cruel and barbaric, but the theology of Islam does prescribe capture and enslavement of non-combatant men, women and children of the infidels as a part of the legitimate booty promised by Allah to those who fight for enforcing his commandments. The history of Islam is replete with examples of this practice.

Economic Inducements

Muslim rulers gave several inducements for conversion to Islam. Jizya, offering of posts and Zamindaris, and daily allowances were some of the important inducements which made lakhs of Hindus convert to Islam.

Jizya was a tax imposed on Hindus only. It was introduced in 1414 by Ahmad Shah of Gujarat. Collected very strictly, this tax caused much harassment and humiliation and, therefore, a very large number of Hindus became Muslims. Firoz Tughlak also converted a large number of Hindus to Islam through strict enforcement of Jizya. This tax had been rescinded by Akbar in 1573, but Aurangzeb again imposed it and described it "as an excellent means for converting Hindus to Islam". Lakhs of Hindus became Muslims in order to escape harassment and humiliation by petty greedy officials. Jizya was abolished in 1720 after the death of Aurangzeb.

Aurangzeb had also used several other inducements for converting Hindus to Islam. He raised the custom duty for Hindus while abolishing it for Muslims. He formulated and implemented the policy of "Qanungo basharte Islam" which gave the post of Qanungo on condition of conversion to Islam. A large number of educated Hindus became Muslims for getting the prestigious post of Qanungo.

Most of the people were poor and it was much easier to convert them by giving small inducements like an audience with the ruler; a robe of honour at the hands of the ruler; a daily allowance ranging between four annas to seven rupees. Four annas in a day in those days was a considerable inducement.

Criminals were given remission from their sentence on becoming Muslim. In 1681, Aurangzeb had issued an order that all prisoners who accept Islam were to be released. There were regular government officials for supervising the pace and progress of conversion of Hindus to Islam.

Hindus from the families of Rajas and Zamindars became Muslims for getting Zamindari. The Census of India 1901 report says: "The tyrannical Murshid Kuli Khan enforced a law that any Amal or Zamindar failing to pay the revenue, should, with his wife and children, be compelled to become Muslims". Actually, this practice was much older. According to Banshasmriti, Bakhtiar Khilji made a rule that if revenue was not deposited within the prescribed period of time, the defaulting landlord had either to lose his land or become Muslim. This rule is also mentioned in Banglar Itihas of Babu Raj Krishna.

Immigration

Immigration of foreign Muslims in India had started in the beginning of the thirteenth century and it continued for about 500 years. Descendants of the foreign Muslims formed a significant proportion of Muslim population of India at the time of partition in 1947.Armies of Turkish conquerors included several tribes of Muslims and they stayed in India. India was a rich country with fertile lands and large opportunities for employment. With the establishment of Muslim rule, batches of Muslims started coming from Afghanistan, Central Asia, Iran and African countries. These immigrants included soldiers, traders, saints, scholars, musicians, jesters and jugglers.

Throughout the medieval period, foreign Muslims continued coming in droves and were given important positions by the rulers. It was a one way traffic of Muslims coming into India and it was abetted and encouraged by the Muslim rulers. Ibn Batuta says that no new comer was allowed to enter India unless he gave an undertaking to stay permanently in India. Batuta himself had to write a bond to that effect.

Mongols had been coming to India ever since the inception of Muslim rule around 1200 AD. Large number of Mongols had arrived in India during the reign of Balban (1246-1286) and had taken service under Balban. In 1229, the Mongol invader Alghu came with 4000 Mongols and was settled in a colony named Mughalpura.

The Sayyad and Lodhi Sultans of Delhi (1414-1526) invited a large number of Afghans to help them stay in power. This process continued for more than a century of their rule. During the reign of Shah Jahan (1626-1666), Daud Zai Afghans had founded the town of Shahjahanpur in western UP and a large number of Afghans had settled around this area during the subsequent period of hundred years. On the eve of the third battle of Panipat in 1761, one Najibuddoulah, a Yusufzai Rohilla Nawab, had declared that he could depend upon the support of 150000 Afghans who were living in India.

Southern India had foreigners of all extractions - Arabs, Afghans, Abyssinians, Egyptians, Persians and Turks. Most of Bahman Shah's nobles were foreigners. Humayun (1458-1461), had a foreigner as his minister who kept an army of 20000 foreigners. Another one Malik-ul-Tujjar, the governor of Daultabad, had 7000 foreigners as horsemen. Sultan Ahmad had special corps archers from Iraq, Khurasan, Turkey and Arabia. At the end of the fifteenth century, foreigners in Southern India numbered around one million.

In Bengal, Ruknuddin Barbak Shah (1460-1474), maintained a force of 8000 Abyssinians for the protection of his rule. In addition, there were many merchants from Arabia, Egypt and Turkey.

Islam or Death

Offering the choice between Islam and death was a widely used means for converting Hindus to Islam. In Kashmir, Sikandar Butshikan (1393-1417) destroyed all famous temples of Hindus and offered them the choice between Islam and death. Many Hindu families committed suicide; a large number of families fled to Ladakh and Jammu; and a very large number of families in the valley became Muslims.

In 1469, Mahmud Beghara of Gujarat attacked Girnar with the specific objective of converting the Raja to Islam. After fighting for a year, the Raja yielded and accepted Islam alongwith his followers. Rajput Raja Champanas, who refused to convert, was killed with great barbarity in order to set example for others. His son was converted to Islam and was made the Amir of Idar with the title of Nizam-ul-Mulk.

In Deccan, Tipu Sultan had issued an order to the people of Malabar to become Musalmans. In 1789, he led a force of 20000 men for enforcing the proclamation. Thousands of Hindu families were converted and made to eat beef. Tipu declared that this conversion campaign had been very successful. And, on a single day, he had converted 50000 Hindus to Islam. All along his invasion route in Kerala, over 500 Hindu temples were desecrated and their ruins are still extant

Conversions through marriage

According to the Shariat law, a Muslim male may marry a Jew, a Christian, or a Sabean; but, marriage between a Muslim male and Hindu girl is invalid. Also, a Muslim female cannot marry a Non-Muslim male. During the reign of Shah Jahan, therefore, about 5000 Hindus in Bhadnore were converted to Islam for having married Muslim girls. Also, 400 Hindus in Punjab and 70 in Gujarat were converted to Islam for the same reason. The total number of such conversions all over India during the entire period of Muslim rule should be several lakhs. And the process of conversion due to marriage did not stop after the end of Muslim rule and continued even after independence.

At various points of time, it was fervently hoped by Muslims that all Hindus would be converted to Islam. The Arab invasion of Sindh saw a lot of people converting to Islam, but most of them reverted to their original faith. About three hundred years later, Mahmud Gaznavi promised to Khalifa that he would convert whole of India to Islam through his military expeditions. He did his worst. According to Alberuni, "Mahmud utterly ruined the prosperity of the country by which the Hindus became like atoms of dust scattered in all directions and like a tale of yore". But he was wrong. When Timur invaded India in 1398, he found people to be mainly "polytheists and infidels." He said: "My principal object in the invasion of Hindustan is to lead an expedition against the infidels; to convert them to Islam; to overthrow their temples and idols; and to become a Ghazi and a Mujahid before God. He did his worst and that did not make any difference. After one and a quarter century of this, when Babar invaded Hindustan, he found that "most of the inhabitants are Hindus." As late as the end of seventeenth century, Francois Bernier also found Hindustan to be "a country having hundreds of Hindus for one Muslim." Even when Aurangzeb from within and Nadir Shah and Ahmad Shah Abdali from without had delivered massive blows for realising their objectives of Islamisation of Indian population, the Hindus of India had continued their fight against the Muslim rulers.

Fall of Muslim Rule

The bigoted policies of Muslim rulers pursued for centuries resulted in a widespread and strong reaction. Sikhs in the North emerged as a strong force against Moghuls. Banda Bahadur, a disciple of Guru Govind Singh, who had become a Bairagi, took to the arms for avenging the atrocities of Muslim rulers. He won remarkable victories against Moghul armies and became a terror for the Muslims. He was surrounded and captured by the Moghul army along with 740 followers. Farrukh Siyar, the then Moghul emperor gave them the choice between Islam and death. Not a single person became Muslim and all of them accepted death. The martyrdom of Guru Teg Bahadur electrified the entire Hindu society. Sikhs in the North, Marhattas in the South and Rajputs and Bundelas in the Central India put an end to the Moghul empire.

In 1720, Gulam Qadir, a Rohilla bandit entered the Red Fort with a band of his followers and gouged the eyes of Shah Alam, the then emperor, before ransacking the fort. The Moguhl emperor requested the Marhattas for protection. Marhattas came but the bandits had run away by that time. In the words of the British Governor General "the blind emperor sitting on the throne was a pathetic scene."

The sword of Islam got blunted in India. Islam had spread in Arabia, Syria, Egypt, Iran, Iraq, North Africa and even in parts of Europe within a short period of time. This spectacular success had been Achieved through the instrument of Jihad. It appeared as if there was no stopping of the avalanche of Islam in the world. But, contrary to all expectations, Islam received a check in the most unlikely quarter - Hindustan, a country believed to be divided by castes, torn by dissents and indifferent to the form and content of religious beliefs.

The eminent Urdu poet Maulana Hali has said:

"Woh deene hijaji ka bebak bera, Nishan jiska Aksa e Alam mein pahuncha,
mukabil hua koi khatara na jiska; na Amman mein atka na Kutjhan mein thithaka
Kiye pai safar jisne saton samundar, woh dooba dahane mein Ganga ke akar.

(The bold naval force of Islam, whose flags had fluttered on every part of the world, and which could not be cowed down by any danger; nor did stop at Aman, or at Constantinople; but traversed all the seven seas of the world; ultimately got sunk in the mouth of river Ganges.)

The State of Economy

India remained the richest country of the world during the 567 years of Muslim rule because the activities for the production of wealth were not affected by the changes of governments or the change of religion of some of its people. Consequently, India's trade with other countries continued to flourish and remained a good source of income for the people.

Stupendous amounts of wealth in the form of precious metals, jewels, jewellery and coins had been taken out of India by the Muslim invaders. But, this did not diminish the wealth and prosperity of India. According to Nicolo Conti, "in 1420, the banks of Ganges were lined with one prosperous city after another, each well designed, rich in gardens and orchards, silver and gold, Commerce and Industry."

Around the middle of Eighteenth century, India had a share of 25 percent in the world trade. India's flourishing trade and industry had made every country in Europe very eager to have trade relations with India. For this very purpose, Vasco da Gama discovered the sea route to India and landed at Malabar coast in 1498. And, for this very purpose, Thomas Pow had come to Jahangir's durbar in 1608 with a letter from the king of England.

Shah Jahan's treasury was so large that it filled a space of 150000 cubic feet with gold, silver, jewels and jewellery. This very large treasury was an important reason for Aurangzeb launching the military campaign for conquering South India. The campaign had lasted for 26 years and had ended in a failure and the consequential death of Aurangzeb.

Clive, visiting Murshidabad in 1759, had reckoned it as equal to London in terms of extent, population and wealth. He wrote that palaces in Murshidabad were much bigger than those in Europe, and its people were richer than the people in London. According to Clive, "India was a country of inexhaustible riches".

Tried by Parliament for helping himself too readily to India's wealth, Clive gave an ingenious defence. He said that in India he had found opulent cities and crowds of rich people eager to offer him any bribe in order to escape indiscriminate plunder. Bankers threw open before him their vaults piled high with jewels and gold. Concluding his defence he said: " At this moment, I stand astonished at my moderation."

Concentration of Wealth

Though the tempo of economic activities in India had remained unimpaired during the 567 years of Muslim rule, there was a continuing trend for the concentration of wealth among Muslims. This was the result of several policies pursued by the Muslim rulers.

The happy sequence of irrigation following the extension of cultivation, which had continued during the reign of Hindu kings, came to an end with the Muslim invasion of India. The first and foremost duty of the Sultans was to extend the borders of their kingdoms through continuous military expeditions. Allauddin Khilji collected half of the earnings of the farmers as the tax. He said: "If the empire has to stay, farmers should be exploited." The policy of realising large taxes and not paying any attention towards extension of irrigation facilities resulted in a very large proportion of land remaining without irrigation. This situation resulted in a very low intensity of land-use, a very low productivity of land, and, consequently, smaller employment opportunities and incomes in the rural areas. While incomes of the farmers (mostly Hindus) declined, the incomes of the Jagirdars (mostly Muslims) continued to be high and rising constantly.

The invading Muslim armies frequently resorted to torching of Hindu settlements with a view to making people flee and extending the area of their control. The uprooted people took shelter in the forests, and the consequential clearing of forest land for habitation and cultivation reduced the forest area. The Hindu families rehabilitated in this way, however, lived life of pecuniary and perpetual hardship.

All lucrative jobs were given to the local Muslims and the Muslims coming from other countries. And, the various economic inducements given to the newly converted Muslims increased the economic chasm between the Hindus and the Muslims. The trend for concentration of wealth among Muslim Jagirdars, Nawabs, military personnel and the nobles gathered momentum during the last hundred years of Moghul rule. Around the middle of eighteenth century, thus, about 8000 Muslim families out of about 160 million people, collected over one-third to one-half of the gross national product of India.

Chapter Three

Colonial Rule

THE BRITISH rule in India is considered to have started after the battle of Plassey in 1757, and it had lasted for 190 years upto 1947, when India gained independence.

As described in the preceding chapter, India was the richest country of the world at the time of the beginning of the British rule in 1757. The extremely exploitative rule by the British had turned India into one of the poorest countries of the world. In 1937, Mahatma Gandhi attended the Round Table Conference in England, wearing only loin-cloth in order to drive home the point of India's extreme poverty caused by the British rule.

India's Foreign Trade

The 190 years of colonial rule of the British had left legacies which determined the pace and pattern of the growth of Indian economy after freedom in 1947. The core element of the colonial rule was the arrangement whereby Britain and other developed countries produced manufactured articles and India produced primary products. Under this arrangement, the prices of the manufactured articles exported by developed countries rose quite frequently, whereas, the prices of primary products exported by developing countries remained more or less constant and even recorded declines. This unequal exchange became an instrument of exploitation the extent of which is evident from table 3.1 given below.

3.1 COMPOSITION OF INDIA'S FOREIGN TRADE
(*percentage to total*)

Year/ Period	Exports Raw	Exports manufactured	Imports Raw	Imports manufactured
1913	76.6	22.4	19.2	79.4
1920-24	74.2	24.8	21.5	76.7
1925-29	72.5	26.6	25.4	72.6
1930-34	72.0	26.9	27.5	70.3
1935-39	68.5	30.0	33.8	64.4

Source: The Indian Economy by Bimal Jalan, page 3.

The pattern of India's foreign trade indicates the extent of the colonisation of Indian economy. Table 3.1 giving the composition of India's foreign trade during the twentieth century, shows that primary products formed most of India's exports and manufactured articles formed most of India's imports. But, most of the manufactured goods exported by India were products of low technology. For example, in 1938-39, jute and cotton textiles formed 68 percent of India's exports of manufactured goods.

The heart of the process of economic development is utilisation of economic surplus generated in the economy for further development of economy. While India had large surpluses, only a small part of them could be utilised for being invested in the economy. This was attributable to several factors including the continuing 'drain' of capital from India to England, which was in fact a form of loot.

The Drain

Actually, the British had started their loot of India's wealth immediately after the battle of Plassey in 1757. William Digby, the famous Parliamentarian of England had written: "England's industrial supremacy owes its origin to the vast hoards of Bengal and Karnataka being made available for her use. Before Plassey was fought and won, and before the stream of treasure began to flow to England, our industries were at a very low ebb."

For quite some time, the mode of draining out of India's wealth had remained just like plain plunder: treasures and valuables were lifted and transported to England. But, in due course of time, this plunder was given a legal sanction by giving different heads to different kinds of drain. The chief heads were as under:

1. Exactions, which the British called 'tribute'.
2. Home charges.
3. Salaries, pensions and allowances of British officials.
4. Excess of exports over imports.
5. Public Debt.
6. Sterling Debt.
7. Remittances of interest, profits and dividends.

Money received under the various heads aggregated to an enormous amount growing from year to year. England utilised this money for expanding its colonial empire in Asia and Africa. The first China war, the Afghan war, the Burmese war, the Persian war, were all financed by the revenues from India.

Indian money was financing the wars for the expansion of British empire and Indian soldiers were giving their blood, lives and limbs during these wars. Nearly three-fourths of India's budget was spent on 'defence', which actually meant expansion and protection of British empire.

In the 1935-36 budget, Rs.1322 millions (86 percent) were provided for unproductive heads like military services; debt service; law and order; jail; police and justice. Only Rs.220

millions (14 percent) were to be spent on productive heads. Out of this 220 millions, 55 percent was to be spent on education with a view to ensuring an unhindered supply of clerks for running the British government.

Public Debt.

Public Debt was one of the favourite devices of the British for the continuation of their stranglehold over India. By 1857, this Public Debt had risen to nearly 70 million pounds. Explaining the genesis of this Public Debt Dada Bhai Nauroji said: "It had been brought into existence during the period of East India Company's rule in order to meet the expenses of wars leading to the conquest of India and to enable India to pay the Company's dividends. These have been added to the cost of the transfer of Indian administration to the crown in the form of compensation paid to the shareholders of East India Company, and the cost of the suppression of the Revolt in 1857. Thus, long after 1857, India was paying for its conquest by an alien power. Unjust financial relations between India and England, exemplified by the imposition on India the cost of Afghan War of 1878, the Egyptian Wars, the Burmese War and the Frontier Wars of 1890s continued to increase the burden of Public Debt after the assumption of India's rule by the Crown." The Public Debt had risen from 70 million pounds in 1857 to 884 million pounds in 1939.

In addition to the above-said drain to England, a very large part of the internal surplus was appropriated by the colonial government which exported a substantial part of it, or spent it on army and civil administration, utilising very little for the developmental activities. Also, a very large part of the surplus, estimated at around 20 percent of the national income, was controlled by the landlords and money-lenders.

A major explanation for economic stagnation in colonial India was the denial of state support to Agriculture and Industry.

Agriculture

In agriculture, the British rulers saw a large opportunity for increasing the revenue and they devised exploitative means for this purpose. Cornwalis introduced the Permanent Settlement of land under which the amount of land revenue was raised considerably. Agents were appointed for the collection of revenue and they were called "landlords". In spite of the large increase in the amount of revenue, the landlords were free to collect even higher amounts and pocket the excess collection. This resulted in the landlords using coercion and force for collecting higher and higher amounts as revenue.

Land revenue in Bengal had risen sharply after its administration had been taken over by the Company in 1765. From only 0.8 million pounds in 1764-65 it almost trebled to 2.3 million pounds in 1771-72. By the time of Permanent Settlement of land in 1793, the land revenue had risen to 3.4 million pounds, which was more than four times of the revenue in 1764-65. The Permanent Settlement brought two gains to the Company:

1. It considerably raised the amount of land revenue.
2. It created a class of people in India who, as landlords, had a vested interest in supporting the British rule in India.

In spite of the large increases in the land revenue, Company was not satisfied because it had found that out of the rent received from the Ryots, landlords were retaining with them about three times of what they deposited with the Company. The Company, therefore, decided to remove the landlords and have direct dealing with the Ryots.

Under the Ryotwari system, land revenue was fixed by making settlement with the Ryot on the basis of land, not on the basis of produce. The assessment was temporary and subject to periodic re-assessments. The Company could, thus, grab the entire money retained by the intermediary landlord out of the revenues collected from Ryots.

The Company declared the Ryotwari system as being closest to the traditional Indian system. This was not true because of the following reasons:

1. In the traditional rural economy of India, land belonged to the community, peasant had an inalienable cultivation right and the right of state was limited to land revenue. The soil in India belonged to the village community and it was never considered as property of the king
2. The share of the government was traditionally fixed at 1/6th or 1/12th of the produce unless raised due to some unnatural conditions like wars etc. This share of the government was in proportion of the year's produce.
3. Position of the Zamindar was that of an 'intermediary', who was employed by the king for the purpose of collecting revenue and depositing it in the state treasury.
4. Indian peasant was never a serf who could be evicted from land by the feudal overlord.
5. Land was neither saleable nor transferable and even the king could not lay his hands on the land.

Main goal of the colonial land settlement was to extract maximum possible income from agriculture. The main steps taken in this regard were as under:

1. Raising the amount of revenue payable by cultivator.
2. Creation of new classes of intermediaries i.e. landlords, mahajans and patwaris.
3. Centralisation of administration, both fiscal and political.
4. Striking at Community Solidarity and reducing people to an 'atomised individual condition'.
5. Creation of private property in land by making it saleable,

transferable, mortgagable and alienable. Without doing it, government would have found it dif.icult to realise revenue from the poor cultivators.

6. The collection from the cultivator was called 'Rent' and not 'tax'. This meant that the British had become the owner of land and cultivator had been reduced to the status of tenant who could be removed from the land.
7. Torture was commonly used for the prompt recovery of 'rent'.

Rural Indebtedness

The much hated institution of Mahajan was created by the British in order to facilitate collection of the rapacious rent. Propelled by the same objective, the British converted the payment of rent from kind to cash. The mahajan purchased the produce of the Ryot for realising the rent and also gave loans in case of inability to pay rent in situations of droughts, floods and famines. Bahikhata of mahajan was made the most reliable evidence under the law. The British rule, thus, emerged as the most efficiently organised system of exploitation and started the process of gradual proletariatisation of farmers in India. Torture was used for realisation of rent.

The facts deposed during the impeachment of Warren Hastings were quite horrifying. Large masses of people had left their villages and troops were employed to prevent their flight. Ultimately, a great rebellion broke out. Farmers rose against the British repression. And, then followed the public executions of large number of people in order to intimidate the people at large.

Agriculture stagnated and even deteriorated over the years, especially during the first half of the twentieth century, when the full impact of colonialism began to be felt. The very small growth in agricultural production was because of the increases in area under cultivation

The stagnation in agriculture was basically due to the fact that colonialism had transformed the agrarian structure in India and made it extremely regressive. The Zamindars failed to invest in land and relied on rack-renting, while the peasant proprietors had fallen into the clutches of the money-lenders and lost control over their lands. Sub-infeudation, tenancy and share-cropping increasingly dominated both the Zamindari and Ryotwari areas.

The basic malady was that the agricultural surplus was going to the wrong people. Resources were siphoned out of agriculture without any quid pro quo, which meant an internal drain of capital. Payments of very high amount as land revenue made throughout the eighteenth and nineteenth centuries had exhausted Peasants' surpluses and pushed them to subsistence level farming. But, the government did nothing for improving the condition of agriculture. The landlords took no interest in agriculture beyond collecting rent. They found rack-renting and usury far more profitable, safe and congenial than making investment in land. The moneylenders and merchants used their growing share of agricultural surplus for developing usury or for taking possession of lands and becoming landlords.

Commercialisation and tenancy laws resulted in the development of rich peasantry in many areas. But, these peasants also started using their savings for buying lands and becoming landlords, or turning to usury and becoming moneylenders. The vast mass of small farmers, tenants and sharecroppers had no resources or incentives for investing in agriculture. Moreover, whatever savings some sections of farmers were able to make over time were usually expended during times of famines, scarcity and economic depression.

Another reason for the stagnation of productivity in agriculture was the almost absence of change in the technological basis or its productive techniques. Very small quantities of fertilisers were used, and availability of dung had also fallen considerably because of the decline in the cattle population.

Industries

Destruction of Indian industry has been another consequence of the British rule in India. The main reason for the destruction of Indian industry was the excellence of their products which prevented the sale of British products in India. The death-blow to Indian industries was delivered in 1813 with the decision of the British Parliament to end the monopoly of East India Company and to open India's trade for all Britishers. During the Parliamentary debate on this subject in 1813, Mr. Tierney had stated: "The general principle was to be that England was to force all her manufacture upon India, and not to take a single manufacture of India in return. India should stop weaving; supply us the raw material; and we will do the weaving for India."

For promoting sale of British products, thus, the government took the following measures:

1. Permitting import of British goods on negligible or no tax.
2. Imposing prohibitive duties on Indian goods in England.
3. Octroi rules were manipulated for facilitating export of raw material from India to England and promoting sale of British goods in India.
4. Discovering the secrets of Indian skills, particularly the technique of dying, printing etc. and to train British artisans in these skills.
5. Taking measures to ensure Indian markets exclusively for the British goods.
6. Establishing a network of railways throughout the country.

Railways

Railways played a crucial role in the colonial exploitation of India by the British. It facilitated cheap supply of raw material and promoted sale of British products in India.

Between 1860 and 1947, the length of railway track in India had risen from 1349 kilometers to 65217 kilometers, which brought 78 percent of India's total area within the range of railway system.

Indian railways were the largest single international investment of England in the entire nineteenth century. This huge investment could be possible because of the large and growing flow of money from India in the form of trade profits and land revenue, which were actually two forms of loot and plunder. Continuation of these flows had created a surfeit of capital in England. Development of railway system in India was planned by the British as a very safe and extremely profitable investment, as also a means for raising the profits from trade. Laying of railway lines was planned by the British with a view to:

1. Promoting the sale of British goods in the entire hinterland of India.
2. Tightening the stranglehold of the British rule in India.

Modern Industries in India began to develop during the second half of the nineteenth century, but their progress was extremely slow and inhibited. Upto the very end of the colonial period, the growth of industry and the technological level remained low. During the nineteenth century, industrial development was confined to cotton and jute textile. The iron and steel industry developed after 1907, while the sugar, cement and paper industries and a few engineering firms had come up in 1930s.

Gradual Eevival

The strategic considerations of World War I compelled the British government to support development of industries in India. The Mont-Ford Report of 1918 said that industrialisation of India would considerably increase the power of British Empire. Consequently, government took certain measures for supporting the growth of certain consumer product industries; but, at the same time, it sought to restrict their growth by keeping under their control key ingredients like machinery, accessories and crucial chemicals. After the end of World War I, government again started playing their old game of thwarting the growth of Indian industries, which, by then, were successfully competing with foreign industries, including the British ones. The government also adopted the policy of rejecting Indian applications for protection. TISCO was the only exception on account of being "crucially and badly needed by the government".

Government also developed a system of "Imperial preference". So, it was the British manufacturer as the biggest monopolist against whom Indian manufacturer sought protection. British capitalist, on the other hand, sought protection against other foreign companies, which were found to be more efficient and competitive.

The period of Second World War(1939-45) is generally considered as one more significant phase of India's industrialisation. At the time of the starting of this war, the protected industries showed no increase in production and India was totally dependent upon foreign countries for machinery and capital goods. The requirements of war compelled the British government to depend upon India for supply of manufactured goods. But the government was very cautious because they knew that Indian industries had great potentials, which, if realised, could create conditions of stiff competition for the British industries.

The American Technical Mission of 1940 had pointed to the vast potentials for industrialisation in India and had strongly recommended utilisation of this potential in the war efforts of the Allied Powers. But, the British government did not follow the advice of this Mission, and, instead, devised various methods for retarding the growth of Indian industries. The government of India discriminated against India in the distribution of orders for products required in the war. Foreign companies like Lever Brothers, Dunlop and Imperial Chemicals were allowed to open their subsidiaries in India and they were registered as Indian companies.

According to the Census of India 1951, which covered the larger enterprises, 56.7 percent of the value added in manufacture had originated in cotton and jute textiles, 6.6 percent in sugar, 8.4 percent in engineering, 7.6 percent in steel, 4.1 percent in chemicals and 2.1 percent in cement.

Consequently, even though modern industry developed very fast after 1918, indicating a growth rate of 3.8 percent per annum, it had little impact on the overall economic situation, and in 1947, its share in the national income was only 7.5 percent.

The paltriness of India's industrialisation is brought out by many indices. For example, in 1939, out of a population of 389 millions (1941 census), only about 2 million were employed in modern industries. In 1951, only 2.3 percent of the labour force was employed in modern industries. According to the Planning Commission, the number of persons engaged in processing and manufacturing (including artisanal industries) fell from 10.3 millions in 1901 to 8.8 millions in 1951,even though the population had risen by nearly 40 percent. Moreover, in 1951, at least 60 percent of the total output was provided by the unorganised small enterprises.

The underdevelopment of the Indian economy and the stunted growth of its industrialisation is brought out by the fact that the composition of India's national product, the occupational structure of its labour force and the level of urbanisation remained unchanged, or changed very little during the twentieth century. The first two aspects are brought out in table 3.2.

Structure of National Income

It is to be noted that agriculture's share in national income came down mainly because of its stagnation after 1911. Moreover, modern industry formed only 6 to 8 percent of the national income in independent India of 1950, while small-scale enterprises and mining contributing 12 to 14 percent. The share of urban population in the total population was 10 percent in 1901, 11.1 percent in 1931 and 12.8 percent in 1941.

3.2 NATIONAL INCOME AND WORKFORCE 1911 AND 1951
(Percentages)

Sectors	Workforce		National income	
	1911	1951	1911	1951
Agriculture	74.8	75.7	66.6	57.6
Manufacturing	12.2	11.9	20.9	25.3
Trade, Commerce and services	13.0	12.4	12.4	17.1

Source: Indian Economy by Bimal Jalan, page 9.

Note : Manufacture includes mining, storage, transport and Communication.

Modern banking and insurance were grossly underdeveloped. Therefore, Indian entrepreneurs could not mobilise the available Indian capital. Also, the banks controlled by the British starved Indian industry of funds and favoured British-owned and controlled enterprises.

Foreign trade and the rapid construction of railways could have been the means for realising a faster growth of Indian economy. But, both became the instruments for restricting and retarding the growth of Indian economy. Increasing imports did not supplement and aid Indian industry and help in creating 'a new and effective demand', which could lead to the establishment of new industries. Under conditions of free trade, imports displaced indigenously produced handicrafts and the artisanal industries, and also prevented establishment of new industries. The International exchange, instead of supplementing domestic exchange, became a substitute for it.

In the absence of a simultaneous industrial revolution, railways had only introduced a commercial revolution which further colonised the Indian economy. The layout of railway lines and their freight rate policy promoted the export of raw materials and the distribution of imported goods. The railways had encouraged the steel and machine industry, not in India, but in Britain. They had served as a social overhead, not for Indian industry, but for British industry.

Destruction of Ship-building Industry

While laying out railways in India, the British were also destroying the shipping and the ship-building industry of India. As stated in chapter one, ship-building has been a great industry of India. Indians have been sailors for more than 7000 years. The art of navigation was born in river Sindh. The art and science of ship-building was highly developed in India.

When the British took over the administration of India, almost whole of Asian trade was being carried through Indian ships owned by Indians. These ships were plying as far as China, Iran, Red Sea and even across the Atlantic. A very interesting account of the Indian ships is provided by F. Balazar Solvyn in Les Hindoos. He says: "In ancient times, the Indians excelled in the art of constructing vessels and the present Hindoos can still offer models to Europe - so much so that the English, attentive to everything which relates to naval architecture, have borrowed from the Hindoos many improvements which they have adopted with success in their own shipping. The Indian vessels unite elegance and utility and are models of patience and fine workmanship." (History of Indian Shipping by R.K.Mukerjee, pages 250-251)

Senior Officers of British Army and Navy had found India-built ships to be much more lasting and, therefore, very economical in the long run. But, in spite of this cost advantage, England preferred to annihilate Indian shipping. Because, they wanted to build their own Navy and the expertise for doing that - whatever the cost. The Navigation Laws of Britain finished India's flourishing shipping industry.

In 1789, when British company had 40 ships for Indian trade, USA had 15, Dutch 5, Portugal 3, French 1, Danes 1, Indians (residing in areas occupied by East Indian Company) possessed as many ships as all the European nations had put together. But, the number of Indian ships started declining thereafter. Between 1857 and 1900, the number of Indian ships had fallen from 34286 to 1676 and their tonnage had declined from 1.2 to 0.1 million tonnes.

In 1947, India had a shipping tonnage of 0.2 million tonnes. The increase of 0.1 million tonnage in 47 years was largely due to Private Sector coming up with Tata Line in 1894, Swadeshi Company in 1906, Bengal Steamship Company in 1907 and the Scindia Steam Navigation Company in 1919.

Foreign Capital

Till the late 1930s, foreign capital dominated the industrial and financial fields and controlled the foreign trade network as also the internal trade connected with exports. British firms dominated coal, mining, jute industry, shipping, banking, insurance and tea coffee plantations. Moreover, the British controlled many of the Indian-owned companies through their managing agencies. The period after 1918 saw the entry of giant multinational corporations such as Unilever, Imperial Chemical Industries, Dunlop and General Motors, through the branches or subsidiary companies.

It is important to note that foreign investment rarely meant a transfer of foreign capital to India. It was far less than the unilateral transfer of capital or the 'drain' from India. The foreign investment had three important characteristics. First, it contributed to the phenomenon of 'the guided underdevelopment' of India by concentrating on the production and exports of raw materials and foodstuffs. Second, it went into the sectors which catered to foreign markets and not to India's home market. Third, the 'multiplier effects' of these investments in terms of income, employment, capital, technical knowledge and growth of external economies were largely exported back to the developed countries.

Increased Pressure on Land

The gradual decay of industries in India resulted in exodus from manufacturing towns. In the rural areas, millions of artisans, craftsmen, spinners, weavers, potters, tanners, smelters and smiths became unemployed and fell back upon agriculture for their livelihood. The increased pressure on land and the extortionate collection of land revenue made it impossible for the farmers to save and make investments for the development of agriculture. This resulted in a low level of productivity and production in agriculture and an increased frequency of famines in India.

During the last quarter of 18th century, which was the first quarter of the British rule, there were four famines: in 1769, 1783, 1789 and 1792. The areas having come under British rule had become famine-prone areas.

The total number of famines rose from 8 during the 18th century to 31 during the 19th century. These 31 famines during the 19th century resulted in the death of 325 million people, of which 260 million had died during the 18 famines in the last quarter of 19th century. There were four famines during the 47 years of the twentieth century.

Famines

The Royal Commission appointed after the famine of 1878 wrote: "At the root of much of the poverty of the people of India and the risks to which they are exposed in seasons of scarcity lies the unfortunate circumstance that agriculture forms almost the sole occupation of the people, and that no remedy for the present can be complete which does not include the diversification of occupation through which the surplus population may be drawn from agricultural pursuits and led to find the means of subsistence in manufacture."

Agricultural Workers

The frequent recurrence of famines resulted in a large number of cultivators becoming land-less labourers. By 1901, the number of agricultural labourers had risen to 19 millions forming 33 percent of the cultivators in India. By 1951, the number of agricultural labourers had risen to 28 millions forming 40 percent of the number of cultivators. In 1991, the number of agricultural labourers had risen to 75 millions forming 67 percent of the number of farmers. (table 3.3)

Indicators of Backwardness

The national income in colonial India had a very slow growth and the per capita income showed stagnation, if not decline. This may be seen from the table 3.4. which gives estimates made by two experts, Heston and Maddison. These estimates do not, however, bring out the full extent of the prevalence of extreme poverty among the people of India. Throughout the colonial period, most Indians lived on the verge of starvation. In the second half of the nineteenth century, the poverty of the people found expression in a series of famines which ravaged all parts of India and carried away 30 million people. The stagnation in per capita income was not due to a high rate of growth of population. Between 1871 and 1921, India's population grew at the rate of 0.4 percent per annum. The rate picked up after 1921, but was still only 1.4 percent between 1921 and 1951.

3.3 AGRICULTURAL WORKERS IN INDIA
(Millions)

Year	Cultivators	Agricultural Laborers
1901	56.4	18.8(33)
1951	69.8	27.5(40)
1971	75.1	47.1(63)
1981	93.4	56.2(60)
1991	110.7	74.6(67)

Note: Figures in brackets show agricultural labourers as % of cultivators.

3.4 NATIONAL PRODUCT - 1913 TO 1946
Indices at constant prices

Year	Total National Product		Per Capita National product	
	Heston	Maddison	Heston	Maddison
1913	100	100	100	100
1920	96	94	95	94
1929	126	110	115	110
1939	134	119	107	95
1946	142	127	104	93
	Growth rate % p.a			
1913 to 1946	1.08	0.73	0.13	(–)0.22

Source: Indian Economy by Bimal Jalan (page 12)

Other indicators also confirm the state of backwardness. In 1950, the per capita availability was 350 grams of cereals and pulses per day and 10 meters of cloth in a year. The death rate was 27.4 percent per 1000 persons and the infant mortality rate was 175-190 per 1000 live births. Average life span was 32 years only. In 1947, nearly 88 percent of Indians were illiterate.

Division of India

A surprising fact about the period of British rule is the inordinately high growth rate of Muslim population. During the 190 years of British rule upto 1947, Muslim population of India had shown a growth of 313 percent, which was more than three times of the growth of 99 percent for Hindus, and was double of the growth of 156 percent for the Muslim population during the preceding 231 years of Mughal rule! (table 3.5).

3.5 MUSLIM POPULATION OF UNDIVIDED INDIA 1526 to 1947
(Millions)

Year	Total population	Muslim population	Hindu population
1526	160	9(6)	151(94)
1600	140	15(11)	125(89)
1700	160	20(12)	140(88)
1757	165	23(14)	143(86)
1800	170	25(15)	145(85)
1900	284	63(22)	221(78)
1947	380	95(25)	285(75)
Growth (%)			
Moghul Rule (1526-1757)	negligible	156	negative
British Rule (1757-1947)	130	313	99

Note: Figures in bracket indicate % share in total population

Source: Indian Muslims: Who Are they? By K.S.Lal.

The very high growth rate of Muslim population during the period of British rule becomes all the more surprising because of two facts: Firstly, the period of British rule (190 years) was much smaller than the period of Mughal rule (231years). Secondly, the growth of Muslim population was already very high during the period of Mughal rule, because of the great zeal shown by Muslim rulers for converting Hindus to Islam. Consequently, during the 231 years of Mughal rule upto 1757, population of Hindus had fallen from 151 to 143 millions and their proportion in total population had declined from 94 to 86 percent.

The very high growth rate of Muslim population during the British rule was due to the British policy of hostility against the Hindus who formed about three-fourth of the population of the country and had been working for the freedom from the colonial rule of the British. The British pursued a policy of favouring and appeasing the Muslims for making them stand against the Hindus. This policy of harming the Hindus and helping the Muslims became more pronounced after the Mutiny of 1857.

The British government initiated several measures for helping the Muslims and raising their standard of living. All these measures resulted in a very fast growth of Muslim population during the 190 years of British rule.

The greatest reward of the British to the Muslims was the creation of Pakistan. The partition of India has been extremely detrimental for the proper economic growth of both India and Pakistan because of the continued hostility and wars between the two countries.

Chapter Four

Fifty Year After Freedom

INDIA became free on August 15, 1947. But this freedom meant division of the country into India and Pakistan. Undivided India had a total geographical area of 4.23 million sq. kms., out of which 3.28 million sq. kms., or 78 percent, remained with India and 0.95 million sq. kms., or 22 percent, formed the new state of Pakistan.

Undivided India had a population of 412 millions out of which 347 million, or 84 per cent, were in India and 65 millions or 16 per cent were in Pakistan. India while getting 84 percent of the population, got only 78 percent of the area; whereas, Pakistan with 16 percent of population, got 22 percent of the area of undivided India.

Out of the total irrigated area of 30 million hectares in undivided India, 22 million hectares were in India and 8 million hectares in Pakistan. As compared to India, a larger proportion of land in Pakistan had irrigation facilities. Therefore, Pakistan had surpluses of foodgrains, cotton and jute, while India was deficient in regard to these commodities. About 60 percent of India's population was poor due to the extremely exploitative British rule which had lasted for 190 years upto 1947.

Before the arrival of the East India Company, India was a rich and strong trading nation of the world. The English merchants used to describe India as a land where "Many streams of silver run like the rivers going to the sea, and staying there." It was Company's trade with India, which ultimately resulted in India becoming a colony of England.

The British interests, originally confined to trade, became predominantly political in the nineteenth century and completely transformed the economic, social and cultural fabric of the country, as has been explained in chapter three of this book. The original desire for acquiring monopoly of the spice trade changed into the desire for importing textiles, tea and other goods, which, after the Industrial Revolution, changed into an urge to find markets for the sale of the industrial products and investment of surplus capital.

In his independence day address of August 14, 1947, Jawaharlal Nehru, the first Prime Minister of India, had declared that India was keeping her tryst with destiny and redeeming the pledge she had made years ago, and waking to life and freedom. But, unfortunately, after more than 54 years of freedom, India is not free to chalk out her own independent economic path.

India, like all other developing countries with a colonial past, has continued to suffer due to the inequities of the old economic arrangement. This was conceded in the United Nations' declaration of the International Economic order made in 1974 which says that, "it has proved impossible to achieve an even and balanced development of the international community under the existing international order. The gap between the developed and the developing countries continues to widen in a system which was established when most of the developing countries did not even exist as independent states." (UN General Assembly Resolution 2626 (XXX), May 1974.)

First Plan (1951-56)

After independence, India took to the path of planning with a view to removing poverty by achieving a rapid and balanced growth of its economy. India's First Plan (1951-56) declared high priority for agriculture and irrigation as it was considered necessary for mitigating conditions of poverty and realising a rapid growth of economy. The Plan was quite successful. All the targets were achieved and, in some cases, achievement exceeded the target. Major achievements of the First Plan were as under:

1. National income grew by 18 percent and per capita income rose by 9 percent.
2. Production of food grains rose by 20 percent.
3. Irrigation was extended to 16 million hectares.
4. Industrial production rose by 8 percent per annum.
5. Prices fell by 13 percent over the plan period.

A noteworthy feature of the First Plan is that it achieved/exceeded the targets and, at the same time, showed a downward trend in prices, which was beneficial for the poor.

The Mahalanobis Model

The Second Plan (1956-61) was based upon the 'Mahalanobis model' of growth, which was implemented through the Industrial Policy Resolution of 1956. This IPR-1956 had the goal of establishing a 'Socialist Pattern of Society' and had the Public Sector as the main instrument for achieving this goal. The IPR-1956 says:

"The adoption of socialist pattern of society as the national objective, as well as the need for planned and rapid development requires that all industries of basic and strategic importance, or in the nature of public utility services, should be in the Public Sector. The state, therefore, has to assume direct responsibility for the future development of industries over a wider area. Other industries, which are of an essential nature and require investment on a scale which only state could provide in the present circumstances, have also to be in the Public Sector. (Second Plan, page 45)

In compliance of the above stipulations of the IPR-1956, the government started giving large and steadily growing amounts of money for the expansion and technological up-gradation of the Public Sector enterprises from the budgetary resources of the Centre. But, in spite of the very large investment, there was no 'rapid development' as envisaged in the IPR-1956. On the contrary, the rate of growth of India's GDP remained consistently lower than the average growth rate of GDP for the Low Income Countries of the world.

The low growth rate of GDP meant smaller exports, which, in the eventuality of larger imports, resulted in trade deficits and growing burden of external debt.

The Mahalanobis model was not suitable for India because it was not developed for tackling the problems of India. It was a carbon copy of the Russian model developed by Feldman, a Russian economist, for tackling the problems of Russia during the twenties. Therefore, the IPR-1956 has all the salient features of the Stalinist model, viz. the primacy of heavy and basic industry; transfer of capital from agriculture to industry; and the pre-eminence of Public Sector. Even the picturesque phrase of 'commanding heights of economy' used in the IPR-1956 had been lifted from the writings of Lenin.

That Mahalanobis model was a copy of the Russian model was confirmed by Shri Sukhmoy Chakravarty, who was a leading communist ideologue and was the chairman of the Economic Advisory Council of the Cabinet, at the time of his death in 1991. He says: "From the angle of political economy, the Indian planning exercise is often viewed as a variant of the Soviet planning model. I am, of course, referring to the decades of the fifties, especially the late fifties. That Mahalanobis himself saw the matter in this way is borne out by the following statement, which he made in a paper in the western literature. This, incidentally, is the only place where he compared his own work with that of Feldman, a Russian economist of the twenties, whose work was popularised in the mid fifties by E.D.Domar."

While referring to his model of growth Mahalanobis had written that, "a model of exactly this type had been developed by Feldman in 1928 in the USSR. A summary of the paper in English is available in Domar's essays in the Theory of Economic Growth. The Indian work, however, was done completely independent of Feldman's findings. It is interesting to note that impetus to planning initiated almost identical lines of thinking in the two countries, the USSR and India."

However, Sukhmoy Chakravarty says that the fact of India's planning exercise being a variant of the Soviet planning model is not due to any Russian influence, but due to a coincidence of 'convergence' between the independently held views of the Russian economist Feldman and the Indian statistician Professor Mahalanobis. Even if this story is believed, the question arises as to why Nehru had assigned the job of preparing the model to that man only who had the 'convergence' of views with the economist whose model had been approved and adopted by Stalin?

For the Second Plan period, Professor Mahalanobis had envisaged (a) a GDP growth rate of 5 percent per annum, (b) creation of 11 million additional jobs by 1961 and (c) elimination of unemployment by 1966. But, these promises remained unrealised. The unemployment situation continued to deteriorate. And, this was a natural consequence of the implementation of the Mahalanobis model because of its high priority to capital intensive industrial sector, which has a long gestation period. This was found to be in direct conflict with the Model's objective of eliminating unemployment by 1966. In his book 'India's

Development Experience', Dr. Tarlok Singh has pointed to this basic contradiction in the model. He says:

"In the short period, there was a possible conflict between employment and development, which pointed to the difficulties in the way of accepting the full employment as an immediate objective of policy. It was thought that, in the absence of necessary complementary factors, if masses are to be mobilised for work at a low level of productivity, two consequences would follow. First, their contribution to output would be less than commensurate. Secondly, since food supplies could not be easily increased, under pressure of inflation, the attempt to achieve 'full employment' by these means would run the risk of breaking down." (page 94)

The approach in the above paragraph means that employment opportunities were to be created in the industrial sector only where work on machines could ensure generation of capital. Employing people on work without machines was not considered beneficial because it would not generate capital, and would increase demand for food, which would not be possible to meet.

So, the central idea of the Mahalanobis model was accumulation of capital, and not removal of poverty. The Mahalanobis model, thus, meant betrayal of the poor of the country. And the tragedy is that the model failed in achieving its objective of accumulating capital also, and, on the contrary, with its continuously growing dis-savings or losses, the Public Sector, the basic plank of the Model, emerged as the biggest squanderer of the scarce capital resources of the country.

Mahalanobis model was not suitable for India where Poverty is the main problem. Poverty can be removed by creating employment opportunities, for which agriculture has the largest potential. Actually, there are four reasons for giving high priority to agriculture. They are (1) Large potential for removing poverty. (2) Low Incremental Capital Output Ratio (ICOR). (3) Basic principles of planning. (4) Pre-requisite for industrial development.

1. Large Potential for removing poverty: Increases in agricultural production mean increases in employment opportunities connected with various agricultural operations, as also for the storage, marketing and processing of agricultural products. The increased employment opportunities, larger incomes and larger availability of foodgrains results in increased consumption of foodgrains, which reduces the number of people below the poverty line. The large decline in the number of poor in China is due to the large increase in the production of foodgrains realised after the reforms launched in 1978.

2. Lower ICOR: The dire necessity of making the most efficient use of the very limited capital resources in India underscores the importance of giving a high priority to agriculture and irrigation which have a low incremental capital output ratio (ICOR). In other words, investment needed for creating a given amount of income is much less in agriculture than in other sectors of the economy viz. mining, manufacturing and other services. This may be seen from table 4.1 given below.

4.1 SECTORAL INCREMENTAL CAPITAL OUTPUT RATIOS
1950-51 to 1983-84

Sector	1950-51 to 1960-61	1960-61 to 1970-71	1970-71 to 1980-81	1980-81 to 1983-84
Agriculture (Crops And livestock)	2.18	3.23	4.22	3.17
Mining	2.59	5.62	14.56	9.98
Manufacturing	4.47	6.49	8.20	14.36
Other sectors	5.85	5.31	5.79	4.43
All sectors	3.93	5.93	5.97	5.16

Source: Development Planning by Sukhmoy Chakravarty, Page 105.

At the time of the preparation of the Second Plan (1956-61), the ICOR in agriculture and mining was much less than that for manufacturing and other sectors. Therefore, larger outlays for agriculture and mining could have ensured a faster growth of incomes and capital, and also resulted in a faster reduction in the number of poor. But, actually, the Plan outlays for agriculture and allied sectors were reduced considerably in the Second Plan, in accordance with the low priority accorded to agriculture in the Mahalanobis model .(table 4.2)

4.2 PATTERN OF PLAN OUTLAYS – FIRST AND SECOND PLAN
(Percentages)

Head	First Plan (1951-56)	Second Plan (1956-61)
1. Agriculture and allied activities	14.8	11.7
2. Irrigation and flood control	22.1	9.1
3. Power	7.6	9.7
4. Village and small industries	2.1	3.8
5. Organised Industry	2.8	19.6
6. Transport and Communication	26.4	28.3
7. Social services & Miscellaneous	24.1	19.1
Total	100.0	100.0

Source: Development Experience by Tarlok Singh, page 21.

From the above table it can be seen that the Second Plan had indicated a major reversal of priorities: provision for agriculture and irrigation had been reduced from 36.9 percent to 20.8 percent of the plan outlay, while provision for industry had been raised from 2.8 to 19.6 percent. This substantial reduction in the outlays for agriculture and irrigation and a seven-fold increase in the outlays for industry had been done in accordance with the objective of 'primacy of heavy and basic industry' laid down in the Mahalanobis model.

The reduction in the outlay for agriculture and irrigation, which are very efficient user of capital due to their much smaller ICOR, and large increase in the outlay for industry, which has a much larger ICOR, resulted in a low growth rate of GDP.

And the misfortune did not end there. The deliberate downgrading of agriculture and irrigation and the consequential reduced share in the plan outlay resulted in an attitude of neglect towards this sector. Consequently, in irrigation, the achievements remained much short of even the low targets fixed for it. Against the Second Plan target of creating 7.8 million hectares of additional irrigation potential, the achievement was a dismal 2.8 million hectares, which is only 36 percent of the target. Achievement was 44 percent of the Third plan target, and 52 percent of the combined target for the three annual plans for the period 1966-69.

3. Principles of Planning: It is a basic principle of planning that an intensive use should be made of the resources which are abundant, with a view to augmenting supply of the resources which are in short supply. As, India has an abundance of the unutilised resources of manpower and water, an intensive use of these resources should have been planned with a view to augmenting availability of capital. And the only way of doing this was to give high priority to agriculture and irrigation.

4. Prerequisite for Industrialisation: The process of industrialisation depends primarily upon agricultural growth, because incomes from agriculture lead to the demand for the various products of industry, and also results in the formation of capital for the setting up of industries. As agriculture has low ICOR, the capital invested in it is returned within a short duration of time, and this duration is very short in India on account of the very skewed nature of land holdings which leads to larger savings and higher rate of capital formation.

Nehru Rejected Gandhi and Tagore

Nehru adopted the Mahalanobis model in spite of the fact that it was against the views of Mahatma Gandhi. For example, Mahatma Gandhi was of the view that excessive use of machinery should be avoided; but, the Mahalanobis model was based upon the "primacy of heavy and basic industry." Mahatma Gandhi considered freedom as a means for removing poverty, and, therefore, he wanted to pay special attention to the development of rural areas, where most of the poor lived. But, the Mahalanobis model laid excessive emphasis on the development of industries, which created jobs mainly in the urban areas.

Gurudev Ravindranath Tagore was against the very idea of a country copying the model of another country. He believed that copying could not help in the development of a country because "God has given different question papers to different countries."

China Rejected Russian Model

China had also adopted Russian model in their First Plan (1950-1954). But, the plan resulted in large decline in the production of foodgrains, and, consequently, over 30 million people died of starvation and the related diseases. China rejected the Russian model and evolved its own model after a long period of trials and tribulations. This model gave high priority to agriculture and rural development and was adopted in 1978 in the name of reforms. The implementation of this model put the Chinese economy on the fast track of growth.

Actually, the model of growth evolved by a country cannot be suitable for another country because the national aspirations and natural endowments change from country to country, and from time to time in the same country. The question arises that when China discarded the Russian model inspite of being a communist country, what made India cling to it in spite of being a democratic country?

Second Plan (1956-61)

The Mahalanobis model or the Russian model had been adopted in the Second Plan (1956-61). Draft of the Second plan had been finalised when K. M. Pannikar, India's Ambassador in China, started sending reports about the disastrous consequences of the failure of China's First plan (1950-54) and the death of over 30 million people due to steep fall in the production of foodgrains and the consequent incidence of starvation and diseases. But, Mahalanobis told Nehru that fall in the production of foodgrains was not a big problem because there were large surpluses of foodgrains in USA and other countries, from where required quantities could be imported as and when considered necessary.

In April 1955, Nehru approved the draft of the Second Plan and in May 1955 Nehru's government signed an agreement with USA for a long-term agreement for imports of wheat under P.L.480. These imports were strongly opposed by economists and farmers. In order to justify the imports, Nehru appointed the Foodgrains Enquiry Committee under the chairmanship of Asoka Mehta. This Committee appointed on 24-6-57 submitted its report in November 1957, supporting the imports under P.L.480. The Report said:

"The world supply position is relatively easy in so far as wheat is concerned. In fact, large quantities are available in the United States, which may be made available on concessional terms. We feel that it would be to our advantage to take fairly large quantities of wheat and some quantities of rice from the USA under P.L.480. Imports under such concessional terms not only relieve us of our immediate foreign exchange commitments, but also help us to build a rupee exchange fund, which can be utilised for developmental purposes. One condition of the P.L.480 is that we should continue to import our normal needs at ordinary commercial terms. This means that we shall have to import about 5.5 lakh tons of wheat every year....Assured supply of wheat from abroad would enable the formulation of a stable and long-term food policy needs no emphasis. In fact, assurance of continued imports of certain quantities of foodgrains will constitute the very basis of a successful food policy for years to come. (pages 94-95)

The Report of the FEC prepared by Asoka Mehta is a perfect example of intellectual dishonesty and shows a disquieting disregard of the calls of conscience and patriotism by a person, who, being a well-known socialist leader, was expected to use his talents for the betterment of the vast majority of India's poor who depended upon agriculture for their livelihood. Asoka Mehta ignored the most important fact that India had a huge untapped potential for increasing foodgrains production, which had been proved by the inordinately large increases in the production of foodgrains achieved during the period of First Plan (1951-56). And, he knew that imports will have an adverse impact upon the indigenous production of foodgrains, which will mean great hardship for the farmers in India. Still, he recommended 'imports on a long-term basis'. Actually, his report is an essay on the virtues of P.L.480, which could not be improved upon by the ablest among the Americans administering the P.L.480 of USA.

Nehru had made the agreement for importing wheat on a long-term basis under P.L.480 with a view to preventing the emergence of the disastrous conditions similar to those experienced in China because of the implementation of the First Plan.

The fact of high priority to Industry in India's Second Plan (1956-61), resulted in the Plan getting support from a formidable combination of industrialised countries, because, it meant for them, large opportunities for selling machinery to India. Additionally, Russia was the most enthusiastic supporter of the Second Plan because it was based upon the Russian model of growth, and, therefore, it meant India accepting the ideological hegemony of Russia. America was also happy because of the opportunities for making large exports of foodgrains to India under the P.L.480 agreement signed in May 1955, even before the launching of the Second plan on April 1,1956. And, England was happy because the high priority to industries in India's Second Plan meant opportunities for making large exports of machinery to India and a consequential fast reduction of its liabilities to India in the form of sterling balances amounting to Rs. 1600 crores. Paying in the form of machinery was much better than paying in pounds.

In India, the adoption of Russian model eventually ensured for Nehru the support of the leftist parties, which formed the main opposition in the Parliament. The leftists took pride in the fact that Nehru was implementing a Russian model, and they were delighted when Nehru called them the 'progressive group'.

Nehru received lavish praises from Russia and America – the two most powerful countries of the world and also from the opposition in the Parliament. It put him on Cloud Nine.

In 1956, while addressing the National Development Council, Nehru said: "It is heavy industry that counts, nothing else counts, excepting as a balancing factor." But, after some time, Nehru found that continuation of P.L.480 imports was hampering the growth of agriculture and causing great hardship to the 70 percent of India's population depending upon agriculture for their livelihood. He also found that the growth of agriculture determined the growth of industry and the entire economy. He came to the conclusion that Mahalanobis model was not suitable for India. On November 9, 1963, while addressing the National Development council, Nehru said:

"Agriculture is more important than anything else, not excluding big plants, because, agricultural production sets the tone for all economic progress. If we fail in agriculture, we fail in industry also. Agriculture is more important than industry for the simple reason that industry depends upon agriculture. Industry will not progress unless agriculture is sound, stable and progressive."

On December 11,1963, Nehru confessed in the Lok Sabha that his government had failed to check accumulation of economic power in the hands of small groups of persons. Unfortunately, Nehru died soon after and, thus, he did not have time to reverse the course of economic policies pursued during the seventeen years of his stewardship.

Nehru died in 1964; but the policy of giving money for the expansion and technological up-gradation of industries in the Public Sector continued as before. In spite of large investment over a long period of time, the Public Sector continued to show huge losses from year to year. Therefore, the Eighth Plan suggested a reconsideration of the policy of financing the Public Sector. It said:

"The Public Sector, as envisaged by Jawaharlal Nehru, was to contribute to the growth and development of the nation by providing surplus investible resources. This has not happened as it should have. Many PSUs make substantial losses and have become a continuing drain on exchequer, absorbing resources, which are withdrawn from sectors where these are desperately needed to achieve other developmental goals. Apart from the fact that the present situation does not permit any more accumulation of unsustainable losses, there is also the fact that many loss making PSUs do not serve the goal for which they were set up." (page16).

On November 11, 1992, the government decided not to provide budgetary support for new investments to be made by the PSEs. The PSEs were allowed to raise capital from the market. However, budgetary support for PSEs, was, continued on a selective basis, though on a reduced scale. The new industrial policy announced on July 24, 1992, had curtailed the number of industries reserved for Public Sector from 17 to 8.

External Capital

A serious flaw of India's planning has been its excessive reliance upon foreign finance. Because of a conceptual error in their perception, our planners have been treating external finance as a part of the source for the plan, much in the same way as domestic resources raised through taxation and mobilised savings. Therefore, in a situation of domestic resources falling short of the requirement, external finance could be relied upon for bridging the gap. This mental predilection for relying upon external capital for meeting the financial needs of the plans was primarily due to the fact that sterling balances worth Rs.1600 crores were available to the government, and they could be used for meeting the financial requirements of the plans. A good part of the sterling balances had been expended by the government during the period of the First Plan(1951-56).

The Second Plan, which had set the model for India's planning, had envisaged that foreign resources would contribute 16% of the total plan outlay. But, actually, 24% of the plan was financed by external finance.

The Third Plan(1961-66) raised the contribution of the foreign resources to as much as 43% of the gross financial resources. The plan floundered on the foreign exchange front. The Western donors stopped making payments during the 1965 war with Pakistan. While it threw the national economy out of gear, the government and the people of India realised the importance of self-reliance on the foreign exchange front.

The Fourth Plan(1969-74) included an effort for achieving self-reliance in regard to foreign exchange needs of the country. It said: "National self-reliance and growth with stability can be attained only if additional effort is put forward at every level. Dependence on foreign aid will be greatly reduced during the Fourth plan period. It is planned to do away with concessional imports of foodgrains under PL-480 by 1971. Foreign aid net of debt charges and interest payments will be reduced to about half by the end of the Fourth Plan, and will be totally eliminated as speedily as possible." (Pages 13-14 of the Fourth plan)

During the period of Fifth Plan (1974-79), the country veered round to the idea of Zero foreign aid. The two strategic goals of the Draft Fifth Plan were removal of poverty and economic self-reliance. The Draft Fifth Plan document says: "The Policy and measures contemplated for the Fifth Plan for the improvement in the balance of Payments will make it possible to progressively approach full self-reliance. It is, thus, visualised that by 1985-86, we would be in a position to meet the maximum amount of our foreign exchange requirements, including debt service charges, from our own resources, thus, obviating the need for any significant inflow of concessional aid." (Draft Fifth Plan Volume I page 4.) The strategy was based on massive growth of exports and containing the imports.

The Draft Fifth Plan, however, could not be adopted by the National Development Council, which could meet only in 1976, after about three years. By that time, the international economic scene had undergone a major change. The international prices of food, oil and fertilisers, which accounted for a major share of India's import bill, had risen steeply. Therefore, the plan had to be revised drastically. While the overall size of financial resources remained the same, the quantum of external assistance was raised to Rs.5834 crores from the original estimate of Rs.2443 crores. The Finally approved Fifth Plan Document says: "Following the hike in oil prices and a sharp increase in import prices in certain other important commodities like fertilisers and foodgrains, India's balance of payment came under heavy pressure during 1974-75, necessitating recourse to larger external assistance."(The Fifth Five Year Plan, page 38.)

India's reliance upon external assistance has been rising after the Fifth Plan period.

Devaluation

Devaluation of rupee in 1966 has been another big folly of India's Planning. For a long period of 15 years upto 1965-66, the value of rupee had remained stable at Rs.4.76 to a dollar. But, thereafter, the price of a dollar in terms of rupees rose to Rs. 7.50 in 1966-67. This rise of Rs. 2.74 over the price of Rs.4.76 for a dollar meant a 58 percent devaluation of rupee, as may be seen from the table 4.3 given below.

4.3 EXCHANGE RATE OF INDIAN RUPEE
(in terms of US dollar)

Year	Exchange Rate
1950-51	4.76
1960-61	4.76
1966-67	7.50
1970-71	7.50
1980-81	7.91
1990-91	17.94
1991-92	24.47
1992-93	30.65
1993-94	31.37
1994-95	31.40
1995-96	33.45
1996-97	35.50
1997-98	37.16
1998-99	42.07
1999-00	43.33
2000-01	45.69
2001-02*	47.39

* - Average for nine months.

The devaluation of rupee during 1966-67 was quite excessive and for about a decade and half thereafter, there was no need to think of further devaluation. The IMF insisted on this order of devaluation on the specious plea that rupee was overvalued, and made it a pre-condition to the resumption of aid flows from the

Brettonwoods institutions. Actually, this devaluation of Indian rupee was only a case of blackmailing of India when it was facing a situation of unprecedented crisis due to the two-year drought during 1965-67 and a war with Pakistan in 1965. As a bait and a ruse, India was promised large financial assistance and was also told that devaluation will result in large increases in its exports. After the devaluation, however, India did not get the promised financial assistance and its exports did not show the anticipated increases.

Dr. Tarlok Singh, who headed the Planning Commission for fifteen years upto 1966, was very unhappy about the devaluation of 1966-67. He says: "Influential criticism from abroad had been fastened on one element, the over-valuation of the rupee, as the 'prime cause' of current difficulties.... Encouraged by informal assurance of greater external support, the government of India undertook a hasty and ill-prepared devaluation under exceptionally adverse economic circumstances, whose first effects at least were to intensify the strains on the economy. (India's Development Experience by Tarlok Singh, page 351)

India's 'current difficulties' were due to the drought and the war with Pakistan, for which a perceived overvaluation of rupee could not be a cause. This is how Dr. Tarlok Singh thought, and that is perhaps, one of the reasons for which he had decided to leave the Planning Commission.

Indira Gandhi, the then Prime Minister of India, under great pressure from USA and the International Organisations, had agreed to the devaluation of rupee. She entrusted the matter to Shri Asoka Mehta, and, on his recommendations, approved the proposal for devaluation. The devaluation indeed increased the strain on economy because much larger payments had to be made for the same volume of imports and smaller payments were received for the same volume of exports.

Deficit Financing

Mahalanobis had told Nehru that in about 15 years' time i.e. by 1971, Public Sector will start generating large profits, which will make taxation unnecessary. But, actually, Public Sector continued to show larger and larger losses, and for continuing the support to Public Sector industries, government had been compelled to resort to deficit financing from the year 1979-80. Under Deficit Financing, part of the budgetary deficit is met by printing currency and part is met by borrowings. Printing of currency is hurtful for the poor because it raises prices, and borrowings resulted in the emergence of a crippling burden of internal debt and interest payments.

Fiscal Deficits

The steadily growing amount of borrowings resulted in a serious financial crisis by the end of Eighties. There was an acute shortage of foreign exchange, which had fallen to a level equal to the value of half a month's imports. External debt had risen enormously and for servicing the external debt government had to sell and mortgage gold from its reserves. Government at the centre and states were borrowing heavily for meeting expenditures both on capital and revenue accounts. The inflation rate had gone up to 14 percent.

For solving these problems, government took several measures, which were given the name of reform. During 1991-92, the exchange rate was raised from Rs. 17.92 to Rs. 24.47 to a dollar, which meant a devaluation of 36 percent for the rupee. The main thrust of the budget for 1991-92 was to reduce the fiscal deficit, which indicates the overall borrowing requirements of the government. In 1990-91, the fiscal deficit was equal to 6.6 percent of the GDP and it was decided to reduce it to 4.0 percent by 1996-97. The fiscal deficit had fallen to 4.1 percent in 1996-97, but it had again risen to 5.4 percent in 1999-00 and to 5.5 percent for the year 2000-01. In terms of rupees, the fiscal deficit has risen from Rs.37606 crores in 1990-91 to Rs. 114369 crores in 2000-01. This means a three-fold increase during a period of ten years. (table 4.4)

4.4 FISCAL DEFICIT

Yar	Fiscal Deficit Rs. crores)	Percent of GDP (%)
1990-91	37606	6.6
1995-96	50253	4.2
1996-97	56062	4.1
1997-98	73205	4.8
1998-99	89560	5.1
1999-00	104716	5.4
2000-01	114369	5.5
2001-02 (B.E)	116314	5.1

Source: Economic Survey 2001-02

Interest Payments

Government has been reducing the quantum of financial support to the Public Sector since the middle of eighties; but, during this period, the amount of interest payment has been rising steadily and it reached the peak level of Rs. 97342 crores in 2000-01. (table 4.5)

Between 1980-81 and 2000-01, interest payments had risen from Rs. 2604 crores to Rs. 97342 crores, indicating a very high growth rate of 19.8 percent per annum over a long period of 20 years! During these 20 years, the proportion of interest to GDP had risen 2.5 times from 2 percent to 5 percent; and the share of interest in government expenditure had also risen 2.5 times from 11.7 percent to 30.5 percent. In 2000-01, interest payments absorbed 51 percent of government revenue. and 85.1percent of borrowings (shown as fiscal deficit) were expended on payment of interest!

4.5 INTEREST PAYMENTS OF GOVERNMENT OF INDIA
(in Rs. Crores)

Year	Interest	GDP (current prices)	Total Government Expenditure	Fiscal Deficit	Revenue Receipts	Revenue Expenditure
1980-81	2604	130178 (2.0)	22256 (11.7)	7733 (33.7)	12419 (21.0)	14454 (18.0)
1990-91	21498	510954 (4.7)	98272 (18.8)	37606 (57.7)	54954 (91.7)	73576 (29.2)
2000-01	97342	1895843 (5.1)	319610 (30.5)	114369 (85.1)	190988 (51.0)	272696 (35.7)
			Growth rate % per annum			
1980-91	23.5	14.3	16.0	17.1	16.0	17.7
1990-01	16.8	14.0	12.5	11.8	13.3	14.0
1980-01	19.8	14.3	14.3	14.4	14.6	15.8

Note: Figures in brackets show interest as % of the amount.
Source: Economic Survey 2001-02

Non-Plan Expenditure

The inordinately high growth rate of interest during the long period of 20 years upto 2000-01, raised the share of Non-Plan expenditure in the Total expenditure of the Government of India. (table 4.6)

Between 1980-81 and 2000-01, the Non-Plan expenditure recorded a growth rate of 15.5 percent per annum, which was much higher than the growth rate of 11.6 percent per annum for Plan expenditure. Therefore, the share of Non-Plan expenditure in Total expenditure had risen from 59 percent in 1980-81 to 74 percent in 2000-01. During the same period, the share of Plan expenditure in total expenditure had declined from 41 percent to 26 percent.

4.6 GROWTH OF NON-PLAN EXPENDITURE
(1980-81 to 2000-01)

(Rs. crores)

Year	Expenditure Plan	Non-Plan	Total
1980-81	9233 (41)	13262 (59)	22495
1990-91	28365 (29)	69907 (71)	98272
2000-01	83468 (26)	236142 (74)	319610
	Growth Rate % per annum		
1980-91	11.9	18.1	15.9
1990-01	11.4	12.9	12.5
1980-01	11.6	15.5	14.2

Note: Figures in brackets show % share in total expenditure
Source: Economic Survey 2001-02

Table 4.7 shows that between 1980-81 and 2000-01, interest payment had risen at the rate of 19.8 percent per annum, which was lower than the growth rate of 21.2 percent for expenditure on Administration, but was much higher than the growth rates of expenditure for Defence (12.4%) and Subsidies (15.5%). Therefore, the share of interest in the Non-Plan expenditure has risen from 19.6 percent in 1980-81 to 41.2 percent in 2000-01, which is much higher than the share of 31.9 percent for Administration; 15.7 percent for Defence and 11.2 percent for Subsidies.

Because of the very fast growth of expenditure on interest payments, India had to reduce the expenditure on several developmental and welfare schemes, as also the schemes for improving the defence capability of the country. The share of Defence in Non-Plan expenditure has fallen from 27 percent in 1980-81 to 16 percent in 2000-01.

4.7 DISTRIBUTION OF NON-PLAN EXPENDITUTRE
(*Rs. Crores*)

Year	Interest	Admini-. stration	Defence	Subsidies	Non-Plan Expenditure
1980-81	2604 (19.6)	1603 (12.1)	3600 (27.2)	1851 (14.0)	13262
1990-91	21498 (21.8)	7040 (7.2)	10874 (11.1)	9581 (9.7)	69907
2000-01	97342 (41.2)	75176 (31.9)	37144 (15.7)	26480 (11.2)	236142
		Growth rate % per annum			
1980-91	23.5	15.9	11.7	17.9	18.1
1990-01	16.8	26.7	13.1	10.7	12.9
1980-01	19.8	21.2	12.4	14.2	15.5

Note: Figures in brackets indicate % share in Non-Plan expenditure.

Tryst with Destiny

China, in spite of being a communist country, had rejected the Russian model and suffered hardships for 25 years in their endeavours for developing a suitable model of growth. They developed a suitable model and have been successful in considerably reducing the number of poor in China.

India, in spite of being a democratic country, accepted the Russian model and clung to it for a long period of 35 years, in spite of its failures and unsuitability. Thereafter, India has spent a full decade on reversing the policies initiated by Nehru, and it needs more time for completing this job.

India has not been able to do much for the poor and has become the country with the largest number of poor in the whole world. And, we do not have sufficient resources to do something than can result in a substantial reduction in the number of poor. Our much-trumpeted 'tryst with destiny' has turned out to be a 'tryst with destitution'.

Per Capita Income

The First Plan had set a goal of doubling the per capita income from Rs. 1127 in 1950-51 to Rs. 2254 in 1977-78. However, this goal of doubling the per capita income in 27 years could not be achieved and the targeted income of Rs. 2254 was achieved in 1991-92 i.e. 14 years after the target year of 1977-78. And the time taken for the doubling of the per capita income would have been even longer if there had not been a significant rise in the growth rate of GDP after 1980-81. (table 4.8)

4.8 GROSS DOMESTIC PRODUCT
(at 1993-94 prices in Rs. Crores)

Years	Agriculture	Manufacture	Services	GDP
1950-51	83154 (59)	18670 (13)	38653 (28)	140477
1960-61	112848 (55)	34239 (16)	59034 (29)	206121
1970-71	142581 (48)	58997 (20)	94725 (32)	296303
1980-81	167770 (42)	86605 (22)	146787 (36)	401162
1990-91	242012 (35)	169703 (24)	281336 (41)	693051
2000-01	316990 (27)	298427 (25)	578505 (48)	1193922
	Growth Rate percent per annum			
1950-61	3.1	6.2	4.3	3.1
1960-71	2.4	5.6	4.8	3.7
1970-81	1.6	3.9	4.5	3.1
1980-91	3.7	7.0	6.7	5.6
1990-01	3.0	5.9	7.8	5.8
1950-01	2.7	5.7	5.5	4.4

Note: Figures in brackets indicate % share in GDP.

Source: Indian Economic Survey 2001-2002

The rate of growth of per capita income in India has been slow. India took 41 years in doubling the per capita income, while China did it in 25 years only. India's slow rate of growth of per capita income has been due to a fall in the growth rate of agriculture and industry during the sixties and seventies. As may be seen from table 4.8, the growth rate for agriculture had declined from 3.1 percent per annum during the fifties to 2.4 percent during the sixties, and to 1.6 percent during the seventies. During the same period, growth rate for industry had fallen from 6.2 percent during the fifties to 5.6 percent during the sixties and to 3.9 percent during the seventies.

As may be seen from table 4.8, the growth rate of GDP in India during the fifties, sixties and seventies had remained less than 4.0 percent per annum. After the seventies, however, there was a substantial increase in thegrowth rate, which rose to 5.6 percent per annum for the eighties, and to 5.8 percent for the nineties.

The fall in the growth rate of GDP during the decade ending with 1980-81 was mainly due to substantial falls in the growth rates of agriculture and industry. Fall in the growth rate of agricultural production was due to a substantial reduction in the plan outlay after the First Plan period, as indicated in table 4.1 above. But, the growth rate of industrial production had declined in spite of substantial increase in the plan outlay. Up to the end of the Sixth plan period, growth rate of the industrial production had remained much short of the plan targets and this shortfall was the largest for the Fourth plan period. According to the Ministry of Industry, the low growth rate of industrial production was due to the excessive controls. It said:

"The industrial and regulatory arteries, however, hardened after the mid-sixties: controls became more rigid; original objectives were lost sight of; additional controls and regulations were overlaid on the already overburdened industrial and trade control system. The period 1965 to 1980 can, therefore, be truly described as the dark-age of the Indian Industrial Economy". (The Indian Economy by Bimal Jalan, page 109)

"Idiocy of Rural Life"

The substantial reduction in the outlay for agriculture and large increase in the outlay for industry were both in accordance with the priorities of the Mahalanobis model of growth, which was a variant of the Russian model adopted by Stalin in 1928. In addition to the emphasis on industrialisation, the Russian model also had an in-built bias against the farmers and agriculture. This was due to the Marx's views on "idiocy of rural life", which has been referred to by Shri Sukhmoy Chakravarty in his book titled "Development Planning". He says:

> "Jawaharlal Nehru, chief architect of Indian planning, was also the Prime Minister of India. He viewed planning as a way of avoiding the unnecessary rigours of an industrial transition in so far as it affected the masses living in India's villages. While it is possible that he shared something of Marx's views on "idiocy of Rural life", it should be remembered that he was also a pupil of Gandhi from whom he had learnt his basic lessons in political mobilisation which centred round the rural masses."(Development Planning by Sukhmoy Chakravarty, page 3)

This is an extremely important statement by a renowned communist who had been holding several key positions in the central government for a long period of about thirty years up to 1990, when he was holding the post of the chairman of the Policy Planning Committee of the central cabinet. According to this statement, Nehru saw in planning a way to bypass the people in villages, which he wanted to do, perhaps, because he shared

Marx's views on idiocy of rural life. Nehru did share such views of Marx is confirmed by the letters he wrote to Gandhi. For example, a letter written in 1945 says:

> "I do not understand why manifestation of truth and non-violence can be possible only in villages. From the intellectual and cultural point of view, a village is generally backward and no progress is possible in such environments. Narrow-minded people are more prone towards lies and also acts of violence"

These views of Nehru have a striking similarity with Marx's views on idiocy of rural life. Marx had a feeling of aversion and antipathy for farmers because of their emotional attachment with land, which, according to Marx, was the property of state. Stalin had fully exploited Marx's views on land in his ruthless drive against farmers for the collectivisation of land, which meant state ownership and management of all land in the USSR.

Nehru had been influenced by the views of Marx during his long stay in England, because of which he had also become a great admirer of the western civilisation. In a letter to Gandhi he wrote: "I believe that the western industrial civilisation will swamp India."

Gandhi had expressed his anguish over the fact that people in cities live luxurious lives in palatial houses while millions of people remain deprived of the basic necessities of life. On this Nehru wrote:

> "It is not a question of palatial houses for millions of people. There is no reason why millions of people should not have houses with modern facilities and amenities so that they can live comfortably like civilised people. It may be necessary to check excessive expansion of cities; but, we will have to encourage people to enjoy the culture and civilisation of cities."

Here also the implication was that people in villages do not have culture and civilisation, and government should encourage people to live in cities so that they can acquire culture and civilisation!

Nehru's conception of development was that people should have living standards comparable to those in the west. If all Indians cannot have such high standards of living then a segment of India's population should be helped in attaining it.

The Russian model of development with its emphasis on industrialisation, eminently suited Nehru's vision of development because it meant development of cities and towns and raising the income of the urban population. During the mid-fifties, when there was glut of wheat in the markets and prices had already crashed, Nehru arranged for imports of wheat from America on a long-term basis under the PL-480 agreement in order to assure supply of cheap wheat to industrial workers and the urban population. He wanted to make a short cut to industrial development by bypassing the development of agriculture.

In mid-seventies, Government had initiated several measures for the deregulation and liberalisation of economy, and, had also raised the Plan outlay for Private Sector, so that it exceeded the outlay for the Public Sector. These measures resulted in raising the rate of savings, and a more efficient use of capital, which led to a quantum jump in the growth rate of GDP - from 3.1 percent per annum for the seventies to 5.6 percent per annum for the eighties. It is important to note that this large increase in the growth rate had preceded the launching of the reforms in 1991 and the subsequent increased inflow of external capital.

Even the doubling of per capita income in 41 years has not resulted in any improvement in the living conditions of the poor, because this increase is mainly the result of a substantial increase in the incomes in the non-agricultural sectors, which support only one-third of India's population.

Inter-Sector Disparities

Table 4.8 shows that between 1950-51 and 2000-2001, the share of agriculture in the GDP had fallen from 59 percent to 27 percent, while the share of industries had risen from 13 percent to 25 percent and that of services had risen from 28 percent to 48 percent. The steep fall in the share of agriculture in the GDP has been due to the fact that its growth rate has remained much below the growth rates of industries and services. During the 50 years period between 1950-51 and 2000-2000, agriculture recorded an annual growth rate of 2.7 percent which was half of the growth rate of 5.7 percent for industries and 5.5 percent for services.

While the share of agriculture sector in the GDP had fallen to less than half of the share in 1950-51, about two-thirds of India's population continued to depend upon it for livelihood. On the other hand, the combined share of non-agricultural sectors in the GDP had risen from 41% to 73%, while they supported only one-third of India's population. This resulted in a state of growing chasm in the per capita incomes in the agricultural and non-agricultural sectors. Consequently, the ratio between per capita income in the non-agriculture sector and per capita income in the agriculture sector rose from 1.4 in 1950-51 to 3.7 in 2000-01. This may be seen from table 4.9 given below.

The faster growth of incomes in the non-agriculture sector is largely due to the large increases in the wages of the employees in the Organised Sector. Between 1971-72 and 1999-2000, per capita emoluments of Public Sector employees had shown an increase of 2714 percent, which was more than 2.5 times of the increase of 998 percent recorded in the Consumer Price Index (CPI) during the same period.

Between 1980-81 and 1999-2000, the per capita emoluments of the Public Sector employees had risen from Rs. 14239 to Rs. 166592, indicating an annual growth rate of 13.8 percent, which was 1.5 times larger than the growth rate of 9.4 percent for the Consumer Price Index (CPI)

4.9 THE PER CAPITA GDP IN AGRICULTURE AND NON-AGRICULTURE SECTORS
(Rs. at 1993-94 prices)

Year	Population in Agriculture % of total	Per Capita GDP			Ratio of 5 to 4
		Total	Agriculture	Non-Agriculture	
1	2	3	4	5	6
1950-51	67.5	3687	3400	4898	1.4
1960-61	69.5	4430	3700	8963	2.4
1970-71	69.5	5002	3740	9203	2.5
1980-81	66.5	5353	3700	10190	2.8
1990-91	64.9	7321	4400	15180	3.5
2000-01	62.0	10254	6170	22897	3.7

Note: The sector-wise per capita GDP has been derived by dividing the GDP of the sector by its population.

Source: Economic Survey 2001-2002.

Public Sector has 19 million employees and another 9 million employees in the Private Sector enjoy about the same level of emoluments and benefits. These 28 million employees of the Organised Sector form only 7 percent of India's total workforce of 423 millions; but, they constitute the Dominant Sector of Indian Economy.

In September 1997, Government of India had entered into an agreement with the Unions of government employees whereby it agreed to:

i) bear an additional burden of Rs. 7100 crores over and above the pay package of Rs. 11250 crores recommended by the Fifth Pay Commission;.

ii) non-implementation of the recommendations of the Commission for reducing the staff strength by 30 percent in 10 years;

iii) not to scrap the 350000 vacancies as recommended by the Commission.

Economists called this agreement as the worst fiscal profligacy. By making this agreement the government had, in one stroke, undone whatever little fiscal correction had been realised during the preceding few years, and had accepted an additional financial burden of Rs. 2000 to 3000 crores every year. Because of this agreement and consequential fiscal stringency the government had to raise the retirement age from 58 to 60 years.

Neglect of the 93 Percent

Government of India has been pampering the employees of the Organised Sector who form only 7 percent of India's work-force because they are organised and can bring pressure upon the government through various means and methods. But, the government has been quite oblivious of its duty towards the 93 percent of the work-force in the Unorganised Sector because they have no means for making the government give them even the subsistence level incomes. The 93 percent workers of the Unorganised Sector include 75 million agricultural labourers who are about 2.7 times larger than the employees in the Organised Sector and form more than one-fifth of India's work-force. They have no assured work and regular income and form the hard core of poverty in India.

The National Commission on Agriculture had made a comprehensive study of the living conditions and problems of agricultural labourers. In their report released in 1976, the Commission says: "The process of proletariatisation of the rural population has continued even after independence. It is doubtful whether even a beginning has been made towards halting these processes, leave alone reversing them, during the more recent decades of planned development. Neither the general economic development, nor agricultural development, and not even reform measures through the instrumentality of state in India seem capable of reaching far enough to purvey hope and viability to the class of people who bore the major burden of immiserising economic transition under the alien rule. While aliens, at least, had the alibi of being aliens, Independent India has none in extenuation of her record." (The NCA Report vol. XV page 238, para 69.1.3.)

A more scathing indictment of the government could not be possible in a report prepared by a Commission appointed by the government itself. But, the government ignored the recommendations of the Commission and continued to pursue the policies introduced under the Nehruvian model which has an in-built bias against agriculture and farmer. Consequently, the situation in the agricultural sector has been deteriorating over the years.

Inter-State Disparities

The Second Plan had decided to establish a "socialist pattern of society', which means a more equitable distribution of income in the country. But, actually, the chasm between the rich and the poor continued to widen with the passage of time. This is evident from the figures of per capita State Domestic Product (SDP) published by the government in the Indian Economic Survey. With a view to having an idea about the extent of income disparities between different states and also facilitating a comparison with such disparities in the past, the figures of per capita SDP given in Rupees have been presented as percentages of the per capita GDP. This may be seen from table 4.10 given below.

Table 4.10 gives information on per capita GDP for 15 major states which account for 96 percent of India's population. These 15 states can be divided into three categories on the basis of their per capita income as a ratio of the per capita GDP.

4.10 PER CAPITA SDP OF MAJOR STATES
(As percentage of per capita GDP)

State	1960-61	1970-71	1980-81	1990-91	1999-00
I. Higher Income					
1. Punjab	111	157	164	167	131
2. Maharashtra	124	115	149	149	131
3. Haryana	99	129	145	151	120
4. Gujarat	110	122	119	119	110
5. Tamil Nadu	101	85	92	100	110
II. Middle Income					
6. Kerala	79	87	93	84	100
7. Karnataka	90	94	93	92	90
8. West Bengal	118	106	109	94	90
9. Andhra Pradesh	83	86	85	95	80
10. Rajasthan	86	95	75	84	70
III. Low Income					
11. Madhya Pradesh	76	71	83	81	62
12. Uttar Pradesh	76	71	78	72	60
13. Assam	96	79	79	86	55
14. Orissa	66	71	78	62	50
15. Bihar	65	59	56	53	40
PER CAPITA GDP	330	675	1630	4983	17556

Source: *Indian Economic Survey 2001-2002*

The first category comprises five states namely Punjab, Maharashtra, Haryana, Gujarat and Tamil Nadu. In 1999-2000, the per capita SDP of these five states was larger than the per capita GDP and had ranged between 110 and 131 percent of the per capita GDP. These five states account for 25 percent of India's population.

The second category comprises five states namely Kerala, Karnataka, West Bengal, Andhra Pradesh, and Rajasthan. In these states, the per capita SDP in 1999-2000 was equal to or less than the per capita GDP and ranged between 70 and 100 percent of the per capita GDP. These five states account for 30 percent of India's population.

The third category comprises five states namely Madhya Pradesh, Uttar Pradesh, Assm, Orissa and Bihar. In 1999-2000, the per capita income of these states was much less than the per capita GDP and ranged between 40 and 62 percent of the per capita GDP. These five states account for 41 percent of India's population.

For the five states of Punjab, Maharashtra, Haryana, Tamil Nadu and Kerala the ratio between per capita SDP and the per capita GDP for the year 1999-2000 was higher than the ratio for 1960-61. This means that after 1960-61, the per capita SDP in these five states had been growing at a rate higher than the growth rate of per capita GDP. In Gujarat and Karnataka, the ratio in 1999-2000 has been the same as in 1960-61. In these two state, thus the per capita SDP has been rising at the same rate as the per capita GDP. In the remaining eight states, the ratio between per capita SDP and per capita GDP for 1999-2000 was lower than the ratio for 1960-61. This means that after 1960-61, the per capita SDP in these ten states had been growing at a rate lower than the growth rate of per capita GDP.

West Bengal

In West Bengal, the ratio between per capita SDP and per capita GDP had declined from 118 percent in 1960-61 to 90 percent in 1996-97. This means that after 1960-61, the per capita SDP in West Bengal had been rising at a rate lower than the growth rate for the per capita GDP. Because of this fall in the ratio, the ranking of West Bengal among 15 major states has fallen from 2 in 1960-61 to 8 in 1999-2000.

This fall in the ranking of West Bengal is quite surprising. At the time of independence in 1947, West Bengal was India's second most industrialised state after Maharashtra. It has a generous endowment of natural resources; large number of highly educated and skilled people; an uninterrupted rule by the same party for more than twenty years; and a highly educated and a competent Chief Minister.

The downfall of West Bengal wa sought to be explained by CPI(M), the ruling party, through an internal document of the Party. It says: "a number of comrades and leaders are misusing party influence to make huge money by way of getting involved in real estate racket and the associated illegal trade and collection of protection money. They, more often than not, indulge in organised hooliganism."

Assam

In Assam, the per capita SDP as a ratio of per capita GDP had fallen steeply from 96 percent in 1960-61 to 55 percent in 1999-2000. This means that after 1960-61, the growth rate of per capita SDP in Assam has been lower than the growth rate of per capita GDP. This is largely due to the large-scale influx of destitute and famished families from Bangladesh. The significant fall in the per capita SDP, relative to the per capita GDP, has pushed Assam into the group of four backward and contiguous states of Bihar, Madhya Pradesh, Orissa and Uttar Pradesh, often referred to as BIMARU.

Bihar

Bihar is the poorest state of India in spite of its large mineral resources. The per capita SDP of Bihar as a percentage of per capita GDP has fallen from a low 65 percent in 1960-61 to a pathetic 40 percent in 1999-2000. Bihar is the only state in India, which has shown a continuously downward trend in the per capita growth rate of 5.3 percent per annum, which was about two-third of the growth rate for China. Because of the faster growth, China's GDP as a percentage of India's GDP, had risen from 117 percent in 1980 to 215 percent in 1999. This faster growth of China's GDP was mainly due to the accelerated growth of its agricultural production brought about by the policy of giving high priority to agriculture in the reforms introduced in 1978. Consequently, the rate of growth of agricultural production, which had averaged 3 percent per annum during the 25 years period up to 1978, had risen to 5.9 percent per annum for 1980-90 and was 4.4 percent for 1990-98. In 1997-98, China's production of foodgrains was 180 percent of India's production, while China's land under foodgrains is 90 percent of India's land.

4.11 GROWTH OF GDP IN CHINA AND INDIA
1980 and 1999

(Billion dollars)

Country	GDP 1980	GDP 1999	Growth rate percent p.a.
China	202(117)	991(215)	8.7
India	172	460	5.3

Note: Figures in brackets indicate China's GDP as percentage of India's GDP.
Source: *World Development Report 2000-2001*

Between 1980 and 1999, China's per capita GNP rose from $280 to $780, indicating a growth rate of 5.5 percent per annum. During the same period, India's per capita GNP rose from $250 to $450, indicating a growth rate of 3.1 percent per annum, which was about two-thirds of the growth rate for China. (table 4.12)

In 1999, China's Services sector accounted for only 33 percent of its GNP and the remaining 67 percent was in the form of goods produced by agriculture and industry. Therefore, the per capita GNP of $780 in China included goods having a value of $522. In

India, Services sector accounted for as much as 46 percent of its GNP and only 54 percent was in the form of goods. Therefore, the per capita GNP of $450 in India included goods having value of $ 243 only, which was less than half of the per capita availability in China. This may be seen from table 4.13 given below.

4.12 PER CAPITA GNP IN CHINA AND INDIA
1980 and 1999

(GNP in dollars)

Country	Per Capita GNP 1980	Per Capita GNP 1999	Growth rate percent p.a.
China	280(112)	780(173)	5.5
India	250	450	3.1

Note: Figures in brackets indicate China's per capita GNP as % of India's per capita GNP.

4.13 PER CAPITA AVAILABILITY OF GOODS - 1999
China and India

Country	Per capita GNP ($)	Share of goods (%)	availability of goods ($)
China	780	67	522
India	450	54	243

Source: *World Development Report 2000-2001*

The fact of China's per capita GNP having larger proportion of goods has resulted in a faster reduction of poverty in china. The fact of India's per capita GNP having a smaller proportion of Goods is the cause of the comparatively slower rate of reduction of poverty in India.

In China, the reforms introduced by Deng in 1978 gave high priority to agriculture, which was contrary to the "primacy of heavy industry" approach of the model of growth introduced by Stalin; and the policy of Contract System in the reforms was in conflict with the Commune System of Mao. But Deng was confident that the reforms would raise agricultural production and, thereby, remove poverty. Deng was proved correct by time.

The Human Development Report 1997 has described China's progress as remarkable. It says: "In 1978, China initiated certain measures in the field of agriculture with the objective of removing poverty. In six years' time, these measures contributed to a dramatic increase in output; a doubling of rural incomes; and fall in the number of poor from 260 million to 97 million."

In India, Nehru adopted the Russian model of "primacy of heavy industry" which was against the well known views of Mahatma Gandhi who wanted the development process to start from agriculture and small industries. Nehru failed miserably and died a disillusioned man after admitting his failure before the NDC and the Parliament.

The Human Development Report 1997 described India's progress as unsatisfactory. It says: "India remains a country of stark contrasts and disparities. It needs substantial public action if it is to eliminate the worst forms of human poverty and promote an equitable expansion of social, economic and political opportunities."

The above analysis leads to following conclusions:

1. Nehru in India, implemented Marx's views of ignoring agriculture, which was against the views of Gandhi. Nehru was proved wrong by time. Thirty years after Gandhi, Deng in China, implemented Gandhian views of starting the development process from agriculture, which was against the views of Marx. Deng was proved correct by time.

2. Development of agriculture preceding development of industries is the natural sequence of economic growth. Industrialisation without developing agriculture is much costly in terms of money and time, and is more difficult to sustain.

3. Removal of poverty is best assured through development of agriculture, which has vast untapped potential for additional employment opportunities, and, at costs, which are the lowest in terms of money and time.

4. Pragmatism and not dogmatism is the key to the success of strategy for economic development of a country.

Corruption

After independence, corruption in India has been growing at a gradually accelerating pace. A Danish Agency 'Transparency International' has been making investigations in regard to the incidence of corruption in different countries of the world and publishing lists of countries with the least corrupt at the top and the most corrupt at the bottom. The list for 2001 includes 91 countries, of which Bangladesh is at the bottom, while China, India, and Pakistan are shown at S. No. 57, 71 and 79 respectively.

India's First Plan (1951-56) had called for a "continuous war against every species of corruption within administration and also in Public life." (pages 115-118). The Plan had specified certain measures on the basis of the Report on public Administration (1951) prepared by A.D. Gorwala, at the instance of the Planning commission. But, in spite of these measures, corruption in India continued to grow. Dr.Tarlok Singh, who headed the planning Commission for sixteen years upto 1966, was extremely unhappy over the growing corruption in the country. In his book 'India's Development Planning published in 1974, he says:

"Where political audacity and administrative laxity happen to combine for a period, especially at the higher level of decision making, punitive action is slow, or may not come at all. No political party appears wise enough or concerned enough with the long-range interests of the people and the country to look upon the doings of its more influential members with sufficient detachment.... At the stage now reached, it seems most doubtful if the political processes and the administrative structures, which serve the central and state governments, will be capable by themselves of leading and organising the nation-wide moral and practical crusades required to bring about the needed cleansing of public life and administration." (pages 444-445)

Because of remaining the head of Planning Commission for sixteen years and also because of taking great interest in every aspect of planning Dr. Tarlak Singh was fully aware of the disquieting decline in the moral standards of the people assigned the task of running the government at the centre and in the states. Being very close to Nehru, he must have been trying his best to make Nehru take necessary action for putting an end to corruption in the country. That he failed to make Nehru act is apparent from the lines quoted above.

Black money

In 1964, when the 'License Permit Raj' (as described by C. Rajagopalachari) was at its zenith, World bank had prepared a report on corruption in India which stated that corruption in India was of the order of Rs. 1465 crores or 7.3 percent of the GNP in 1964. This was considered to be an underestimate by the economists and the experts.

In 1989, Shri Vasant Sathe, the then Energy minister in the central government, had estimated the quantum of black money at Rs. 70000 crores and he stated that Public Sector was the largest generator of black money.

In 1991, the planning commission had estimated that the quantum of black money was "at least Rs.300000 crores at 1989-90 prices."

In 1996, black money was estimated to have risen to 25-33 percent of the GDP. And, Shri Bhure Lal, Central Vigilance Secretary, had said that incalculably large amounts of money were lying in the Swiss bank accounts of Indians.

Marxists' View of corruption

Sukhmoy Chakravarty, the renowned communist, who was the guiding spirit in the formulation of the Third plan (1961-66), and was chairman of the Policy Planning Committee of the central cabinet upto 1990, had tried to explain the predacious working of the 'License Permit Raj' on the basis of the tenets and terms of Marxism. He said : "One cannot help concluding that India's Development pattern has exacerbated the dualism that was there at the start of the development process itself. The propensity of the 'haves' in the system is not based on ownership of property, as in the capitalist system, but on their possession of political power. It is the peddling of influence, the use of political power to confer benefits on the seekers of legal and Illegal concessions and advantages that bring riches to the power elite. Not only bribes, but regular concessions, cuts, kickbacks and pay-offs are freely given to decision makers by the beneficiaries of contracts, licenses, permits, supply orders, remissions of government dues and other concessions. Both the beneficiaries belong to the same class, and, as members of the class, while serving their individual interests, unwittingly promote the collective interests of the class."

Sukhmoy Chakravarty has elaborated the meaning and functioning of 'License Permit Raj.' And, in the process, he has said that corruption in India is due to the fact that people holding political power have also been controlling economic power – which is precisely the central idea of Marxism. But, according to the thought system of ancient India, described in Kautilya's Arthashastra, state should not involve itself in economic activities and should only try to control the functioning of those involved in it, with a view to protecting the weaker sections of society.

Actually, Marxism is an outlandish and outdated thought system, which had collapsed under the weight of its wrong premises, and lies buried in Russia, the land of its origin.

Sukhmoy Chakravarty and some other well-known communist had been holding crucially important positions in Nehru's government because of a tacit agreement with Nehru that they will be given charge of the ministries which are important for the formulation and implementation of economic policies. Nehru had made this agreement in spite of Congress having good majority in the parliament because most of the MPs were the supporters of Gandhian approach of economic development, and, as such, were opposed to the Russian model of growth. After the death of Gandhi and some other top leaders of Congress, who believed in Gandhian approach of development, Nehru consolidated his position in Congress. Communists called it the victory of 'modernists' over the 'moralists'. In his book, "Development planning – The Indian Experience", Sukhmoy Chakravarty has written:

"When the planning process was initiated in India, there was a legacy of pre-independence debate centred around the 'Gandhian' approach at one pole and the 'modernising' approach of Nehru at the other pole. Gandhi and his disciples looked more like *moralising old men* than like people who could be expected to change the direction of society. Thus, the 'modernising' approach of Nehru won the day, because, their scientism seemed more compatible with ideological priorities involved in building up a post colonial nation state."(page 8)

This rejection of the moralistic approach of Gandhi put Indian politics on to the path of continuously falling moral standards, resulting in even the top leaders blatantly violating the laws of the country with the sole aim of gaining and retaining power.

In January 1966, Indira Gandhi had become Prime minister after defeating Morar ji Desai, who was a great moralist and a disciplinarian. But, the victory of Indira Gandhi was due to the support given by communists. Indira Gandhi had to take several measures for retaining the support of the communists.

On June 12, 1975, Allahabad High Court gave a verdict against the election of Indira Gandhi and, consequently, she ceased to be a member of parliament. But, Indira Gandhi obtained a stay order; imposed emergency on the country; and got the law changed in a way that made the verdict of High Court ineffective. By these actions, Indira Gandhi became the role model for all the politicians who believe in capturing political power by any means.

During the mid-eighties, Rajiv Gandhi had been accused of accepting bribe in the purchase of Bofor Guns. In the mid-nineties, P.V. Narsimha Rao had been accused of bribing some MPs for the sake of retaining his position as Prime minister.

Within a period of 18 years upto 1993, thus, three Prime Ministers of India had violated the laws of the country, and all the three succeeded in retaining the post of Prime minister.

This is the most disquieting fact of Indian Politics during the last quarter of twentieth century. And this is also the basic reason for the increased lawlessness and fast growth of corruption in the country.

Political parties have become a haven for criminals of various hues because members of political parties, if accused of any crime, can always say that the charges against them are the handiwork of their political opponents or of the rivals in their own party.

This infiltration of criminals in political parties has increased considerably during the last 20 years or so. Quite often, criminals are supported by political parties for increasing their numerical strength in the Assembly or the Parliament. Many criminals have become office-bearers of the party or even ministers. The NCRWA has seen it as a nexus between terrorism, drugs, smuggling and politicians.

The lists of criminals in political parties and also in legislatures, prepared by the Election Commission show the extent of criminalisation of politics in India.

This is a grim scenario.

Gandhian Approach

In the present situation, Gandhian approach of development is the only hope. Gandhi had underscored the importance of morality and Dharma for ridding the country of its poverty, and had called Ram Rajya as the ideal form of government – God's Kingdom. There is much confusion and misinformation about the meaning of Dharma and Ram Rajya, which needs to be removed.

Dharma

The word Dharma has been in use since times immemorial, and, therefore, it is also called Sanatana Dharma. As stated in chapter one earlier, Kautilya's Arthashastra has defined Dharma. It says:

"Dharma signifies an absolute and immutable concept of Righteousness and includes the idea of duty which everybody owes to oneself, to one's ancestors, to society as a whole, and to universal order. Dharma is law in its widest sense – spiritual, moral, ethical and temporal. Every individual, whether the ruler or the ruled, is governed by his or her own Dharma. To the extent that society respected Dharma, society protected itself; to the extent society offended it, society undermined itself." In brief, Dharmo Rakshati Rakshitah.

Gandhi's conception of Dharma is based on the abovesaid meaning of Dharma given in Kautilya's Arthashshatra, which is world's oldest treatise on Economics and Politics written around 300 BC.

Ram Rajya

Ram Rajya or 'God's Kingdom' was the cherished goal of Gandhi. By Ram Rajya Gandhi meant a government of the people, based on high moral standards. He described Ram Rajya as the rule of Dharma. Gandhi was of the view that raising the moral standards of the people is necessary for the establishment of Ram Rajya.

An important fact of the fifty years of freedom is that the Muslim population had been growing at a rate faster than that for Hindu population and their proportion in total population had risen from 9.5% in 1947 to 11.7% in 1991 (Table 4.14).

4.14 MUSLIM POPULATION OF INDIA AFTER 1947

(Millions)

Year	Total Population	Muslim Population
1947 (August)	347	33(9.5)
1951	361	36(10.0)
1961	439	47(10.7)
1971	548	61(11.2)
1981	683	76(11.4)
1991	846	95(11.7)

Note Figures in brackets show Muslim Population as % of total population.

Chapter Five

Globalization

The central idea of globalisation is a very old one and is found in the scripts of ancient India, which were written thousands of years back. For example, Manusmriti says:"Sarve Bhavantu Sukhinah; Sarve Santu Niramaya; Sarve Bhadrani Pashyantu; Maa Kashchit Dukhabhag Bhavet."

The above said shloka is a proof that the saints and seers in ancient India had a global view of the mankind in which all human beings could lead a happy life; nobody practised deceit; everybody wished happiness for others; and nobody suffered hardship. The saints and seers in ancient India considered the whole world as one family. VASUDHAIV KUTUMBAKAM.

Growing Poverty

Globalisation being preached and propagated now has a different context and different objectives. The call for this globalisation is the result of the need of the old Colonial Powers – now organised as the G-7 countries – to regain their old colonial prerogatives of having an assured market for the sale of their products and investment of their capital. But, this globalisation and the free trade being propagated and promoted by the WTO, the

World Bank and the IMF has not gained the support of the different sections of the world population. On the contrary, the number of the opponents of globalisation and free trade has been found to be increasing. This is due to the fact that this globalisation has been found to be creating and accentuating income disparities and also aggravating conditions of poverty which are due to the colonial exploitation of a very large part of the world over a long period of time.

During the last fifty years, the poor of the world have been becoming poorer and the rich have been becoming richer. And, this has happened inspite of the World Bank, the IMF and the UNO making promises for doing their best for removing poverty from the world.

In the Foreword to the World Development Report 1978, the first of the series of the annual reports of the World Bank, Robert S. Mc Namara, the President of the Bank, had said: "The past quarter century has been a period of unprecedented progress in the developing countries. And, yet, some 800 million people continue to be trapped in absolute poverty, which is an anachronism and is beneath any reasonable definition of human deficiency. The two objectives of development, then, are to accelerate economic growth and to reduce poverty." But, poverty continued to grow in depth and dimensions.

The WDR 1990 was a major study of poverty. This report identified a path of poverty reduction that could reduce the number of poor in the world by 300 million by 2000 AD. But, the WDR 1992 said, "This target was not feasible because the increase in number of poor during 1985-90 had been far in excess of the estimate. Even larger increase in number of poor was expected during 1990-95, because of the large increase in unemployment and poverty in the European countries, in spite of a substantial economic growth there."

On 17-10-1993, Boutros Ghali, the UN Secretary General said: "extreme poverty is far from inevitable: it is an unacceptable scourge." Expressing deep concern over the growing poverty, the United Nations General Assembly proclaimed 1996 as the international year for the eradication of poverty and 1997-2006 was declared as the decade for eradication of poverty.

The Article 38 of GATT agreement signed in 1994 includes the objective of raising standards of living of the people in the world, particularly in the less developed countries.

In July 1994, during the fiftieth anniversary of the World Bank held in Madrid, there was much criticism of the working of World Bank. The World Bank President, Lewis Preston, however, assured the Finance Ministers from 178 countries that the World Bank and IMF have not strayed from their mission taken up fifty years back. He said: "We are committed than ever before to help the poor."

But, in their report for 1999-2000, the World Bank has admitted that they have committed mistakes in combating poverty and that many of their policies were misguided. Today, the report says, 1.5 billion people live on an income of less than one dollar a day, up from 1.2 billion people in 1987, and the number is expected to rise to 1.9 billion by 2015.

The gap between the rich and the poor has also widened. In 1970, the average per capita income in the poorest 1/3 of the countries was only 3.1 percent of the income in the richest 1/3 of the countries. By 1990, the ratio had fallen from 3.1 to 1.9 percent only.

The chasm between the incomes of the rich and the poor of the world had been widening during the last 50 years, and this trend acquired an accelerated pace during the last 20 years. In 1980, 57 percent of world's population living in the 48 LICs had a per capita income of $278 which was 1/38 of the per capita income of the 17 percent of world's population living in the 25 HICs. By 1998, this ratio had further declined from 1/38 to 1/45.

The position is far worse for the 46 LICs excluding China and India. In 1980, these 46 LICs had a per capita income of $588 which was 1/18 of the per capita income of the 17 percent of world's population living in the 25 HICs. By 1998, this ratio had fallen steeply from 1/18 to 1/62. This is due to the sharp decline in the share of these LICs in the world GDP from 4.1 to 1.6 percent! These 46 LICs accounting for 22 percent of world's population have been turned into an area of growing darkness in the world.

The Human Development Report 1996 gave some disquieting facts about the condition of poverty in the world. It said:

1. Over a period of 15 years, economic stagnation or decline has affected 100 countries, reducing the incomes of 1.6 billion people, i.e. more than a quarter of the world population. In 70 of these countries, average incomes are less than they were in 1980, and, in 43 countries, they are less than they were in 1970. Over 1990-93 alone, average incomes in 21 countries had fallen by a fifth or more.
2. In the past 30 years, the poorest 20% of the world saw their share of the global incomes fall from 2.3% to 1.4 %, while the share of the richest 20% rose from 70% to 85%. Consequently, the ratio of the shares of the richest and the poorest rose from 30:1 to 61:1.
3. During the past three decades, the proportion of people enjoying per capita income growth of 5% a year more than doubled from 12% to 27%, while the proportion of those suffering negative growth more than tripled from 5% to 18%.
4. Between 1960 and 1990, the share of the poorest countries in the world trade had fallen from 4% to 1%.
5. The gap between the incomes of the rich and the poor countries, which was $5700 in 1960, had risen to $25350 in 1998, indicating a more than four-fold increase in 38 years.

The HDR 1996 had warned that the order of imbalance in economic growth, if allowed to continue, will have dangerous consequences for the whole world.

Least Developed Countries (LDCs)

In their brochure on poverty, the UN says: "The Least Developed Countries (LDCs) form hard core of poverty in the world. During the 25 years period ending with 1996, the number of LDCs had risen from 21 to 48." Trade has been the basic cause for the aggravation of poverty in the world during the last 500 years.

It was trade that made Columbus embark on his 1492 voyage in search of a new trade route to India, which brought him to America, by mistake. And this mistake marked the beginning of a period of inhuman annihilation of 90 percent of the original inhabitants of America.

Columbus was the first coloniser and also the first person to start the slave trade in the world. Slaves were needed as labourers after the large-scale extermination of the original inhabitants of America. In 1776, slaves formed 20 percent of the total population of America. Two thirds of the 20 million slaves sent to America had perished before reaching America. On an average, one slave survived seven years "on the job".

American slavery was the most formidable motor of capital accumulation in Europe. This capital became the fundamental rock on which the gigantic industrial capital of contemporary times was founded.

Trade was the cause of India becoming a colony of England in the middle of eighteenth century. By the time America became free in July 1776, England had consolidated its power in India, which was famous in the world for its wealth and inexhaustible riches. The gigantic plunder of India's wealth transformed England from a poor backward country into a great industrial and military power of the world.

Trade was the cause of subjugation of China by England after the two so called opium wars fought in 1839-42 and 1856-60. The wars took place because England considered it its right to sell opium in china and the Chinese government opposed the import of opium into the Chinese territory. The two wars ended in a victory for England. China was compelled to allow import of opium into China and to hand over to England the administration of a part of China's coastal area, which later on became known as Hongkong.

Colonial exploitation by England occurred mainly in India, China, Africa, West Indies and the Caribbean. The French colonised Africa, South-east Asia and the Caribbean. America, an ex-colony of England, emerged as the leader of the ex-colonial powers after the World War II (1939-45). And, trade became the main instrument for the continuation of the exploitation of the ex-colonies of the world.

The phrase 'Least Developed Countries' (LDCs) had been coined by the United Nations in 1971 for describing the "poorest and economically the weakest among the developing countries with considerable economic, institutional and human resource problems which are compounded by geographical handicaps and natural and man-made disasters."

Between 1971 and 1995, the number of LDCs had risen from 21 to 48, out of which as many as 33 are in Africa which has only 12 percent of the world population. These 48 LDCs have a combined population of some 800 millions or about 13 percent of the world population, but they have only one percent of world's income. For the 48 LDCs, the average per capita income in 1998 was \$300 only, as compared to \$520 for the LICs and \$25510 for the HICs.

The average GDP growth rate for the LDCs has declined from

2.2 percent per annum during the 1980s to 1.8 percent during the 1990s. Their share of world exports and imports has also declined from 0.7 and 1.0 percent respectively in 1980s to 0.4 and 0.7 percent in the 1990s. This worsening of the trade position has further marginalised the LDCs in the world economy.

In spite of debt relief measures, the stock of outstanding debt of almost half of LDCs equals or exceeds their GDP. The UNDP used criteria of human development based on longevity, knowledge and standard of living in 174 countries, showed that 40 out of the 48 lowest ranked countries on the basis of Human Development Index (HDI) are LDCs. It is important to note that all the 48 lowest ranked countries have been colonies of the Industrialised countries, and the G-7 countries include all the major coloniser countries.

Out of the 48 LDCs, 19 are ex-colonies of England; 15 are ex-colonies of France; and 8 are ex-colonies of Portugal. Italy, Spain, Belgium and Germany were the colonising countries in the remaining 6 LDCs.

Apparently, the extreme poverty in the LDCs is due to excessive exploitation over hundreds of years by the colonial powers. Ethiopia, the oldest state in Africa and having a population of 61 millions, has a per capita income of $100 only which is the lowest in the whole world and works out to a miserable $8 for a month!!

The continuous aggravation of the conditions of poverty in the world is mainly due to the deteriorating terms of trade between the developed and the developing countries. Prices of finished goods produced in the developed countries have been rising fast while the prices of raw materials sold by developing countries kept falling. Thus, between 1960 and 1970, the price of a jeep in terms of Burmese cacao had risen from 4 to 10 tons. Years ago, Juleus Nyerer, President of Tanzania, wondered why for the same number of tractors, his country had to export double the quantity poor backward country into a great industrial and military power of the world.

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An October 1986 report by Swiss-based bank of International Settlement stated that during the preceding two-and-a-half years, international banks had been taking more money out of heavily indebted countries than they had been putting in.

Since 1985, IMF has become a net importer of funds from the developing countries. Even the liberal Brandt Commission conceded that the "IMF has imposed unnecessary burdens on the poor countries that caused riots and the toppling of governments."

The early 1980s, thus, marked the beginning of the period of 'debt slavery' for the poor countries because it saw the emergence of the awesome phenomenon of annual service charges exceeding the amount of loans by a gradually growing margin. In 1991, as many as 114 countries were indebted to the world bank, and were regular supplicants for its favours for getting fresh loans, as also for receiving various concessions like re-scheduling or forgiving of old debts.

The pauperisation and indebtedness of a large segment of world population resulted in substantial reduction in the imports of the products of industrialised countries and also caused a fall in the growth rate of their economies.

Exports

As stated earlier in the book, trade with India had remained a source of substantial incomes for the European countries for a very long period of time. Therefore, the blocking of the trade routes after the emergence of Ottoman empire compelled the European countries to undertake extremely hazardous voyages for discovering a new sea route to India.

But, the European countries turned trade into a means of exploitation and colonisation. Consequently, the poor colonised of sisal as compared to the preceding year. The Prime Minister of Malaysia has accused the World Bank for deliberately over-estimating future prices of rubber with a view to bringing about a large increase in its production and a consequential fall in its prices.

In the name of trade, a plunder of the resources of the poor countries has been going on during the last 50 years.

In December 1991, while inaugurating a conference of 150 countries in Paris, Shri Mitterand, the President of France, had stated that despite the end of colonialism rich countries had continued to exploit the resources of the poor countries through grossly unjust terms of trade. He also said that the so-called development aid can in no way be a compensation for the rape of the resources of the poor countries.

Indebtedness

Indebtedness further added to the already unbearable miseries of the inhabitants of poor countries. In the WDR 1985, Gamani Corea, former Secretary General of UNCTAD, had expressed his concern for the poor people of the Developing countries. He observed: "For a developing country, the servicing of its debt becomes a real problem if it significantly impairs its ability to sustain a level of import adequate to meet its developmental requirements. If the level of imports possible is barely adequate to meet the `normal requirements of economy, allowing for little or no growth, the problem becomes truly critical. Since the discharge of debt obligations usually enjoy a prior claim on the total external resources available to a country, the point of default is usually the point of total disruption and breakdown".

Actually, developing countries had become net exporters of capital from 1982 onwards because the service payments had far exceeded the capital inflows. During 1985, developing countries

countries sank deeper and deeper into debt and were forced to restrict their imports to the barest minimum. This had an adverse effect upon the exports of rich countries.

As may be seen from Table 5.2, the growth rate of exports of G-7 countries had fallen from 18.7 percent per annum during the seventies to 7.2 percent per annum during the eighties. This steep fall in the growth rate of exports impelled the rich countries to introduce in the Uruguay Round of GATT negotiations four new areas of Agriculture, TRIPS, TRIMS and Services with a view to raising the value of their exports. But just the opposite happened. The growth rate of exports of the G-7 countries fell from 7.2 percent per annum during the eighties to 4.9 percent during the nineties. And, as may be seen from table 5.1, the share of G-7 countries in the world exports, which had risen from 48 percent in 1980 to 54 percent in 1990, had fallen to 50 percent in 1998.

5.1 EXPORTS FROM G-7 COUNTRIES – 1970 TO 1998

Value (Billion dollars)

Country	1970	1980	1990	1998
1. America	43	213	394	682
2. Japan	19	130	288	388
3. Germany	34	192	421	542
4. England	19	114	185	273
5. France	18	110	216	305
6. Italy	13	78	170	305
7. Canada	16	63	128	215
G-7 Countries	162	900	1802	2648
	(48)	(48)	(54)	(50)
World	338	187	3328	5254

Note: Figures in brackets show % share in World total.
Source: World DevelopmentReport 2000/01(table 20)

Significantly, the growth rate of the exports of the G-7 countries had fallen from 7.2 percent during the eighties to 4.9 per cent during the nineties while the growth rate of world exports had remained constant at 5.9 percent during the two decades. This means that while the exports of G-7 countries were showing growth rates lower than the growth rates for world exports, Many countries of the world were showing growth rate of exports which were higher than the growth rates of world exports.

5.2 EXPORTS\ FROM G-7 COUNTRIES – 1970 TO 1998
Growth Rate (Percent per annum)

Country	1970-80	1980-90	1990-98	1970-98
1. America	17.4	6.3	7.1	10.4
2. Japan	21.2	8.3	3.8	11.4
3. Germany	18.9	8.2	3.2	8.4
4. England	19.6	5.0	5.0	10.0
5. France	19.8	7.0	4.4	10.6
6. Italy	19.6	10.2	4.5	11.0
7. Canada	14.7	7.3	6.7	9.7
G-7 Countries	18.7	7.2	4.9	10.5
World	18.9	5.9	5.9	10.2

Obviously, the main cause for the fall in the growth rate of world exports is the widespread and aggravated situation of poverty in the world and not the tariffs and other restrictions to the flow of trade. And the reduced share of the G-7 countries in the world trade is an indication of a trend for regionalisation of world trade as against the globalisation of trade.

High Wages in HICs

In addition to the widespread and aggravated situation of poverty, another important reason for the fall in the growth rate of world exports has been the very high wages in the HICs, which has made their products costlier. And, HICs account for about three-fourths of the world exports. This situation was pointed to by

Klaus Schwab, President of World Economic Forum. In 1994, Schwab wrote: "Traditionally, the world has been divided into rich countries with high productivity and high wages, and poor countries with low productivity and low wages. But, now, some countries combine high productivity with low wages. The growing presence of these countries in world markets is leading to "massive deployment of productive assets" which is making it impossible for advanced countries to maintain their standard of living. In other words, competition from the emerging economies of the Third World has become a threat, perhaps the threat, to the economies of the First World."

The perceived threat to the standard of living of the HICs is not a new idea propounded by Schwab. As far back as during the 1950s, George Kennan, the then head of America's State Department's Policy Planning Staff, had also expressed concern for the threat to the lifestyle in the West and had written: "We have about 50 percent of world's wealth, but only 6.3 percent of its population. In this situation, we cannot fail to be the object of envy and resentment. Our real task in the coming period is to devise a pattern of relationship which will permit us to maintain this position of disparity without positive detriment to our national security. To do so, we will have to dispense with all sentimentality and day-dreaming and our attention will have to be concentrated everywhere on our immediate national objectives. We need not deceive ourselves that we can afford today the luxury of altruism and world benefaction. We should cease to talk about vague and unreal objectives like human rights, raising of living standards and democratisation. The day is not far off when we are going to deal in strict power concepts. The less we are hampered then by idealistic slogans the better it will be for us." (Turning the Tide by Chomsky, page 48)

The capitalist system of production has created a situation of large and growing income disparities between the rich and the poor of the world. These disparities are sought to be protected in the name of protecting standard of living in the rich countries. Protecting standard of living of the 15 percent of world's population living in the rich countries will mean perpetuating the poverty of the 60 percent of world's population living in the poor countries. And WTO is the instrument of the rich countries for the protection of their standard of living.

But, the real danger to the standard of living in the rich countries is not posed by the poor countries, as stated by Schwab, but by the MNCs located within the rich countries.

Collapse of Capitalism

'The End of Work," written by Jeremy Rifkin is a severe condemnation of the capitalist system of production. The book warns that in the coming years newer and newer technologies will be depriving millions of workers in all the three segments of the world economy viz. agriculture, industry and services, and ultimately create a situation of near workerless world economy, leading to the collapse of capitalism.

Machines are the very embodiment of the investment that drives a capitalist economy. But, whenever a machine moves in, many workers move out. The entrepreneur argues that a machine, though it replaces many workers, raises productivity and the national income.

The additional income generated by a machine adds to the stock of capital owned by the entrepreneur who uses it for purchasing more machines with a view to optimising his income and profits. The endeavours of millions of industrialists, thus, increase the income and wealth of a country.

But, Simonde de Sismondi, a renowned economist of Europe, raises the question: "Is wealth everything and men are absolutely nothing? If, wealth alone counts, then there is nothing more to wish for than that the king, remaining alone on the island, might produce all the output of the island through automata by constantly turning a crank.

Consciously, or unconsciously, Sismondi expressed views which are in conformity with the ancient Indian view that the goal of economic activity is to facilitate an alround development of man. The ancient Indian thought system considered people of a country as a part of its wealth.

According to Kautilya, "artha" has a much wider significance than merely "wealth". The material well-being of individuals is a part of "artha". Kautilya's Artha-Shastra says: "The source of livelihood of men is wealth and wealth of a nation is both its territory and the inhabitants, who may follow a variety of occupations."(15.1.1)

Rifkin's book is about a world in which MNCs have taken the place of kings, turning cranks that set into motion the mechanical, electrical and electronic automata that provide the goods and services to the people of the world.

For about 200 years there has been a migration of workers leaving jobs that technology has taken away and joining other that it was creating. But this process has almost come to an end. During the time labour was moving into and then out of the factory, a third great sector was offering growing possibilities for employment. This was the expanding range of "services" sector which includes teachers, lawyers, nurses, doctors, maids, baby-sitters, government officials, traffic cops, file clerks, typists, custodians and sales people.

But, as with manufacturing, technology in services sector also created jobs with one hand and took it away with the other. The sector grew on the back of the typewriter and telephone and shrank under the impact of the Xerox machine and the mail order catalogue. But, the computer has brought the drama to a close, threatening to allow the MNC to sit on its island, turning its crank, while the automata goes to work.

The MNCs have been sharing with the workers in their home countries the huge profits made from trade by imposing upon the poor countries excessively exploitative terms of trade. For about 25 years upto 1980, when the world trade had a high rate of growth, workers in the developed countries gained much in terms of wages and benefits. But, during the same period of time, wages in the developing countries had shown very small increase, if any.

For realising further increases in their profits, therefore, the MNCs started moving their factories to the low wage countries and exporting their products back to their home countries as also to the export markets of their home countries.

The shifting of factories to the low wage countries coupled with reduced demand for exports resulted in a situation of unemployment and under employment in the developed countries. By using the threat of moving the factories to the low wage countries and even to the low wage pockets within the same country, the MNCs succeeded in reducing the wages of the workers and, thereby, increasing their profits, year after year.

In several European countries, working hours have been reduced in order to avoid retrenchment of workers.

All this caused much resentment among the workers in the developed countries. They joined the crowd of over 50000 people protesting against the policies of WTO during the Seattle meeting in November 1999.

During the meeting of the World Economic Forum (WEF) held at Davos in January 2000, the police had to use tear gas in order to control a crowd protesting against the free trade policies of WTO. Protestors mainly from France and Italy, were holding the banner of "Anti WTO Coalition".

During the Bangkok Conference of UNCTAD held on 13-2-2000, the determined anti-WTO protestors had penetrated the tight security arrangements and managed to hit with a fruit pie Michel Camdessus, the outgoing Managing Director of IMF.

There is a steadily increasing pauperisation of the people in the poor countries of the world. According to an UNCTAD paper read in the Bangkok meeting, the 48 LDCs accounting for 13 percent of world's population had a 4 percent share in world trade in 1980, which was lost during the nineties.

A Silent War

In 1985, Luis Ignacio Silva, the famous Brazilian labour leader, had said: " Without being radical or overly bold, I will tell you that the Third War has already started – a silent war, not for that reason any the less sinister. This war is tearing down Brazil, Latin America and practically all the Third World. Instead of soldiers dying there are children; instead of millions of wounded there are millions of unemployed; instead of destruction of bridges there is tearing down of factories, schools, hospitals and entire economies. It is a war by the United States against the Latin American continent and the Third World. It is a war over the foreign debt, one which has its main weapon, interest, a weapon more deadly than the atom bomb."

In 1986, the seven most industrialised countries of the world had their first summit in Ramboullet in France. The G-7 countries had come together for safeguarding and promoting their interests which were identical because of a common background of being ex-coloniser and also being the home countries for most of the MNCs in the world. Actually, the MNCs had created the G-7 organisation as a covering and a camouflage for their activities. The G-7, thus, is the face of the organised strength of the MNCs and the rich of the world, which is pitted against the unorganised poor countries of the world. The G-7 countries control the World bank the IMF and the WTO.

In the July 1994 summit, the G-7 countries had tried to make a show of doing something in regard to the debt crisis of the world. A communique issued by the summit called the creditor nations to pursue measures to improve debt treatment of the poorest and most indebted countries of the world. Oxfam, a world organisation of NGOs working for helping the poor, called the communique as mere 'pious words.' John Magrath, head of the Oxfam said: "This communique is the off-hand way in which the debt crisis always seems to be considered by the G-7. The Trinidad terms of 1990 and the subsequent G-7 summits have not done anything to redress the big problem of multilateral debts payable to the World Bank and the IMF. One really starts to wonder weather the North takes any interest in the South at all unless the South poses some kind of threat to them. But, then, the institutions of South that could pose a threat to North do not exist."

What happened during the G-7 summit of July 2001 proved beyond any doubt that the Oxfam and the large number of such organisations had been working hard for building up the institutions that could pose a threat to the North.

The G-7 summit held at Genoa in July 2001 had around 100000 protesters from all over the world. And there were unprecedented scenes of violence in which Molotov Cocktail were used. From morning till night, there were running battles on streets of Genova, as tens of thousands of protesters vented non-stop rage at the rich countries' summit. The toll was the highest yet for an anti-globalisation protest: one dead, 450 injured, tens of millions dollars in damage, and a large part of city devastated by riots. Protesters demanded a reduction in the debt of poor countries.

Debt Slaves

The external debt of the developing countries has risen steeply from $295 billion in 1971 to $2465 billion in 1998, indicating a high growth rate of 8.4 percent per annum over a long period of 27 years. The amount of $296 billion paid in debt service in 1998 was higher than the debt of $295 billion in 1971. (table 5.3)

5.3 EXTERNAL DEBTS OF DEVELOPING COUNTRIES
1971-1998

(Billion dollars)

Year	Debt	Debt service
1971	295	34
1980	1138	174
1990	1773	198
1998	2465	296

Source: *World Bank Global Development Finance 1999*

Debt is the most intractable problem for the countries of South. The interest payments that are a crippling burden for them, are quite unjust because they have already paid back amounts many time larger than the amount of initial loans. Logic demands that either the compound interest rates are constrained in some way, or debts are repudiated in some way or the other.

Between 1992 and 1990, $927 billion was advanced to the South, but an amount of $ 1345 billion had been paid in debt service alone. With principal, this amounted to $12.5 billion per month. There has not been an outflow of wealth of this magnitude since the conquistadors plundered Latin America.

In September 1996, under pressure from the indebted countries and the NGOs, the IMF and the World Bank had adopted the 'Highly Indebted Poor Countries initiative (HIPC). But, the G-7 and the IMF scuttled this initiative. The implementation of the HIPC initiative would have cost less than what is spent by US citizens on sport shoes over a period of eight years.

Emerging Asia

According to Projections made by Economists in 1993, the centre of economic growth is shifting to Eastern Asia. According to the World Bank, seven NIEs along with China and Japan, accounted for 3 percent of the World GNP in 1950. In 1993, their aggregate GNP had risen to 22 percent.

According to the World Bank, during the next ten years, 55-60 percent of the growth of world GDP will be accounted for by East Asia because GDP there is expected to grow at the rate of 5.4 percent per annum. Therefore, Asia will be the dynamo of growth in the future. Saving rates present further evidence in this regard. In the West, saving rates had declined from an average 16 percent in 1960 to 8 percent in 1993. During the same period, most of Asian countries had saving rates above 30 percent and the saving rates in Japan, in spite of a fall from 28 to 23 percent, were about three times of the saving rates in the West.

Besides, the G-6 (G-7 minus Japan) closed 1992-93 with a collective current account deficit of $ 168 billion, while East Asia finished with a current account surplus of $ 173 billion, making it a net exporter of capital.

The position during the nineties has been in conformity with the abovesaid projections made in 1993. According to the World Development Report 2000-2001, the annual growth rate of GDP for East Asia and Pacific, which includes china and Japan, was as high as 8.0 percent during the eighties and 7.4 percent during the nineties. For South Asia, which mainly comprises former undivided India, the growth rate of GDP has remained constant at a healthy 5.7 percent during the eighties and the nineties. (table 5.4)

For Europe and Central Asia, which includes four members of G-7, the annual growth rate had declined from 2.4 percent during the eighties to (-)2.7 percent during the nineties. For America, the growth rate of GDP has risen from 3.0 percent during the eighties to 3.4 percent during the nineties. And for Canada, the growth rate has declined from 3.3 percent during the eighties to 2.3 percent during the nineties. For the world, the growth rate of GDP has declined from 3.2 percent during the eighties to 2.5 percent during the nineties. (Table 5.4)

5.4 GROWTH RATES OF GDP - EIGHTIES AND NINETIES
(percent p.a.)

Countries	1980-90	1990-98
ASIA		
East Asia	8.0	7.4
(including China and Japan)		
South Asia	5.7	5.7
(includes former undivided India)		
EUROPE AND AMERICA		
Europe & Central Asia	2.4	(-)2.7
(includes four members of G-7)		
America	3.0	3.4
Canada	3.3	2.3
WORLD	3.2	2.5

Source : World Development Report 2000-2001

On the whole, the growth rates of the GDP during the eighties and nineties have been significantly higher in Asia than the growth rates in Europe, America and Canada. So the projections made in 1993 that the centre of economic growth is shifting to Asia has been confirmed by the latest available information regarding growth rates of GDP in the world.

The demonstrations at Seattle, Davos , Bangkok and Genoa show that the workers in the developed and developing countries have become united against the exploitative policies of the WTO which has been found to be only a tool in the hands of MNCs.

Kofi Annan, Secretary General of the United Nations, is also unhappy about the attitude and actions of the rich countries. In an article written after the failure of Seattle meeting he said: "it is hardly surprising if the developing countries are suspicious of those who claim to be helping them by introducing new conditions or restrictions on trade. They have been told time and again that free trade is good for them and they must open up their economies. And, they have done so often at considerable cost. But, the rich countries have cut their tariffs less than the poor countries. The rich countries are happy enough to export manufactured goods to each other; but from developing countries, they still want only raw materials. As a result, their average tariffs on manufactured products imported from developing countries are now four times higher than the tariffs on products imported from the industrialised countries. In addition to the high tariffs, quotas and anti-dumping penalties are used to keep Third World imports out of the First World markets. In reality, it is the industrialised countries who are dumping their surplus food on world markets, and, thereby, threatening the livelihood of millions of poor farmers in developing countries who cannot compete with subsidised imports from rich countries."

The continuous process of concentration of wealth, which is the cardinal characteristic of the capitalistic order of production, has resulted in the world economy look like several tiny and shrinking islands of prosperity surrounded by a vast and turbulent ocean of poverty.

In his famous book 'The End of Work', Jeremy Rifkin says: "Rising levels of worldwide unemployment and the increasing polarisation between the rich and poor are creating the conditions for social upheaval and open class warfare on a scale never before experienced in modern age. Crime, random violence and low intensity warfare are on the rise and they show every sign of increasing dramatically in the years immediately ahead. A new form of barbarism waits just outside the walls of the modern world. Beyond the quiet suburbs, exurbs and urban enclaves of the rich, lie millions upon millions of destitute and desperate human beings. Anguished, angry and harbouring little hope for an escape from their circumstances. There are the potential leaders and the masses whose cries for justice and inclusion have gone unheard and unaddressed. Their ranks continue to swell as millions of workers find themselves without work, and suddenly and irrevocably outside the gates of the new high-tech global villages."

George Soros, a graduate of the prestigious London School of Economics and an outstanding capitalist who had the brilliance needed for exploiting even capitalism and had made billions of dollars in the process, is of the firm belief that "global capitalism is coming apart at its seems." In his famous book "The Crisis of Global Capitalism" he says: "Unfortunately, we are again in danger of drawing the wrong conclusions from the lessons of history. This time the danger comes not from communism, but from Market Fundamentalism. Communism had abolished the market mechanism and imposed collective control over all economic activities. Market Fundamentalism seeks to abolish collective decision-making and to impose the supremacy of market values over all political and social values. Both extremes are wrong. What we need is a correct balance between politics and markets, between rule making and playing the rules."

Both Jeremy Rifkin and George Soros seem to be groping towards the ultimate truth lying in the hallowed wisdom of ancient India, according to which the goal of economic activity is development of human faculties and skills, and not accumulation of wealth only - the later being only a means to achieve the former.

Having development of human faculties as the goal of economic activity explains the most astonishing fact that India had remained the richest country of the world for an unbelievably long period of over 7000 years, right upto the middle of eighteenth century.

And having accumulation of capital as the goal of economic activity has resulted in a situation in which no industrial power has been able to remain at the top even for 100 years. This is what Paul Kennedy has lamented about in the 678 pages of his famous book titled "The Rise and Fall of Great Powers" which covers the later 500 years of the second millennium.

Reduced Growth Rates

The rate of growth of GDP in the Industrialised countries had shown a downward trend after seventies. According to the World Development Report 2000-2001, the growth rate of World GDP had declined from 3.2 percent per annum during 1980-90 to 2.5 percent during 1990-99. This was largely due to a significant fall in the growth rate of GDP in the High Income Countries from 3.1 to 2.4 percent and a marginal fall in the growth rate of GDP in the Low and Middle Income countries from 3.4 to 3.3 percent.

For the year 2001, the IMF visualised a growth rate of 2.7 percent for the world GDP, which is much less than the growth rate of 4.1 percent in 1997. The growth rate for America's economy, which is the largest in the world and accounts for 29 percent of the World GDP, is expected to be less than 1 percent. Japan, the second largest economy of the world accounting for 15 percent of World GDP, is expected to show a fall of 1 percent in its GDP. On the other hand, the growth rate of GDP is expected to be over 7 percent for China and over 5 percent for India. According to IMF "the robust growth rates of GDP in China and India are due to their limited exposure to world economy. Though, both the countries are not isolated from the world economy, their dependence on exports is limited and their growth is mainly due to the internal demand."

Poverty is the most serious problem of the world. In addition to being a danger to peace and stability in the world, poverty is also inhibiting the process of growth of the world economy on account of the growing conditions of destitution in large parts of the world. The most important responsibility of all world organisations, therefore, is to make all possible endeavours for the alleviation and mitigation of conditions of poverty in the world.

But, for the MNCs, the most important goal is to increase the stock of their capital by optimising profits. And, trade is the most important means for maximising profits. The MNCs have succeeded in relegating to the background the question of removing poverty and in projecting the expansion of trade as the most important goal of all international organisations. MNCs have made WTO the super-government of the world.

Free Trade

The globalisation of financial markets is taking place all over the world and the strength of these global forces is very much greater than that of the national governments. All over the world, people have been found to be divided on the crucial question of protection and free trade. A study in this regard had been done for the ECONOMIST by the August- Reid group, a Canadian Pollster. It is based upon an opinion poll carried out among 12741 adults spread over 22 important countries of the world. The leading question asked in the poll was "as to which of the following two approaches do you think would be the best way to improve the economic and employment situation in this country":

i) Protecting our local industry by restricting imports; or
ii) Removing import restrictions to increase our international trade.

Replies received to this question showed that

i) Protectionists world-wide outnumbered free traders - 47% to 42%
ii) Proportion of people supporting free trade had declined from 43% in 1997 to 42% in 1998.

In 14 out of the 22 countries, protectionists had outnumbered the free traders and another four countries had shown a fall in the number of free traders, which means a swing towards protectionism.

The trend for a fall in the number of free traders and a rise in the number of protectionists has been called as 'amazing' in the study because it has shown a negative result for the stupendous global efforts of the WTO, the World Bank, the IMF and the most powerful group of G-7 countries for the propagation and promotion of free trade and globalisation in the world.

It is interesting to note that America, Australia, UK, Canada and Italy, who are strong champions of free trade in the world, have large majority of their own people still supporting protection. The study says: " A clear majority of Americans (56% to 37%) are protectionists even today." And, over the past one year, the number of free traders in America had declined by 4%. Such decline was much larger in Italy (21%), Canada(13%) and UK(12%). All this means a further swing towards protectionism.

India

According to the study, 56% of Indians are protectionists and 37% are free traders - exactly the same proportion as in America. But, in India, the swing towards protectionism has been found to be four times stronger than in America. Over the past one year, the number of free traders in India has declined by 15% as against the fall of 4% in America.

Actually, among the 22 countries, India has shown the second largest swing towards protection, Italy being the first in this regard.

In the developed countries, people are turning towards protectionism because of the hope that it would solve their problems of unemployment and underemployment, which are the results of MNCs resorting to downsizing, lay-offs, mergers, acquisitions and shifting of factories to the low wage countries, with the objective of optimising profits and raising the stock of their capital.

In the developing countries, people are against free trade because they have come to understand that the euphoria over free trade and globalisation had been created by the ex-colonial powers - now masquerading as the G-7 countries - for the purpose of regaining their old prerogatives of having assured markets for the sale of their products and investment of their capital. For achieving these goals, the ex-colonial powers had created GATT, the World Bank, and the IMF. The GATT had been transformed into the World Trade Organisation (WTO) which conducts itself as the super-government of the world.

Soro's Warning

An excessive emphasis on free trade has resulted in the emergence of excessively free currency market which has ruined the economies of several countries in East Asia and has created conditions of turmoil and recession in the entire world. Consequently, millions of free traders in the world have become protectionists.

George Soros, the wizard of financial market has written a book ' The crisis of Global Capitalism : Open Society Endangered '. In this book, Soros argues that financial markets have grown so powerful that they can destroy societies. He has suggested better regulation of financial markets because the IMF has proved incapable of preventing the situations of crisis erupting at different places in the world.

The ECONOMIST has said that for policy makers the study done by August Reid Group could prove powerful food for thought. This study is very important for the policy makers in India. It confirms the popular belief that free trade at this stage is not in the interest of a balanced growth of Indian economy and that the majority of Indians are against the imposition of free trade upon India. The figure of 56% for free traders in India arrived at by the study is confirmed by the ground reality as also the aggregate of protectionists in all political parties in the Parliament.

The Canadian Pollster August Reid Group had also asked a question on free movement of capital. In reply to this question, 49% of people world-wide had supported tighter control; 37% were against it; and 14% could not say anything. In Spain and Italy, clear majority of people supported free movement of money. People in China, South Korea, Taiwan and Thailand, were largely against free movement of capital.

This question had assumed importance because of the turmoil in world economy which was widely attributed to the problem of excessive speculation or hot money, which had emerged because of the existence of huge stocks of unutilised capital in the developed countries of the world. During his visit to India in December 1998, Percy Barwick, the owner of a colossal financial empire had said: " there is $45 trillion capital lying in the world looking for investment and India gets $2 billion only. Why don't you create the environment for attracting that capital? Shri Barwick was only playing the role of a peddler of foreign capital.

In their book titled ' Market Unbound ', Lowell Bryan and Diana Farell say that in 1992, the world stock of liquid financial assets was roughly twice the $16 trillion GDP of the OECD countries. By the year 2000, the GDP of these countries was expected to grow to $27 trillion, while the stock of financial assets was to be thrice as much at $81 trillion.

The TRIMS agreement of GATT is only an attempt of the developed countries for securing and ensuring investment opportunities in the developed countries of the world.

The existence of huge stocks of capital in the developed countries is also proved by the fact that the rate of interest in the developed countries is less than half of that in the developing countries.

Rampant Capitalism

The problem of rampant capitalism or hot money has been made extremely unmanageable by the formation of TRIAD alliance between the US treasury, the Wall Street and the MNC. This alliance is aggressively trying for an unbridled role for short-term capital, so that it can freely slosh around in the world economy. In spite of the great havoc caused in the world economy this Triad is opposing every form of control on the movement of capital in the world and is asking for more openness ' in the name of globalisation.

In September 1998, an exasperated Mahathir bin Mohammad, Prime Minister of Malaysia, had taken a big bold step backward from the free market by introducing a range of foreign exchange controls in order to shield its badly battered currency ringgit and for saving the economy from the speculators. Mr. Mahathir had firmly refused to receive assistance from the IMF. On the New Year eve, he lambasted the western powers and said: "Their leaders, media, traders, international agencies and banks will all resort to whatever means it takes to achieve their nefarious objectives". He warned Malaysia to stay vigilant against enemies who were out to re-colonise the South Asian countries.

George Soros, the wizard of financial markets, says that capitalism is heading for a collapse. Marx had also predicted collapse of capitalism. But, capitalism became stronger after Marx. Lenin had attributed it to the fact that capitalism had entered a new stage in which colonies were used as markets for the products of industrialised countries and for investment of their capital. This gave capitalism a new lease of life.

The long-drawn development of America consisted in a joint movement of capital and labour. Massive investments of European capital in America created jobs for millions of people, which, in turn, created demand for a vast range of goods and services. It was the symbiosis between labour and capital that lent sustenance and strength to capitalism.

The huge stock of capital in the developed countries is the result of a high growth rate of economy during 1950-1990. America was the biggest beneficiary of this stupendous growth because its production potential had increased enormously during the period of World War II (1939-45) and it remained intact after the war.

Between 1950 and 1980, a large part of the gains of economic growth in America had gone to the poorer sections of the people and incomes of the poorest fifth of Americans had grown faster than the incomes of the richest fifth of Americans.

But, after 1980, distribution pattern of income in America got tilted in favour of the rich and against the poor. Government of President Reagan took several measures for raising the return on capital (i.e. profits) and restricting the return on labour (i.e. wages). The government gave a free hand to the MNCs for downsizing, lay-offs, mergers, acquisitions and shifting of factories to the low wage countries. Consequently, wages remained stagnant and profits continued to rise. During 1980-1995, incomes of the richest fifth of Americans (mostly share-holders) had risen by 11 percent, whereas incomes of the poorest fifth of Americans (mostly workers) had fallen by 10 percent.

These figures declared the victory of capital over labour and the demise of the spirit of symbiosis between capital and labour, which had lent sustenance, stability and respect to capitalism in spite of its inherent contradictions.

Accumulation of capital by optimising profits is the core idea of capitalism. Downsizing, mergers, acquisitions and moving the factories to the low wage countries are increasingly in vogue in the developed countries because of the keen competition and the continuous urge for raising profits.

Millions of unemployed or under-employed in developed countries mean reduced demand for various goods and services. Machines can reduce the cost of production, but machines do not create demand for goods and services. That is the crucial point which has been overlooked in the mad race for raising profits and increasing the stock of capital.

The turmoil in the world economy and the continuing recession is the result of the inherent contradictions of capitalism. The discovery of America had given a new lease of life to capitalism. But, now, no such discovery is possible on this planet.

The raisen d'etre of economics is to devise ways and means for promoting the welfare of the people by developing their faculties and proficiencies. But, the capitalist system of production has reduced man to the position of a cog in the machine for the purpose of generating capital.

The White Paper on unemployment published by the European Union in 1994 had called for the formulation of a new model of economic development based upon triangular relationship of growth-competition-employment.

Human Development Report of the UNDP says that development should be woven around man, not man around development.

In the developed countries, however, the problem of unemployment is not very serious and they have sufficient resources for supporting the unemployed. But, in India, the problem of unemployment is already very serious and we do not have resources to support the unemployed. Therefore, the above said suggestion of European Union for giving equal importance to growth , competitiveness and employment is particularly relevant for India.

Thousands of years back, a wise person in India had said:

"Bubhukshitah kinna karoti papam, kseena nara nishhkaruna bhavanti. The hungry can commit any crime , the weak get devoid of compassion.

Around the middle of twentieth century, a President of America had said: "If a society cannot help the many who are poor, it cannot save the few who are rich."

World Stock of Capital

Almost all sales and purchases of enterprises in the world is being done by the MNCs who own the capital stock of FDI. The FDI stock of capital in the world has risen from $ 104 billion in 1965 to $ 4772 billion in 1999. This means a 46-fold increase in 34 years and an annual growth rate of 12 percent, which is more than three times of the growth rate of world GDP during this period. This high growth rate of the world stock of FDI is largely due to the fact that the MNC have been extracting a much higher return on the investments made in the Developing countries as compared to the return from investment in the developed countries. According to the World Bank Report titled "Global Economic Prospects and the Developing Countries", the rate of return from FDI in developing countries is 10-12 percentage points higher than the return from FDI in developed countries. The report says that "higher returns on FDI in developing countries are due to greater risks, but no data are available on this." Apparently, this statement is a blatant lie because the risk factor on investments in developing countries is covered by the system of guaranteed returns. The high guaranteed returns is nothing but a form of exploitation of the poor countries by the MNCs

UNCTAD Study on MNCS

UNCTAD has prepared a study based on the views of MNC managers on various aspects of investment during the next five years. Salient findings of this study are as under:

1. Developing countries will have a rapidly rising share in the production and exports of MNCs
2. MNCs will have greater reliance on mergers, acquisitions, alliances and joint ventures as vehicles for international expansion.
3. For MNCs, market access will remain the most important motive in the choice of location. On an average, MNCs will place almost twice as much weight on " production for local market" as on " labour-cost-driven-location". This preference will be particularly marked in services.

Money Power of MNCs

In the industrialised countries, there is a growing surplus of capital due to the rate of growth of FDI in the World remaining much higher than the growth rate of World GDP (Table 5.5)

5.5 WORLD GDP AND WORLD STOCK OF FDI
(Million dollars)

Year	GDP	Stock of FDI
1980	10674	495(4.6)
1990	21390	1761(8.2)
1999	30212	4772(15.8)
	Growth Rate % p.a	
1980-90	7.2	13.5
1990-99	3.9	11.7
1980-99	5.6	12.7

Note: *Figures in brackets are % share in World GDP.*

Sources : *1. World Investment Report 2000.*
2. World Development Report 2000/2001.

In 1980, world stock of FDI was only 4.6 percent of the world GDP. This ratio rose to 8.2 percent in 1990 and to 15.8 percent in 1999. In other words, the world stock of FDI, which was only 1/22 of the world GDP in 1980, had risen to be 1/6 of the world GDP in 1999. This is due to the fact that the growth rate of the world stock of FDI has always been much higher than the growth rate of World GDP. During 1980-90, the annual growth rate of the world stock of FDI (13.5%) was about double of the growth rate of GDP (7.2%). But, during 1990-99, which is the period of globalisation and liberalisation of trade, the growth rate of the world stock of FDI (11.7%) is about three times larger than the growth rate of world GDP (3.9%). This is due to the fact that the growth rate of GDP during 1990-99(3.9%) has fallen to about one-half of the growth rate during 1980-90(7.2%), whereas, during the same period, the growth rate of world stock of FDI has shown a much smaller decline, from 13.5% to 11.7 %.

In 1999, the MNCs could make an investment of about $500 billion on the basis of the return from their stock of $4712 billion. The MNCs also borrow from a variety of sources, namely commercial banks, equity markets, public organisations and their corporate systems in the form of internally generated profits. Taking into account all these sources, the investment potential of the MNCc is estimated to be about four times of the return from the investment of the stock of capital owned by them.

Borrowing from a variety of sources at lower rates of about 7 percent and investing at higher rates of return of about 15-22 percent explains the very fast growth of FDI stock in the world.

FDI is now the dominant mode of investment in the world. The inordinately large growth of FDI during the last 33 years has resulted in a large and growing control of the MNCs over the economies of developing countries. And, as is evident from the study on managers referred to above, MNCs are having plans to further tighten their stranglehold over the economies of all countries of the world.

We are in an incipient stage of an extremely insidious form of colonisation in which money power is playing the part that military power had played in the case of earlier colonisation. We must reduce to the minimum our need for foreign capital. And, in meeting this minimum need, reliance on FDI and the MNCs should be reduced to the minimum possible by having larger recourse to other sources namely, GDR, FII, NRIs and foreign banks.

During the last 20 years, the industrialised countries have accumulated very large and fast growing stocks of unutilised capital. This is the reason why the West is keen to develop opportunities for the investment of its capital stock through TRIMS (Trade Related Investment Measures) and MAI (Multilateral Agreement on Investment) evolved by OECD (Organisation for Economic Co-operation and Development) which comprises 45 rich countries of the world.

In addition, MNCs have their men among government officials and ministers; political leaders; and journalists, who incessantly try to influence the policies of their government and the opinion of the people with the objective of increasing the reliance of their country upon foreign capital, which broadly means FDI by MNCs. These people are more dangerous than the overt means of GATT like TRIMS and MAI. Such people had brought about the ruin of Asian economies by making their governments receive foreign capital far in excess of the needs of the economy. And, the flight of this hot money started the turmoil in Asia.

Even this turmoil has been called an 'opportunity' by the MNCs because it has brought about a fall in the prices of the assets of the afflicted countries, which the MNCs had been planning to buy for long. The WIR 1998 says: "Some of the changes are actually conducive to increasing FDI flows to affected countries.

One is the fall in the cost of assets. In addition, the availability of firms seeking capital, and liberalisation of policy with respect to the M&As facilitates the entry of foreign investors through acquisition of assets." (Overview page xxii)

So the economic disaster in Asian countries was considered an opportunity by the MNCs for entering the territories of affected countries by spending much smaller amounts than they were prepared to spend.

But, the WIR 1998 is speaking only half the truth. The other half of the (bitter) truth is that the TRIAD comprising US State Department, Wall Street and the MNCs 'engineers' turmoil in different countries of the world with the objective of buying cheap their assets which they would not even think of selling in the normal circumstances.

FIENDISH. Yes. But, this is the real face of Globalisation. Actually, capitalism's conception of globalisation is opposite of India's conception of globalisation mentioned above.

India's Prudence

For more than a year after the eruption of financial crisis in Asia in July 1997, the US treasury and the IMF had been lecturing the shaken governments that the only prudent response to their financial problem is to move more rapidly towards free markets for everything from cars to currency.

But several eminent economists favoured controls on capital movement. In an article in Foreign Affairs, Jagdish Bhagwati wrote: "Wall Street has obvious self interest in a world of free capital mobility because it enlarges the area in which to make money. This is, however, not in the interest of emerging economies. Before allowing free market in capital, these economies must reckon with the cost and also consider the probability of running into a crisis. Indeed, capital flows are characterised by panics and maniacs."

World Bank chief economist Joseph Stilglitz also favoured some controls on movement of capital and has said that "controls should be used to discourage short-term investment (bank loans and currency trade) without disrupting investment in factories and infrastructure. Free flow of international capital will expose developing countries to unnecessary risks without commensurate returns".

But, many countries in Asia allowed their economies to be swamped by foreign capital. And, the flight of this hot money started the Asian crisis. The devaluation of Baht on 2-7-97 started the crisis which spread to Indonesia, Thailand, Korea, Malaysia and infected even Japan, which is the second largest economy of the world. But, India had made prudent use of capital, and, consequently, recorded growth rates which were about the best in the world.

Even IMF and Wall Street applauded India for its growth rates. In the half yearly report on the World Economic Outlook released in late 1998, IMF said that the growth rates of India's economy had declined from 7.5 percent in 1996 to 5.6 percent in 1997 and to 4.8 percent in 1998. But, in China, growth rates had declined more steeply - from 9.6 percent in 1996 to 8.8 percent in 1997 and to 5.5 percent in 1998. The gap between the growth rates of China and India has, thus, been reduced. And, this has happened in spite of the very large difference in the inflows of foreign capital in the two countries

In 1996, China had shown a growth rate of 9.6 percent by investing $50.1 billion of foreign capital. India's economy is 1/3rd of China's economy. Therefore, for achieving growth rate of 9.6 percent India needed foreign capital equal to 1/3rd of $50.1 billion, i.e. $ 17 billion. But, India achieved a growth rate of 7.5 percent (i.e. 4/5th of 9.6 percent) by investing only $6.4 billion of foreign capital which is less than half of the stipulated amount of $17 billion.

Growth of Foreign Capital

India's above-said achievement is attributed to a prudent and efficient use of foreign capital. The IMF says that India has relied less on net private capital flows than has been the case with most of the 38 selected developing countries.

For example, Indonesia had shown a growth rate of 2.8 percent only while it had a substantial inflow of $18 billion as foreign capital. Thailand had recorded a minus growth of 0.4 percent in spite of the large inflow of $13.5 billion as foreign capital. In both these countries, the non-FDI inflow of foreign capital had formed a large part of the total inflow of foreign capital - 56 percent in Indonesia and 83 percent in Thailand.

Lord Keynes, the architect of the IMF had warned against the free movement of capital and had favoured control which could distinguish between movement of floating funds and genuine investments for development purposes. But, IMF itself has become the chief protagonist and promoter of free movement of capital in the world. After the crisis in Asian countries, it has been found that the amount of investment moneys that had flowed into the emerging economies was far in excess of the genuine needs of the economies. It speaks of the clout of foreign capital in the administration of these countries.

Sudden movement of such moneys out of the recipient countries instabilised the economies. This is how Indonesia, Thailand and several other countries had suffered. The IMF was very much aware of the excess inflow of foreign capital into these countries and was also aware of the dangers inherent in this situation. But, it did nothing to control the situation. Because, IMF is only a puppet in the hands of MNCs, which regulate the flows of capital in the world and are the major beneficiaries of the global movement of capital.

George Soros has suggested formation of an international agency to regulate the flow of trillians of dollars across the national borders. In his book 'Alchemy of Finance' published in 1989, he had said: "I had very low regard for the sagacity of professional investors. The more capable they are, the less they are capable of taking right decisions." Soros, who is an esteemed alchemist of finance, had himself gained and lost billions of dollars. In regard to the need for regulating global capital market, he is right on the dot.

Even Wall Street journal appreciated policies pursued by India. It said: "Capital controls had saved India from crisis. The decision of India to continue with capital control and its refusal to allow free flow of funds has enabled it to withstand the current global crisis. And, it has encouraged other afflicted countries to follow suit."

India did not follow the IMF prescription of free market for capital and after the spectre of financial bankruptcies erupting almost all over the world, the IMF brought itself round to appreciating India's policies of control on capital market.

The IMF has applauded India for "less reliance on foreign capital." Actually, the credit for this goes to the people of India. After the initiation of reforms in 1991, the government of India had started projecting the argument that liberalisation of imports of foreign goods and foreign capital were necessary for realising a faster growth of economy. Statements made by senior ministers of government gave the impression that they had turned pedlars of foreign goods and foreign capital.

The Swadeshi Jagaran Manch established in 1992, took up the challenge and told the people that a growing reliance upon foreign goods and foreign capital is the surest way to aggravating poverty and losing freedom. A vast majority of people in India, irrespective of party affiliations, supported the SJM line of thinking. Government has to restrain its enthusiasm for importing foreign goods and foreign capital.

PART II

NINTH PLAN

(1997 TO 2002)

Chapter Six

Ninth Plan

THE NINTH plan says that the tempo of economic growth was expected to suffer because of substantial shortfalls in the achievements of the Eighth Plan targets for the crucially important sectors of irrigation and power. Also, during the Eighth Plan period, the Balance of Payment situation had shown a serious worsening, which had increased our reliance on foreign capital.

Irrigation

During the Eighth Plan period, an additional irrigation potential of 8.4 mh had been created against a target of 15.8 mh. This meant an achievement of only 53% of the target, which is the lowest achievement after the Third Plan period ending in March 1966.(table 6.1). The Ninth plan set a target of creating additional irrigation potential of 17 mh., and, thus, raising the cumulative potential to 102 mh. By the end of Ninth Plan period, however, the cumulative potential is expected to be almost 100 mh.

The high growth rate of 2.9 percent per annum for foodgrains production during the eighties was largely due to the high rate of achievement of irrigation targets during the seventies. And, the much lower growth rate of 1.7 percent per annum for production of foodgrains during the nineties is largely due to the much lower rate of achievement of irrigation targets during the eighties.

6.1 PROGRESS OF IRRIGATION SINCE 1950
Million hectares

Plan(period)	Additional Target	Potential Actual (%)	Cumulative Potential
Pre Plan(1950-51)	22.60		
First Plan(1951-56)	7.85	3.66(57)	26.26
Second Plan(1956-61)	7.84	2.83(36)	29.08
Third Plan(1961-66)	10.38	4.52(44)	33.57
Fourth Plan(1969-74)	8.00	7.10(89)	44.20
Fifth Plan(1974-79)	11.10	10.26(93)	52.02
Sixth Plan(1980-85)	13.74	8.61(63)	65.22
Seventh Plan(1985-90)	15.00	11.30(75)	76.52
Eighth Plan(1992-97)	15.80	8.35(53)	84.88
Ninth Plan(1997-02)	17.05	15.00(88)	99.88

Note: Figures in brackets indicate achievement as % of target.
Source: *Ninth Five Year Plan (1997-2002) Volume II, page 479.*

Power

At the beginning of the eighth Plan period, the all-India installed capacity for generating power was 69065 MW and addition during the Eighth Plan period was 16423 MW, which was only 54 percent of the target of 30538 MW. The Planning Commission has pointed out that during the Eighth Plan period power was the worst performer among the various infrastructure sectors. During the last two years of Eighth Plan, addition to capacity was a dismal 2000 MW a year, against the addition of around 5000 MW a year during the pre-reform period. At the beginning of Eighth Plan period, the energy deficit was 7.8 percent and the peaking deficit was 18.8. At the beginning of Ninth Plan period, energy deficit had risen to 11.5 percent and the peaking deficit had been restricted to 18.0 percent.(table 6.2)

The Ninth Plan set a target of raising the generating capacity by 40245 MW to 125265 MW in 2001-02. The achievement of this target was expected to reduce the energy deficit to 1.4 percent and the peaking deficit of power to 11.6 percent (table 6.2). But, on 31-3-2001, the installed capacity was only 101630 MW, which was 23635 MW short of the Ninth Plan target. Therefore, the Ninth plan is expected to end with a big shortfall in the capacity generation. (table 6.2). The position in Power Sector at the end of Ninth Plan period thus, is, worse than that at the end of the Eighth Plan period.

6.2 POWER SUPPLY POSITION

(Percentages)

Deficit	Beginning of Eighth Plan	Beginning of Ninth Plan	End of Ninth Plan
Energy Deficit	7.8	11.5	1.4
Peaking Deficit	18.8	18.0	11.6

Source: *Ninth Plan (pages 681 and 688)*

The Ninth plan set a target of reducing the energy deficit to 1.4 percent and peaking deficit to 11.6 pecent. But, in 2000-01, the energy deficit was 7.8 percent and the peaking deficit was 13.0 percent

Demand for power in India has been growing at the rate of 10 percent per annum, while the availability has been increasing at the rate of less than 7 percent per annum. And, then, there is a backlog of shortage of 25000 MW. The shortage of power is around 12.5 percent with a peak demand deficit of upto 20 percent.

Our average plant load factor (PLF), or capacity utilisation, is a low 65 percent. We lose 22 percent of the generated power in transmission and distribution (T&D), which is more than double of the world norm of 10 percent. So, the consumers receive less than 50 percent of the power, which India has the potential to generate on the basis of the existing capacity.

Our SEBs which supply around 65 percent of electricity in India have been showing heavy losses for the past several years. The net subsidy after accounting for amounts received from state governments has risen from Rs.5404 crores in 1991-92 to Rs.26613 crores in 2001-02.

The plans to increase the power generation capacity fall far below the mark of fast rising demand for power. Plagued by low plant-load, very high T&D losses and theft, the current capacity delivers much less than 50 percent. On the other hand, if various segments of the power chain, namely generation, transmission and distribution can be made to function more effectively, it is possible to wipe out the shortage of electricity even with the present installed capacity.

Balance of Payment

The Ninth Plan has laid special emphasis on improving the Balance of Payment (BOP) position. The plan says: "Export performance will be critical in determining our ability to achieve high growth rates while also achieving the objective of self reliance. Rapid economic growth requires large volumes of investment and extensive industrial modernisation, both of which imply rapidly growing import needs. Maintenance of balance of payments stability depends upon our ability to achieve high rates of export growth. Without a strong export performance there is danger of being pushed into unsustainable balance of payments deficits, which could lead to increased external indebtedness. Export growth was relatively strong through most of the Eighth Plan period, but has slowed down in the early years of Ninth plan. This is a disturbing development which needs urgent attention. It is essential to examine the constraining factors which limit our export performance and take urgent steps to remove these constraints. Exchange rate policy is one important determinant of export performance and it is essential to ensure that exchange rate remains supportive of the export effort. Equally important in the present situation are infrastructure constrains including transport, custom procedures and banking facilities. Our facilities and procedures in these areas are inadequate and often lead to delays and harassment. They need to be thoroughly revamped in order to provide greater support to exporters."(Vol.I page 5)

The Plan further says, "It is expected that with a concerted effort for export promotion on all the fronts and creation of conditions for greater export-orientation of the economy, the rate of growth of exports during the Ninth plan period will attain the targeted level of 11.8 percent per annum and yield a terminal year (2001-02) value of total exports of Rs.205,070 crore or US $ 56.3 billion in real terms. This may be seen from table 6.3 given below.

6.3 BALANCE OF PAYMENTS IN NINTH PLAN
(Rs. '000 crores at 1996-97 prices)

	1996-97	2001-02	Ninth Plan
Exports	117.3	205.1	800.9 (10.4)
Imports	132.2	221.0	936.1 (12.2)
Trade balance	– 14.9	– 15.9	– 135.2 (– 1.8)
Net Invisibles	0.5	–2.0	–24.6 (– 0.3)
Current A/C Balance	– 14.4	– 17.9	– 159.8 (–2.1)
Financed by :			
Net External Assistance	0.5	1.0	7.7 (0.1)
Net External Debt	15.5	5.9	53.9 (0.7)
FDI	8.7	10.7	92.3 (1.2)
Net FPI	9.3	4.8	23.1 (0.3)
Total Capital Inflow	34.0	22.4	177.0 (2.3)
Change in reserves	20.8	4.5	17.2 (0.2)

Notes: 1. Repayment of IMF loan has been adjusted against external Assistance in 1996-97.
2. Net external debt includes NRI deposits and short term credit.
3. Figures in brackets are percentages to GDP.

Source: Ninth Five Year plan (1997-2002), Volume I, page 140

But the presumption of the Ninth plan that India's exports will rise to $56.3 billion in 2001-02 proved wrong and the actual exports are estimated at $43.4 billion, which is $12.9 billion less than the target.

During the Ninth plan period, the value of India's exports and imports was expected to be around Rs.801 thousand crores and Rs.936 thousand crores respectively, resulting in a trade deficit of Rs.135 thousand crores. But, actually, the exports at Rs.793 thousand crores were 8 thousand crores less than the target of Rs. 801 thousand crores, and imports at Rs.1021 thousand crores were 85 thousand crores in excess of the target of Rs. 936 crores. Consequently, the adverse trade balance at Rs.228 thousand crores was Rs. 93 thousand crores in excess of the target adverse balance of Rs. 135 thousand crores. This 0rder of adverse trade balance means that the situation at the end of the Ninth Plan period is worse than the situation at the end of Eighth plan period. And, this has happened in spite of the great concern shown by the government in the Ninth plan document. This matter has been further dealt with in chapter 10 on External Sector.

The Ninth Plan

In India, the growth rate of GDP had remained less than 5.0 percent per annum during the first 23 years of planning upto March 1974. Thereafter, however, the growth rate rose to 5.0 percent for the Fifth Plan, to 5.4 percent for the Sixth Plan, to 5.9 percent for the Seventh Plan and to 6.8 percent for the Eighth Plan. It is important to note that the period of higher and steadily rising growth rates had started in India with the beginning of the Fifth Plan in April 1974, i.e. full 17 years before the launching of the reforms in 1991. (table 6.4)

6.4 THE GROWTH PERFORMANCE OF THE PLANS
(Percent per annum)

Plan(period)	Target	Actual
First Plan (1951-56)	2.1	3.7
Second Plan(1956-61)	4.5	4.2
Third Plan(1961-66)	5.6	2.8
Fourth Plan(1969-74)	5.7	3.4
Fifth Plan(1974-79)	4.4	5.0
Sixth Plan(1980-85)	5.2	5.5
Seventh Plan(1985-90)	5.0	5.8
Eighth Plan(1992-97)	5.6	6.8
Ninth Plan(1997-2002)	6.5	5.4*

Sources: *1.Indian Economic Survey 2001-02(S.4)*
2.Ninth Plan Volume I page 50 and 54
* - Anticipated

Macro Parameters for the Ninth Plan

During the period of Ninth Plan, GDP was expected to grow at the rate of 6.5 percent per annum on the basis of an Incremental Capital Output Ratio (ICOR) of 4.3 and an investment of the order of 28.2 percent of GDP, of which an amount equivalent to 26.1 percent of GDP is expected to come from savings, leaving 2.1 percent as the Current Account Deficit (CAD). The estimate of CAD being 2.1 percent of GDP is based on the growth rate of 11.8 percent for exports and the growth rate of 10.8 percent for imports. (table 6.5)

Savings

The Ninth Plan has set a target of raising the saving rate to 26.1 percent of GDP from 23.8 percent achieved during the Eighth Plan period. The increase of 2.3 percentage points in the saving rate is sought to be realised by raising the saving rates in all the three sources of saving, viz. Household, Private Corporate Sector and the Public Sector. (table 6.6)

6.5 MACRO PARAMETERS FOR NINTH PLAN
(for a growth rate of 6.5 % per annum)

Item	Eighth Plan Target	Eighth Plan Actual	Ninth Plan Target
1. Domestic Saving Rate (% of GDP)	21.6	23.8	26.1
2. Current Account Deficit (% of GDP)	1.6	1.1	2.1
3. Investment Rate (% of GDP)	23.2	24.9	28.2
4. Fiscal deficit (% of GDP)	4.0	5.0	4.8
5. GDP Growth Rate (% per annum)	5.6	6.8	6.5
6. Export Growth Rate (% per annum)	13.6	11.9	11.8
7. Import Growth Rate (% per annum)	8.4	11.7	10.8

Source: Ninth Plan Vol I page 54

The target of increasing savings by 2.3 percentage points to 26.1 percent during the period of Ninth Plan was not considered difficult to achieve in view of the comparable and even better achievements recorded during the periods of the Eight Plans. As may be seen from table 6.7, savings during the Fourth Plan period, had risen by 2.8 percentage points and formed 16.8 percent of GDP; and this record increase was followed by another record increase of 4.7 percentage points in the Fifth Plan period, which raised savings to 21.5 percent of the GDP. Again, savings during the Seventh Plan period had risen by 3.2 percentage points and formed 22.0 percent of GDP. It was quite possible to raise the savings by another 2.9 percentage points during the Ninth Plan period so that they form 26.1 percent of the GDP. But, the Ninth Plan period has shown a saving of only 23.4 percent which is much below the target of 26.1 percent.

6.6 COMPOSITION OF DOMESTIC SAVINGS IN NINTH PLAN

(Percent of GDP at market prices)

Sector	Seventh Plan (Actual)	Eighth Plan (Actual)	Ninth Plan (Target)
1. Household Sector	16.1	18.6	19.8
2. Private Corporate Sector	1.9	3.8	4.7
3. Public Sector of which:	2.3	1.4	1.6
(a) government Sector	(–) 1.6	(–) 1.8	(–) 2.2
(b) Public Enterprises	3.9	3.2	3.8
Gross Domestic Saving	20.3	23.8	26.1

Source: Ninth Plan Vol I page 57

6.7 GROWTH OF SAVINGS DURING THE PERIOD OF 8 PLANS

Plan(period) last myear	Savings As % of GDP	Increase % points
First Plan(1951-56)	12.6	0.0
Second Plan(1956-61)	11.6	(–) 1.0
Third Plan(1961-66)	14.0	(+) 2.4
Fourth Plan(1969-74)	16.8	(+) 2.8
Fifth Plan(1974-79)	21.5	(+) 4.7
Sixth Plan(1980-85)	18.8	(-) 2.7
Seventh Plan(1985-90)	22.0	(+) 3.2
Eighth Plan (!992-97)	23.2	(+) 1.2

Source: *Indian Economic Survey 2001-02 (S-8)*

During the 50 years period between 1950-51 and 2000-01, while the share of Household Sector in Gross Domestic Product has risen from 69 to 89 percent and share of Private Corporate

Sector has risen from 10 to 16 percent, the share of Public Sector has fallen from 21 percent to (-) 7 percent. (table 6.8)

6.8 DOMESTIC SAVINGS - SOURCEWISE
(At current prices)
(Rs.crores)

Year	Household Sector	Private Sector	Public Sector	Gros Domestic Savings
1950-51	612(69)	93(10)	182(21)	887
1960-61	1254(63)	281(14)	454(23)	1989
1970-71	4634(70)	672(10)	1343(20)	6649
1980-81	19868(73)	2339(9)	4929(18)	27136
1990-91	109897(84)	15164(11)	6279(5)	131340
2000-01	435926(89)	86881(18)	(-)34497(7)	488328

Source: *Indian Economic Survey 2001-2002 (S-6)*
Note Figures in brackets show % share in Gross Domestic Savings

Household Sector comprises financial savings and savings in physical assets. Private Corporate Sector comprises Joint Stock Companies, Corporate Bank and Societies.

Incremental Capital Output Ratio

The Incremental Capital Output Ratio (ICOR) is the ratio of additional capital invested to the additional output obtained during a particular year, or over a period of time (i.e. the Five -Year Plan period). It indicates the units of additional capital required to be invested for obtaining one unit of additional production.(table 6.9)

It will be seen from the table 6.9 that although the sectoral ICORs assumed for the Ninth plan are either equal to or less than the corresponding ICORs prevailing during the Eighth Plan period. The aggregate ICOR of 4.3 is significantly higher than the Eighth Plan average of 3.7. This is because of the fact that considerable investments have to be made for meeting the shortfalls in the three major infrastructures, namely mining and Quarrying; electricity, gas and water; and rail transport; all of which have fairly high ICOR.

6.9 SECTORAL GROWTH AND ICOR IN NINTH PLAN

Sector	Eighth Plan Growth % p.a	Eighth Plan ICOR	Ninth Plan Growth % p.a	Ninth Plan ICOR
1. Agriculture & Allied Sectors	4.0	2.3	3.9	2.2
2. Mining & Quarrying	3.5	6.3	7.2	5.9
3. Manufacturing	9.2	4.7	8.2	4.4
4. Electricity, gas &water	7.4	16.3	9.3	16.3
5. Construction	5.2	3.3	4.9	2.7
6. Trade	10.0	0.8	6.7	0.8
7. Rail Transport	2.2	14.0	3.9	12.0
8. Other Transport	6.8	7.5	7.4	6.5
9. Communications	14.9	7.3	9.5	7.1
10. Fnancial Services	12.1	0.8	9.9	0.7
11. Other Services	5.6	6.0	6.6	5.8
12. Public Administration	4.5	8.1	6.6	5.6
Total	6.8	3.7	6.5	4.3

Source: *Ninth Plan Vol I ,Table 2-14, page 69.*

During the Ninth Plan period, the share of Agriculture and Allied fields in the GDP is expected to go down to 25.7 percent from 28.8 percent for the Eighth Plan period. The share of Industry is expected to rise from 28.3 percent to 29.7 percent and the share of services is expected to increase from 42.9 to 44.6 percent.(table 6.10).

Within Agriculture, the share of Agriculture and allied fields is expected to fall from 27.0 percent to 23.9 percent and the share of Mining and Quarrying is expected to remain constant at 1.8 percent.

6.10 SHARE OF AGRICULTURE IN GDP

Sector	Share of GDP(%) 1996-97	2001-02
Agriculture		
1. Agriculture and allied Sectors	27.0	23.9
2. Mining and Quarrying	1.8	1.8
Total	28.8	25.7
Industry		
3. Manufacturing	19.4	20.9
4. Construction	6.0	5.5
5. Electricity, gas and water	2.9	3.3
Total	28.3	29.7
Services		
6. Trade	13.5	13.8
7. Rail Transport	1.1	1.0
8. Other Transport	5.1	5.3
9. Communications	1.4	1.6
10. Financial Services	6.6	7.7
11. Other Services	9.9	9.9
12. Public Administration	5.3	5.3
Total	42.9	44.6
Total for three sectors	100.0	100.0

Source: *Ninth Plan Vol.I, table 2-14, page 69.*

Within Industry, the share of Manufacturing and electricity, gas and water is expected to rise and the share of Construction is expected to fall from 6.0 percent to 5.5 percent.

Within Services, all the activities are expected to show an increase in their share of GDP, except for the likelihood of rail transport showing a marginal fall in its share from 1.1 percent to 1.0 percent and the share of other services remaining constant at 9.9 percent

The Fiscal Deficit

The Ninth Plan has set a target of reducing the fiscal deficit from 4.7 percent of GDP to 3.9 percent of GDP in 2000-02. Actually, however, the fiscal deficit had risen from 4.1 percent in 1996-97 to 5.5 percent in 1999-00 and is expected to be around 5.4 percent for 2001-02.(table 6.11)

During the last ten years, the government has failed to reduce the fiscal deficit which was the central objective of the Economic Reforms launched in 1991. The fiscal deficit in the last year of the Ninth plan(2001-02) is expected to be larger than the fiscal deficit in 1996-97, the base year of the Ninth plan.

It is important to note that the budgets of the central government had never shown a deficit during the long period of 32 years upto 1978-79. Managing the expenditure of the government within its revenues had remained the guiding principle of the government. Actually, it was the policy of the government to always have a surplus in the budget with a view to utilising it for the developmental activities.

But, this good tradition of having budgets with surpluses was broken by the 1979-80 budget, which showed a deficit equal to 0.61 percent of the GDP. And, this budget for 1979-80 marked the beginning of the period of budgetary deficits. The revenue deficit grew from 0.61 percent of GDP in 1979-80 to 3.3 percent of GDP in 1990-91 and was estimated at 3.6 percent of the GDP in 2000-01.

The steady increases in revenue deficits resulted in increases in government borrowings and the interest liabilities, which pushed up the fiscal deficit from year to year. In 1980-81, the fiscal deficit was Rs. 8299 crores. In that year, revenue deficit was equal to 30 percent of the fiscal deficit and interest accounted for 33 percent of the fiscal deficit.

In 1998-99, when the fiscal deficit had risen to Rs.89560 crores, up from Rs.8299 crores in 1980-81, the revenue deficit was 75 percent of the fiscal deficit as against the ratio of 30 percent in 1980-81, and the interest formed 86 percent of the fiscal deficit, as against the ratio of only 33 percent in 1980-81. This may be seen from table 6.11 given below.

6.11 DEFICITS OF CENTRAL GOVERNMENT

Year	Fiscal Deficit Rs.Crore	Revenue Deficit Rs.Crore	Interest paid Rs.Crore	Col 2 as % of Col.1	Col.3 as % of Col.1
	(1)	(2)	(3)	(4)	(5)
1980-81	8299 (5.9)	2473 (1.5)	2748	30	33
1990-91	37606 (6.6)	18562 (3.3)	21498	49	57
1995-96	50253 (4.2)	29731 (2.5)	50045	59	100
!996-97	56062 (4.1)	32654 (2.4)	59478	58	106
1997-98	73205 (4.8)	46450 (3.1)	65637	63	90
1998-99	89560 (5.1)	66975 (3.9)	77882	75	86
1999-00	104716 (5.5)	67596 (3.5)	90249	65	86
2000-01	114369 (5.3)	81708 (3.6)	97242	71	85
2001-02 (BE)	116314	78821	112300	68	97

Note: Figures in brackets indicate deficit as percentage of GDP
Source: Indian Economic Survey 2001-2002, page 43

Apparently, the country has been caught in a situation of unprecedented financial crisis due to a spiralling growth of revenue deficit, interest and the fiscal deficit, which has resulted in a crippling burden of internal debt. The so called economic reforms have only pushed the country further down in the slush of financial mess. The country is lying firmly caught in the internal debt trap.

Cause of Deficits

A very small deficit in 1979-80 has grown into a very large amount during the last 22 years. The question arises as to why the government had discarded the policy of having surplus budgets pursued consistently for a long period of 32 years after independence and opted for a policy of having deficits in the budgets?

The reason is quite obvious. The government had been compelled to resort to the policy of deficit financing because of the large and fast growing amount of financial support given to the Public Sector industries, because they had not yielded the returns expected from them. The situation is best described in the Eighth Plan. It says: "The Public Sector, as envisaged by Jawaharlal Nehru, was to contribute to the growth and development of the nation by providing surplus re-investible resources. This has not happened as it should have. Many PSUs make substantial losses and have become a continuing drain on the exchequer, absorbing resources, which are withdrawn from sectors where they are desperately needed for achieving other developmental goals. Apart from the fact that the present fiscal situation does not permit any more accumulation of unsustainable losses, there is also the fact that many loss making PSUs do not serve the goal for which they were set up. A policy of the government meeting the cash losses of so many enterprises for all times to come is just not sustainable." (page 16)

The Eighth Plan document released in July 1992 had been prepared by a Congress government. And, the above para from the Plan document says that the prevailing situation of financial crisis in the country was due to the extremely inefficient working of the Public Sector which had been created by Jawaharlal Nehru. This is a very anomalous and confusing situation. The Congress Party uses the name of Jawaharlal Nehru for getting votes from the people, and the government formed by Congress says that Jawaharlal Nehru was responsible for the financial mess that the country is facing!

The Eighth Plan blamed Nehru for the financial crisis of Indian economy because of the inefficiency of the Public Sector created by him. The inefficiency of the Public Sector is largely due to the corruption which has made it the largest generator of black money in India.

But, Nehru had died in 1964 and most of the growth of Public Sector and its corruption took place after the death of Nehru. How, then, Nehru alone could be held responsible for the precarious state of Indian economy 25 years after his death?

However, all matters relating to the growth of Public Sector and its contribution to the growth of industries in India has been dealt with in chapter 8 dealing with industries.

The deficiencies of the Public Sector had become known by the end of the Third Plan period and the government had started reducing the amount of its investment in the Public Sector. But, the savings that the government was making by reducing the investment in Public sector were less than the increases in the amount of interest the government was paying on the borrowings it had been making for financing the investment in the Public Sector since its inception in 1956. After 1980, the amount of interest paid by the government had risen very fast as may be seen from the table number 6.11 given above.

Chapter Seven

Agricultural Growth

UNDER THE Constitution, Agriculture is a state subject. The agriculture sector today provides livelihood to 65 percent of the labour force, contributes nearly 27 percent of Gross Domestic Product and accounts for about 21 percent of the total value of the Country's exports. It supplies bulk of wage goods required by the non-agricultural sector and raw material for a large section of industry. Per capita availability of foodgrains has risen from 395 gms per day in 1951 to 466 gms in 2000. In terms of gross fertilizer consumption, India ranks fourth in the world after America, former USSR and China. India's area under pulse crops is the largest in the world. In the field of cotton, India is the first to evolve a cotton hybrid.

Foodgrains

Between 1950-51 and 1997-98, India's net sown area had risen from 119 to 142 million hectares. But, during this period, the share of foodgrains in the gross cropped area has declined from 77 to 66 percent.

Between 1950-51 and 2000-01, production of foodgrains had risen from 51 to 196 million tonnes; production of sugarcane had risen from 57 to 299 million tonnes; production of cotton had increased from 33 to 97 lakh bales; production of jute and mesta had risen from 30 to 105 lakh bales; and production of nine major oilseeds had increased from 52 to 184 lakh tonnes.

The increase in foodgrains production from 51 to 196 million tonnes in 50 years means a growth rate of 2.7 percent per annum. But, the growth rate has shown large variations from decade to decade. (table 7.1)

As may be seen from table 7.1, production of foodgrains had increased at the rate of 3.22 percent per annum during the fifties; but, for the sixties and the seventies, the growth rates were much lower at 1.72 percent and 2.08 percent respectively. During the Eighties, the growth rate of foodgrains production had risen to 2.85 percent per annum, but it declined to 1.66 percent per annum during the Nineties.

The high growth rate of 3.22 percent per annum for foodgrains production during the fifties was due to the high priority given to agriculture in the First Plan because of which the area under foodgrains had risen from 97 million hectares in 1950-51 to 116 million hectares in 1960-61. Another important factor in this regard was an inordinately long spell of favourable weather.

7.1 GROWTH RATE OF FOODGRAINS PRODUCTION
(1950-51 to 2000-01)

(% p.a.)

Foodgrains	Fifties	Sixties	Seventies	Eighties	Nineties	1950-01
Rice	3.28	(–)8.05	1.91	3.62	1.79	2.8
Wheat	4.51	5.90	4.69	3.57	3.04	4.6
Coarse Cereals	2.75	1.48	0.74	0.40	(–)0.06	1.5
Pulses	2.72	1.35	(–)0.54	1.52	(–)0.58	0.6
Total foodgrains	3.22	1.72	2.08	2.85	1.66	2.7

Source: Indian Economic Survey 2001-02, table 8.7, page 189.

P.L.480 Imports

The fall in the growth rate of foodgrains production after the fifties was mainly due to the large imports of wheat from USA under the PL480 agreement signed in May 1955. These imports had started arriving in India when there was already a glut of wheat in the markets because of two successive bumper crops in 1954-55 and 1955-56. These imports started a vicious circle by depressing the prices of wheat, which resulted in a reduction in the indigenous production, leading to still larger imports. In 1956, imports of wheat at 1.1 million tonnes formed 14 percent of the indigenous production. In 1966, imports had risen to 7.8 million tonnes, which was equal to 86 percent of the indigenous production!

7.2 PROGRESS OF IRRIGATION SINCE 1950

Plan(period)	Additional Target	Potential Actual(%)	(million ha.) cumulative	Cost Rs./ha.
Pre Plan (1950-51)			22.60	
First Plan (1951-56)	7.85	3.66 (47)	26.26	1504
Second Plan (1956-61)	7.84	2.83 (36)	29.12	1724
Third Plan (1961-66)	10.38	4.52 (44)	33.57	2571
Fourth Plan (1969-74)	8.10	7.10 (89)	44.20	4747
Fifth Plan (1974-79)	11.10	10.26 (93)	52.02	6259
Sixth Plan (1980-85)	13.74	8.61 (63)	65.22	67606
Seventh Plan (1985-90)	15.00	11.30 (75)	76.52	50032
Eighth Plan (1992-97)	15.80	8.35 (53)	89.56	47691
Ninth Plan-1997-02	15.00	10.00	99.56	N.A

Note:*Figures in brackets show achievement as % of target*
Sources: *1. Ninth Plan table 8.21.*
2. Indian Economic Survey 2001-2002

The PL 480 agreement impeded the growth of the production of wheat in two ways: Firstly, imports pushed down prices of wheat which adversely affected its production. Secondly, the long-term plans for the imports of wheat made the government lose interest in irrigation.

During the First 18 years of planning, the creation of irrigation potential had been less than half of the plan targets.(table 7.2). The irrigation potential created during the Second Plan period was a dismal 36 percent of the target. Apparently, government was not taking proper interest in the development of irrigation potential in the country because Nehru had made long term arrangements for imports of wheat from USA under PL 480 agreement.

Nehru sought to justify the imports under PL 480 agreement by appointing the Foodgrains Enquiry Committee under the chairmanship of Asoka Mehta. The Committee supported the policy of imports and the PL 480 agreement. It said:

"We feel it would be to our advantage to take fairly large quantities of wheat and some quantity of rice from USA under PL 480, for imports under such concessional terms not only relieve us of our immediate foreign exchange commitments, but also help us to build a rupee fund which can be utilised for developmental purposes. The assured supply of foodgrains from abroad would enable the formulation of a stable and long-term food policy. The assurance of continued imports of certain quantities of foodgrains will constitute the very basis of a successful food policy for years to come. From the point of view of food administration, import has a certain advantage over procurement. All imported grains come into the hands of the authorities and the entire amount is available for distribution. On the other hand, procurement can only be a fraction of the production. (pages 94-95)"

The FEC Report is an eye opener in so far as it shows as to how Nehru, the great Socialist of India, who was known the world over for his anti-American stance and statements, was actually forging links for India's permanent dependence on America in respect of foodgrains. The Report also shows how Shri Asoka Mehta, another great Socialist leader of India, lent support to through a Report which could not be improved upon even by the most brilliant among the Americans working for promoting the sale of foodgrains under the PL 480 programme of America.

Quite expectedly, the recommendations of the Foodgrains Enquiry Committee were accepted by the government, and, thus, began 'the era of food policy founded on food aid'.

Several eminent economists including Professor K.N.Raj and Dr. V. M. Dandekar had strongly opposed the PL480 imports, but the government did not pay any attention to their pleas and arguments.

Extension of Irrigation

The two years drought of 1965-67 and the threat of USA to stop supplies of wheat during the 1965 war with Pakistan gave a big jolt to the government and it realised the importance of acquiring self-sufficiency in foodgrains. Shri Lal Bahadur Shastri, the then Prime Minister of India, gave the slogan of 'Jai Jawan Jai Kisan', which meant that for the security and freedom of the country, the farmer working in the farm is as important as the soldier fighting on the front. All of a sudden, government started giving high priority to irrigation.

Consequently, the achievement of irrigation target rose dramatically from 44 percent for the Third Plan period to 89 percent for the Fourth Plan period and to 93 percent for the Fifth Plan period.(table 7.2)) This unusually large increase in the achievement of irrigation targets proved that the poor achievements of irrigation targets during the first 18 years of planning were entirely due to the low priority given to irrigation on account of the continuing imports of large quantities of wheat from USA under the PL 480 agreement.

But, by the time the government had realised the importance of irrigation, the period of low costs had been over. The cost of irrigating one hectare of land, which was Rs.1504 during the First Plan period, had risen to Rs.67606 during the Sixth Plan period.

During the 48 years period upto 1998-99, an additional irrigation potential of 70 mh had been created against the target of 93 mh indicating a shortfall of 23 mh. The addition of 70 mh in the irrigation potential has resulted in an increase of about 140 million tonnes in the production of foodgrains. It means that the addition of one hectare to the irrigation potential has been adding two tonnes to the production of foodgrains. In addition, the increase in the irrigation potential has also raised the production of several other crops. Consequently, there has been some increase in the per capita availability of important articles of consumption like cereals, sugar, edible oils, tea and cloth, which has brought about some improvement in the living conditions of the people.

But, a much bigger success in the war against poverty could be achieved if the creation of irrigation potential had not shown the inordinately large shortfall of 17 mh during the first 18 years of planning. This missed potential in irrigation, if achieved, would have added another 34 million tonnes to the production of foodgrains, which would have completely wiped out hunger and poverty from India and also turned it into a net exporter of foodgrains.

The addition of 17 mh to the irrigation potential would have cost around Rs.5000 crores during the first 18 years of planning. But, now, the cost will be over Rs. 100000 crores at 1995 prices.! This excessively heavy additional financial burden is due to Nehru's decision for importing wheat from USA under the PL 480 agreement, which was signed at a time when there was a situation of glut in the wheat markets of India. This huge financial loss is in addition to the incalculable losses suffered by millions of farmers because of the sale of highly subsidised American wheat which continued for a long period of about 20 years upto 1974. Millions of Indian farmers had been totally ruined during these 20 years and the clock of the development of Indian agriculture had been put back by about as many years.

The Turning Point

The year 1965 was a turning point in independent India's history of agricultural growth. In 1965, the Government of India had appointed the Committee on Foodgrains Prices for suggesting ways and means for increasing India's production of foodgrains. The Committee suggested a major reversal of the government policy of keeping foodgrains prices low which had been followed since the beginning of planning in 1951, as per explicit directions to this effect contained in the First Plan document. The Committee recommended that the prices of foodgrains should be suitably raised with a view to giving sufficient incentive to the farmer for increasing his production of foodgrains. This policy of 'incentive price', and the use of newly evolved high-yielding varieties (HYVs) of foodgrains, started an era of continuously rising production of foodgrains, which has been described as the green revolution of India.

Large and liberal supplies of water are necessary for realising the full potential of the HYVs of foodgrains. Therefore, the unusually fast growth of irrigation potential during the seventies paved the way for the eighties to achieve the high growth rate of 2.85 percent per annum for the production of foodgrains.

Lop-sided Growth

In 2000-01, the production foodgrains in India was estimated at 196 million tonnes, which was about four times of the production of 51 million tonnes in 1950-51 and indicated a growth rate of 2.7 percent per annum over the period of 50 years. (table 7.3). But, the growth of India's foodgrains production during these 50 years has been lop-sided. While the share of wheat in total production of foodgrains has risen from 14 to 35 percent and the share of rice has gone up from 41 to 43 percent, the share of other cereals has fallen from 29 to 16 percent and that of pulses has declined from 16 to 6 percent. Therefore, the benefits of the large increase in foodgrains production have gone mainly to the wheat producing areas of the country. This has created and accentuated regional disparities in income distribution in India.

7.3 PRODUCTION OF FOODGRAINS — CROPWISE
1950-51 to 2000-01

Foodgrains	Production in million tonnes		Growth rate
	1950-51	1999-00	% p.a
Rice	21(41)	85(43)	2.8
Wheat	7(14)	69(35)	4.6
Other Cereals	15(29)	31(16)	1.5
Pulses	8(16)	11(6)	0.6
Foodgrains	51(100)	196(100)	2.7

Note: Figures in brackets are % share in Foodgrains production.
Source: Economic Survey 2001-02 (S-16)

Foodgrains Production - Plan-wise

The production of foodgrains during 2001-02, the terminal year of the Ninth plan, is expected to be around 209 million tonnes, which is 25 million tonnes less than the Ninth Plan target of 234 million tonnes. This estimated shortfall of 25 million tonnes in the annual production of foodgrains during the Ninth plan period is more than double of the shortfall of 11 million tonnes during the Eighth Plan period. The shortfall in total production of foodgrains during five years of the Ninth Plan adds up to 89 million tonnes which is about three times of the shortfall of 31 million tonnes during the Eighth Plan period. This may be seen from table 7.4 given below.

Indian economic Survey 1998-99 had drawn an alarming picture of the agricultural sector because of the steep fall in the growth after the eighties. The Survey says: "An annual growth of 3.5 percent in foodgrains in the eighties is the hallmark of the green revolution that enabled India to become self-sufficient in foodgrains and even become a marginal exporter. The decade of nineties could not maintain this pace and annual growth rate has fallen to 1.7 percent, i.e., about equal to the rate of annual population growth. This trend has to be reversed." (page 117).

7.4 TOTAL FOODGRAINS PRODUCTION - PLAN-WISE

Million Tonnes

Plan(period)	Target last year	Target five years	Production five years	Excess(+) short(-)
First Plan(1951-56)	63	291	316	(+)25
Second Plan(1956-61)	82	362	370	(+) 8
Third Plan(1961-66)	102	469	405	(–)64
Fourth Plan(1969-74)	129	577	515	(–)62
Fifth Plan(1974-79)	125	583	590	(+) 7
Sixth Plan(1980-85)	152	720	691	(–)29
Seventh Plan(1985-90)	180	823	774	(–)49
Eighth Plan(1992-97)	210	966	935	(–)31
Ninth Plan(1997-2002)	234	1100	1011	(–)89

Note: Total production of foodgrains during five years of a plan has been compared with the total of the targets for five years, because the production in the terminal year of a plan is not always the highest production during the plan period.

Indian Economic Survey 1999-2000 had again shown a deep concern for the fall in the growth rate of foodgrains production. It says; "Overall growth rate decelerated to 1.80 percent per annum during the decade of nineties which is just about equal to annual population growth rate, and, therefore, is a matter of concern. Annual growth rate in wheat continues to be robust, but in rice it tapered off in Nineties after fairly high growth in Eighties. Whereas, decline in coarse cereals output is understandable because of substitution effect, failure in improving growth in pulses is quite a setback." (page 134)

But Indian Economic Survey 2000-2001 did not show any concern over the trend for lower growth rates of foodgrains production. It says: "Total foodgrains production in 2000-01 is likely to be a low of 199 million tonnes compared to 209 million tonnes in the preceding year. This represents a fall of 10 million tonnes (4.7 percent drop). The effect of this large decline is not worrisome as the country sits upon a very large stock of over 43 million tonnes of foodgrains. (page 154)"

This statement of the government is surprising for two reasons. Firstly, because it shows that the government is not aware that a fall in the production of foodgrains means a fall in the incomes of the rural population, which leads to a fall in the demand for the products of industry. A look at the indices of sectoral growth of economy shows that a higher growth of agriculture leads to a higher growth of industries and a lower growth of agriculture leads to a lower growth of industries.

Secondly, the abovesaid statement of the government shows that it considers itself responsible for maintaining sufficient stocks of foodgrains for the PDS only, which seeks to serve only 1/6 of India's population. The PDS covers around 165 million people, out of which 60 million are below poverty line (BPL). These 60 million poor form only 1/6 of the 360 million poor in India. The remaining 5/6 or 300 million poor are dependent upon the market where prices of foodgrains go up because of the very large purchases made by the FCI.

A system that seeks to help 1/6 of the poor by adding to the hardships of the remaining 5/6 of the poor by raising the prices of foodgrains in the market cannot be called a system that helps the poor. The people who are dying of starvation are the people who belong to the 5/6 of the poor who are not covered by the PDS. Relevant facts about the growth and functioning of PDS in India are given in the later pages of this chapter.

The large decline in the growth rate of foodgrains production during the nineties is mainly due to the fact that the states which have contributed a major part of the total increase in production of foodgrains have been showing a lower growth rate after the eighties, and the production in these states seem to have reached a sort of plateau.

Foodgrains Production – Statewise

India's production of foodgrains had risen from 49 million tonnes in 1947-48 to 95 million tonnes in 1967-68. This almost doubling of the production of foodgrains in twenty years time was achieved through increasing the area under foodgrains and extension of irrigation facilities. During the thirty years period after 1967-68, there has been a more than doubling of the foodgrains production and the level of production in 1997-98 had risen to the record level of 192 million tonnes. This second doubling of the foodgrains production in thirty years time has been achieved mainly by raising the per hectare yields by extension of irrigation facilities and increasing the area under HYVs of foodgrains.

Between 1967-68 and 1999-00, production of foodgrains had risen from 95 to 209 million tonnes, indicating an increase of 114 million tonnes in 32 years. The contribution of the five regions of the country in the total increase of 114 million tonnes varies widely between 7 million tonnes for the Western Region and 44 million tonnes for the Central Region. This may be seen from the table 7.5 given below which indicates increases in foodgrains production between 1967-68 and 1999-00, as also the yield in terms of kgms. per hactare.

7.5 STATEWISE PRODUCTION OF FOODGRAINS
1967-68 and 1999-00

REGION/State	Production(MTs) 1967-68	1999-00	Increase in MTs	Yield Kg/ha.
CENTRAL	33(35)	77(36)	44(39)	1431(87)
Madhy Pradesh	10(10)	21(10)	11(10)	944(58)
Rajasthan	6(7)	11(6)	5(4)	1077(66)
Uttar Pradesh	17(18)	45(20)	28(25)	2000(122)
EASTERN	21(22)	40(18)	19(17)	1583(97)
Assam	2(2)	4(2)	2(2)	1333(81)
Bihar	9(9)	15(6)	6(5)	1444(88)
Orissa	4(5)	6(3)	2(2)	1167(71)
West Bengal	6(6)	15(7)	9(8)	2333(142)
NORTHERN	11(12)	40(19)	29(25)	2833(173)
Haryana	4(4)	13(6)	9(8)	2750(167)
Himachal Pradesh	1(1)	1(1)	--	1000(61)
Jammu & Kashmir	1(1)	1(1)	--	1000(61)
Punjab	5(6)	25(11)	20(17)	3500(214)
SOUTHERN	19(20)	33(17)	14(12)	1526(93)
Andhra Pradesh	7(8)	13(7)	6(5)	1571(96)
Karnataka	5(5)	10(5)	5(4)	1286(79)
Kerala	1(1)	1(1)	--	1000(61)
Tamil Nadu	6(6)	9(4)	3(3)	2000(122)
WESTERN	10(11)	17(9)	7(6)	889(54)
Gujarat	3(4)	4(3)	1(1)	1500(92)
Maharashtra	7(7)	13(6)	6(5)	714(44)
ALL-INDIA	95(100)	209(100)	114(100)	1637(100)

Notes: 1. The 17 states included in the table 7.5 account for 99 percent of India's total production of foodgrains.
2. Figures in brackets indicate percentage of All-India production of foodgrains.

Source: *Indian Economic Survey 2000-2001, table 1.15.*

In 1999-00, Northern Region, with only 10 percent of India's area under foodgrains, had accounted for 19 percent of India's foodgrains production, and as much as 25 percent of the total increase in foodgrains production realised between 1967-68 and 1999-00. This spectacular achievement is due to the very high rate of productivity in this region. The per hectare production of foodgrains in the Northern Region at 2833 kgms. is about double of the production in Central Region (1431 kgms.), Eastern Region (1583 kgms.), and Southern Region (1526 Kgms.) and is more than three times of the per hectare production in Western Region (889 kgms).

The very high rate of productivity in the Northern region is due to the very large proportion of land having irrigation facilities, and the growing of HYVs of foodgrains. The Northern region has shown the highest growth rate for production of foodgrains. Between 1967-68 and 1999-00, the production of foodgrains in the Northern region had risen from 11 to 40 million tonnes, indicating a growth rate of 4.1 percent per annum. During the same period, the annual growth rate of foodgrains production was 2.7 percent in Central region; 2.0 percent in Eastern region; 1.7 percent in Southern region; and 1.6 percent in Western region. During the same period, the total production of foodgrains in India had been increasing at the rate of 2.5 percent per annum, which is higher than the population growth rate of 2.1 percent.

In India, the Gross Irrigated Area(GIA) forms 36 percent of the Gross Cropped Area(GCA). But, this ratio is as high as 95 percent for Punjab and 76 percent for Haryana. In Uttar Pradesh, this ratio is 62 percent. In the states of Bihar, Jammu & Kashmir, Andhra Pradesh and Tamil Nadu, the ratio varies between 40 and 48 percent. In the remaining 10 of the 17 states included in the table 7.5, the ratio is less than 40 percent. Some of these 10 states have large areas of "assured rainfall", and, therefore, are not entirely dependent upon the irrigation facilities.

In 1999-00, average per hectare production of foodgrains in India was 1637 kgm. In five states, per hectare production was higher than the national average and Punjab had a per hectare production of 3500 kgms which was more than was double of the national average of 1637 kgms. The population of these 5 states forms 35 percent of India's population.

In the remaining 12 states, the per hectare production of foodgrains was less than the national average of 1637 kgms, and Maharashtra had a per hectare production of 714 kgms. which was less than half of the national average. The population of these 12 states forms about 64 percent of India's population.

Punjab, which has the highest per hectare production of foodgrains, has a poverty ratio of only 12 percent which is the lowest in whole of India and is comparable to the poverty ratio of around 8 percent in China.

For all the four Regions other than the Northern Region the per hectare yield was less than the All-India yield.

The Eastern Region had a per hectare yield of 1583 kgms which was 97% of the All-India yield.

The Southern Region had a per hectare yield of 1526 kgm which was 93 % of the All india Yield.

The Central Region had a per hectare yield of 1431 kgm which was 87 percent of the All-India yield.

The Western Region had a per hectare yield of 889 kgms which was 54 percent of the All-India yield.

The per hectare yield of 714 kgms for Maharashtra was less than half of the All-India yield and was about one-fifth of the yield for Punjab.

Ninth Plan Approach

The Ninth plan has underscored the importance of agriculture as a means for removing poverty. It says:

"A number of earlier plans have explicitly recognised that the sector which has the greatest employment potential is agriculture.

The Ninth Plan goes further and asserts that agricultural growth has also the highest potential for both poverty reduction and reduction in regional imbalances. A number of developed and developing countries like Australia, New Zealand, Malaysia and Taiwan, and also our own state of Punjab, demonstrate that highly productive agriculture can lead to just as high standards of living as high levels of industrialisation, with more favourable impact on poverty. In India, the level of agricultural productivity, particularly in those areas characterised by high poverty, is so low that it invites attention to the sizeable scope and opportunity for increasing agricultural output, and thereby rural incomes, across a wide geographical area. Such growth, however, will not come about unless close attention is paid to the needs of agricultural development. Not only does this mean more water, fertilisers and high yielding varieties of seeds have to be used, it must also be recognised that modern agriculture is just as much a high technology activity as any industry. Therefore, a focussed approach to agriculture would also require providing the ways to provide echnical information to every farmer, and to provide the ppropriate kinds of infrastructure and institutions for both ricultural production and marketing of produce, including agro-ocessing." (Preface to the Ninth Plan, page vii)

The Ninth Plan has set a target of producing 234 million nnes of foodgrains in 2001-02, the terminal year of the plan. he Plan says: "Under the accelerated growth scenario for the Ninth Plan, with GDP growing about 7%, population growing by ıbout 1.7% and per capita income by about 5%, the demand for foodgrains is expected to grow by about 3% per annum. Under this scenario, the estimated food requirement by the end of the Ninth Plan would be around 227 million tonnes. Against this, the target for foodgrains production is fixed at 234 million tonnes for the terminal year of the Plan. To achieve this target, it is assumed that the area under foodgrains would be 126 million hectares. The target shows that India has to increase foodgrains production at least by 35 million tonnes during the period of Ninth Plan, from the level of around 199 million tonnes in 1996-97. The large part of incremental production will have to come from the rainfed areas.(Ninth Plan para 4.1.69). The targets of production of foodgrains and other crops for the Ninth Plan period, are given in the table 7.6 .

7.6 PRODUCTION TARGETS FOR 2001-02
(*Production in Million tonnes*)

Foodgrains	Production 1996-97	Production 2001-02	Growth rate % p.a
Rice	81	99	4.02
Wheat	69	83	3.68
Coarse Cereals	34	36	0.70
Pulses	14	17	2.67
Total Foodgrains	199	234	3.26
Oilseeds	25	30	3.75
Cotton	142	157	4.00
Sugarcane	277	336	3.91

Note: Production of cotton is in lakh bales of 170 kgms. each.
Source: *Ninth Five year Plan, table 4.1.4 at page 454.*

As stated in the beginning of this chapter (table 7.1), India's growth rate of foodgrains production during the nineties was less than half of the growth rate during the eighties, and it was less than the growth rate of India's population. The government had expressed much concern about this situation in the Economic Survey for 1998-99 and 1999-2000. But, a comparison with China shows that the growth rate of India's agriculture has been much below that for China during a very long period of 19 years upto 1999. This may be seen from table 7.7 given below.

During the eighties, the growth rate of agriculture in India was 3.1 percent per annum which was about 1/2 of the growth rate of 5.9 percent for agriculture in China. During the nineties, the growth rate of agriculture in India was 3.8 percent per annum which was much less than the growth rate of 4.3 percent for agriculture in China.

Throughout the 19 years period upto 1999, growth rate of agriculture in China was four times larger than the growth rate of its population. This is the reason for China achieving a larger measure of success in mitigating conditions of hunger and poverty among its people.

7.7 GROWTH OF AGRICULTURE IN INDIA AND CHINA
(Percent per annum)

Country	1980-90	1990-99
India	3.1 (2.1)	3.8 (1.8)
China	5.9 (1.5)	4.3 (1.1)

Note: Figures in brackets indicate population growth rates
Source: *World Development Report* 2000-2001.

During the same period, growth rate of agriculture in India was only 1.5 times larger than the growth rate of its population during the eighties and was double of the growth rate of population during the nineties. This is the reason for India achieving a comparatively smaller measure of success in mitigating conditions of hunger and poverty among its people.

The high growth rate of agriculture in China is due to the large increase in the per hectare yields of the crops. The per capita arable land in China is only 0.10 hectare, which is much less than India's per capita land of 0.17 hectare. In 1998, China's per hectare production of wheat was 1.5 times larger than the per hectare production in India; China's per hectare production of rice and groundnut was more than double of the per hectare production in India; and the per hectare production of cotton in China was about three times of the per hectare production in India. This may be seen from table 7.8 given below.

7.8 YIELD OF IMPORTANT CROPS IN INDIA AND CHINA
(100 Kg. per hectare)

Country	Rice (paddy)	Wheat	Cotton (lint)	Groundnut (in shell)
India	28.9	25.8	3.0	10.3
China	60.6	36.7	8.4	25.8

Source: *Tata's Statisitcal Outline of India 1999-2000.*

The very high growth rate of agriculture in China had been achieved as a result of the economic reforms launched in 1978. The reforms had introduced the 'family production contract responsibility system' under which China's 800 million farmers were allowed to grow any crop and sell it anywhere, after meeting their contract responsibility to the state. Because of these reforms, agricultural output rose steeply and the incomes of farmers grew several times. Consequently, millions of enterprises emerged in the rural areas. The rate of growth of agriculture in China, which was only 2.5 percent per annum during the long period of 25 years upto 1978, rose steeply to 5.9 percent during 1980-90 and was a high 4.3 percent during 1990-99.

The spectacular growth of agriculture in China is the result of the reforms of 1978, which abolished all controls and allowed the farmer to plan his farming activities with a view to optimising his income.

In India, the growth rate of agriculture has been much lower than that in China because of the continuation of the regime of regulations in the agricultural sector. India's economic reforms launched in 1991 have not yet given to Indian farmer the kind of freedom that the farmer in China got in 1978. In India, the reforms have totally bypassed the agricultural sector which accounts for 2/3 of India's working population and supplies raw material to the industries as also to the substantial segment of Indian economy known as the unorganised sector and the informal sector.

Public Distribution System

The Public Distribution System had been started in India with the establishment of the Food Corporation of India (FCI) on 1-1-1965. Actually, the planners and economists have always been opposed to the PDS because of the principle that state should not involve itself with buying and selling of commodities, and should restrict itself to exercising control over those involved in it. The entire question of the FCI handling the buying and selling of foodgrains was referred to the Foodgrains Policy Committee (FPC) formed under the chairmanship of Professor M. L. Dantwala, an eminent economist of India. In their report submitted to the government on 15-9-66, the FPC says:

"It has to be remembered that purchase operations by a single large buyer tend to raise prices much more than by a large number of small buyers. Government's purchase prices are likely to turn out to be so high that neither the objective of holding the price-line, nor that of equitable distribution to all, including the low-income groups, can be expected to be achieved. It would be a different matter, of course, if the country is prepared to bear a crippling burden of very large consumer subsidy. We do not recommend it.(page 37).

The FPC had strongly opposed government's involvement with the procurement and sale of foodgrains. But, the government held the views of the FPC as being against the tenets of socialism which stipulate state control over production and distribution of all essential commodities and services. The FPC had to relent under great pressure from the government. It agreed to the functioning of the FCI, but laid down certain conditions for compliance. The FPC explicitly recommended that "FCI should strive to reduce the cost of procurement, handling and distribution of foodgrains by rationalising their operations and, ultimately, set norms for the government and private trade." (page 52).

But, the FCI flouted all conditions laid down by the FPC and its handling charges have been rising ever since its inception in 1965. This has resulted in a continuously rising trend in the amount of food subsidy paid by the government to the FCI.

The amount of Food subsidy, which was only Rs. 71 crores in 1970-71, had risen to Rs.650 crores in 1980-81 and to Rs.2200 crores in 1987-88. In June 1988, the government of India asked the Bureau of Costs and Prices (BICP) to review the cost structure of FCI and suggest ways and means for controlling the trend for large increases in the amount of food subsidy. In their report submitted to the government in July 1990, the BICP made the following recommendations:

1. Food subsidy should be calculated on the basis of the normative costs and not the actual costs.
2. Issue prices of foodgrains should be at least 75 percent of the market prices in general and about 90 percent of the market prices in case of high quality foodgrains.
3. Grain Losses during transport should be reduced by allowing private transport contractors to operate along with the state agencies.
4. Forty lakh tonnes of foodgrains should be released by the FCI into the open market with a view to reducing the burden of subsidies and bringing down prices in the market.
5. Government should enter international forward market for foodgrains because it will enable it to reduce the stocks held in buffer for price stabilisation operations during the drought years, and, thus, cut down operational costs and the amount of subsidy, especially when there are large leakages from stocks. The government transactions in international forward market will also curtail speculative hoarding of stocks by traders during critical times of shortages.

6. Forward Market Commission should be set up for domestic future market for a select number of foodgrains.
7. Dismantling of the PDS will benefit the large majority of the poor who are not covered by the PDS, because the large quantity of foodgrains kept in the FCI stores will remain in the market and reduce the prices of foodgrains.

In December 1989, The Eighth Plan working group on Public Distribution system (PDS) had recommended drastic reduction in foodgrains subsidy by restructuring the PDS. The group was of the view that only those below the poverty line should be given the facility of cheaper grain. In this regard, the working group suggested a dual pricing system under which the rural and urban poor should be offered subsidised foodgrains, and all other card-holders should pay the full price.

The working group also observed that in spite of the government paying huge amounts as food subsidy, the people below the poverty line did not benefit from the PDS because they did not have the requisite purchasing power to buy even the subsidised foodgrains.

In February 1992, the Commission for Agricultural Costs and Prices (CACP) demanded a fresh look at all aspects of the management of food economy in general and the PDS in particular. In this regard, the CACP made the following recommendations:

1. The government should reduce its commitment of foodgrains distribution in a systematic manner in the next few years so as to cover only a limited proportion of the population, which was really poor.
2. The rate of subsidy should be drastically brought down in a phased manner in three to four years.
3. Because of the crucial importance of the above said matters, a high powered committee consisting of the

> representatives of the Planning Commission and the concerned central ministries should consider the recommendation of the CACP for appropriate action.

The CACP regretted that the recommendations on these aspects made by it in the past had not received the consideration of the government.

The Eighth Plan document stated that a concerted effort will be made during the plan period for limiting the PDS benefits to the poor families only.

Actually, the PDS has been an anachronism for quite some time. PDS, in its original form, was put into place for the purpose of selling large quantities of foodgrains received from the USA under the PL-480 agreement signed in May 1955. The government developed a vested interest in the PDS because 90 percent of the income from the sale of PL-480 foodgrains was received by the government as loans and grants from USA and was used for meeting its budgetary expenditures.

With the end of the PL-480 imports and India becoming self-sufficient in foodgrains due to the green revolution, the PDS would have faded away in due course of time. But, the question of the continuation of PDS was given a political colouring and it was allowed to function in spite of the large and growing losses in its operations, which were met by the subsidies paid by the government. The government continued to pay the fast growing amount of subsidies in spite of the recommendations made by the various Committees and the Planning Commission for restricting the scope of the functioning of the PDS through limiting its sales operations to the really poor people in the country. The recommendations for restricting the scope of the functioning of the PDS were made on the basis of economic logic and the need for curbing corruption in the PDS. But, the government could not implement these recommendations because of political compulsions.

The Socialists of different hues in the Parliament were of the view that state control over the essential needs of the people is an integral part of socialism, and, therefore, PDS should be supported, whatever the cost. And the Congress government in the centre was a minority government, which could not remain in power without the support of the socialists and communist. The situation was quite similar to the situation during the early years of the rule of Indira Gandhi. For remaining in power, Indira Gandhi had to take certain radical measures with a view to establishing the socialist credentials of her government and, thus, ensuring the support of the Socialists and the Communists in the Parliament. The minority Congress government in 1991 just did what Indira Gandhi had done in a similar situation in the mid sixties. And supporting the PDS was the best way of establishing the socialist credentials of the Congress government.

In January 1992, the Congress government with Narsimha Rao as the Prime Minister, initiated steps for revamping the PDS. The RPDS sought to give preference to people living in most difficult areas such as drought-prone areas; desert areas; tribal areas; certain designated areas; and the urban slum areas. The government made large endeavours for increasing the procurement of foodgrains, which rose to the record level of 27 million tonnes in 1993-94 from 18 m.t in 1992-93.(table 7.9). But the sale of foodgrains fell from 18 m.t to 15 m.t., which was 12 m.t. less than the procurement. During 1994-95, the sale of foodgrains fell further to 13 m.t., which was again less than the procurement by 12 m.t. During the five years of the working of RPDS, the total procurement of foodgrains had exceeded the sales by 31 million tonnes, which means an excess of 6 m.t every year. The sale of 13 m.t. of foodgrains in 1994-95 was the lowest since 1980-81, and it has been the lowest till 1999-2000. On the whole, the RPDS was a big failure, but the government had persisted with it as a populist measure.

In January 1997, Deve Gowda's government announced the implementation of the targeted PDS (TPDS) which was another exercise in populism. The TPDS promised to give to every poor family 10 kilograms of cereals at half the market price. The consequential increase in the demand for foodgrains was proposed to be met by increasing the procurement of foodgrains and by diverting part of the supplies meant for the families above poverty line (APL) to the families below poverty line (BPL). A stimulus to the drive for increasing procurement of foodgrains was provided by raising the procurement price of wheat from Rs.380 per quintal in 1995-96 to Rs. 475 per quintal in 1996-97, which meant an increase of 25 percent in one year. But, the government justified the inordinately large increase in the procurement price on the ground that the restrictions imposed on the free movement of foodgrains prevented the farmers from realising higher prices for their foodgrains. Consequently, procurement of foodgrains rose from 20 to 24 m.t; but, the sales fell from 20 to 17 m.t. The fall in the sales of foodgrains during 1997-98 against an anticipated increase was a proof of the failure of the TPDS.(table 7.9)

Dual Pricing

During 1999-2000, government introduced the dual pricing system under which foodgrains were sold to the below poverty line (BPL) families at half of the Economic Cost of FCI and to the above poverty line (APL) families at 90% of the Economic Cost. This resulted in some increase in the offtake by the BPL families mainly due to the fact that millions of APL families had turned BPL families for taking advantage of the comparatively much lower prices for them. But, offtake by the APL families recorded substantial fall because millions of such families had shifted to the open market where better quality foodgrains were available at lower prices. The consequential fall in the total offtake coupled with the increase in procurement of foodgrains resulted in the stocks of foodgrains showing a record growth of 10 million tonnes in one year and rising to the record level of 42 million tonnes on July 1, 2000.(table 7.10).

Because of the dire necessity of having storing space for the large quantities of rice to be procured from the next rice crop government planned to sell large quantities of wheat by reducing its price to Rs.700 per quintal against the Economic Cost of Rs 900 per quintal. But, the government could not sell any significant quantities of wheat on account of the low prices in the open market and the prospects of the prices remaining low because of the record wheat crop of 74 million tonnes in 2000, after a bumper crop of 71 million tonnes in 1999.

The government explored the possibilities of reducing the stocks of wheat through having some deals for loaning or barter, but all in vain. The government remained saddled with huge stocks of foodgrains, which could not be sold and could not be exported because of the high Economic Cost of FCI.

During 1999-00, the procurement of foodgrains had risen to the record level of 32 million tonnes, but the sale of foodgrains in that year had fallen to 16 million tonnes i.e. to half of the procurement. But, in spite of the fall in the sale of foodgrains the subsidy during 1999-2000 had risen by Rs.500 crores and reached the record level of Rs. 9200 crores. This means a per quintal subsidy of Rs. 575 which was only Rs. 5 less than the procurement price of Rs. 580 for wheat during that year. (table 7.9) For the year 2000-2001, the subsidy had risen to the record level of Rs. 13000 crores!

During the ten years period upto 2000-01, the total procurement of foodgrains was 250 million tonnes, which was 76 m.t larger than the offtake of 174 m.t. during this period. This large and continuing excess of procurement over the level of offtake had resulted in the stocks of foodgrains recording inordinately large increases and far exceeding the norms laid down by the government. In July 2001, the stocks of foodgrains had risen to the record level of 62 million tonne which was 38 million tonnes larger than the norm of 24 million tonnes! (table 7.10}

The huge stocks of foodgrains lying locked up in the government warehouses considerably reduced the availability of foodgrains in the market, and, consequently, pushed up their prices. The high prices of foodgrains meant great hardship for the large majority of the poor who do not buy their foodgrains from the PDS.

7.9 FOODGRAINS PROCUREMENT SALE AND SUBSIDY

Year	Production (Million	Procurement Metric	Sale Tonnes)	Subsidy (Rs.Crore)	Subsidy (Rs./Qntl)
1970-71	66	7(11)	9	71	8
1980-81	90	11(12)	15	650	43
1990-91	129	23(18)	15	2450	163
1991-92	130	17(13)	19	2850	150
1992-93	130	18(14)	18	2800	156
1993-94	140	27(19)	15	5537	369
1994-95	147	25(17)	13	5100	392
1995-96	139	22(16)	15	5377	358
1996-97	151	20(13)	20	6066	303
1997-98	149	24(16)	17	7500	441
1998-99	157	30(19)	19	8700	458
1999-00	166	32(19)	16	9200	575
2000-01	154	35(23)	12	12010	10001

Notes :

1. Foodgrains in tables 7.9 and 7.10 mean rice and wheat only.
2. Figures in brackets indicate procurement as % of production.

7.10 FOODGRAINS STOCKS AND NORMS
Million Tonnes

As of July 1	Minimum Norm	Actual Stock	Excess
1994	22	31	9
1995	22	36	14
1996	22	27	5
1997	22	22	--
1998	22	28	6
1999	24	32	18
2000	24	42	18
2001	24	62	38

Source: Economic Survey 2001-02 (pages 91-97)

Horrendous state of Affairs

In July 2001, Attorney General Soli Sorabji, appearing before the Supreme Court on behalf of the central Government, had admitted that the starvation deaths were due to a "Horrendous state of affairs". His appearance was in connection with the petition filed by People's Union for civil Liberties (PUCL) which had said that "50 million tonnes of foodgrains, as against 17 million tonnes required for the buffer stocks, were lying with the FCI and the non-enforcement of the Famine Code had resulted in starvation deaths." The PUCL had raised three basic questions before the Supreme Court:

1. Does the right to life mean that people who are starving be given foodgrains free? Particularly when large quantities of foodgrains are lying unused and rotting.
2. Does the right to life under Article 21 of the Constitution of India includes the right to Food?

3. Does not the right to Food which has been upheld by the Apex Court, imply that the State has a duty to provide food, especially in the situation of drought when people are not in a position to purchase food ?

The Court said that the priority of the government in compliance with the famine code, should be to provide food to the aged, infirm, disabled, destitute, pregnant and lactating women, who are in danger of starvation.

It is rather surprising to find that Arthashastra written by Kautilya around 320 B.C. had prescribed the quantum of ration for males, females, children as also for elephants, horses, cows, bullocks, camels, donkeys and dogs.

Kautilya has prescribed measures for saving the lives of people in situations of famines, floods and droughts; but, he has not suggested any measures for saving people from starvation in 'situation of unmanageably large stocks of foodgrains.' He just could not visualise such a situation.

The poor quality of foodgrains.

It is a matter of common knowledge that the quantum of impurities in the PDS foodgrains is much larger than that in the foodgrains sold in the market. But, in March 1992, people were shocked when four opposition parties of the Parliament made the accusation that the impurities in the PDS foodgrains were as high as 49 percent, and pointed to the government formula introduced in 1965 which permitted the purchase of foodgrains having impurities upto 49 percent.

The top officials of the government confirmed that the government had been facing criticism for not revising the said formula of 1965 which was being exploited by unscrupulous traders. Actually, the formula had been derived on the basis of a very technical evaluation of the traits and qualities of each grain in some samples and was a gross overestimation of the extent of impurities. But, the question of impurities in foodgrains assumed great importance because of the very large number of complaints about the poor quality of PDS foodgrains. The large impurities in the PDS foodgrains are largely attributable to the following factors:

1 The foodgrains procured by the government are generally of the grade two quality and the grade one quality foodgrains are retained by the farmers for selling at prices higher than the Minimum Support Prices(MSP) offered by the government.
2 Every year, a large quantity of foodgrains gets infested in the warehouses. While supplying foodgrains from the warehouses, the infested foodgrains are always taken out first in order to prevent other grains from getting infested. That explains frequent complaints about the sale of infested foodgrains by the PDS.
3 A good proportion of the good quality foodgrains received by the Fair Price Shops gets replaced by the poor quality foodgrains.

During 1999,the bulk buyers (mainly roller flour millers) did not buy the wheat offered by the FCI at the price of Rs. 7500-7700 per tonne because of its poor quality. They imported about one million tonnes of wheat from other countries, because, for the same price, imported wheat was much better in quality.

It was an extremely unfortunate situation. The government wanted the FCI to unload excess quantities of wheat in order to reduce the burden of subsidies; but, the quality of FCI wheat was so bad that there were no buyers for it. Consequently, India imported wheat in spite of bumper crops and the FCI having huge stocks of foodgrains!

Growing Corruption

FCI has been known to be having much corruption in the entire gamut of its operations viz. buying, transporting, storage and distribution. But, in 1996, the people were amazed by the totally new kind of corruption in the working of FCI. Senior officials of the FCI had been accused of diverting large quantities of wheat to non-existing firms for the purpose of deriving personal monetary gains. The scam had been referred to the Punjab and Haryana High Court for judgement.

In January 2002, 16 officials of the FCI had been suspended and moved from their postings for alleged irregularities committed by them. The note recorded by Shanta Ram the Hon. Minister says: "This episode highlights the extent of corruption and malpractices that exist in FCI."

The Three Myths

As described above, weakness of the government was the real cause of the continuation of the PDS. But, the government sought to justify the functioning of the PDS by spreading the myths that it helps the poor by supplying cheaper foodgrains; it prevents inflationary increases in prices of foodgrains; and it helps the farmers by buying their foodgrains. These three myths stand demolished by government's own data and statistics published from time to time, as may be seen from the following paragraphs.

In 1999, PDS covered 165 million people, out of which 60 million were below the poverty line (BPL). These 60 million poor formed only 1/6 of the 360 million poor in India. The remaining 5/6 or 300 million poor remained dependent upon the market where prices of foodgrains had gone up because of the very large purchases made by the FCI. A system which seeks to help 1/6 of the poor by adding to the hardships of the remaining 5/6 of the poor by raising the prices of foodgrains, cannot be called a system that helps the poor. Therefore, the myth that PDS helps the poor stands demolished.

The argument that PDS prevents inflationary increases in the prices of foodgrains is also a myth, and the reality is that it is the PDS, which raises the prices of foodgrains by making inordinately large purchases of foodgrains, and, thus, reducing their availability in the market. All the Committees appointed by the government, as also the Eighth and the Ninth Plan have recommended that government should substantially reduce their procurement of foodgrains and restrict their operations to the really poor families of the society.

As may be seen from table 7.9, government procurement of foodgrains had formed 11 percent of its production in 1970-71 and 12 percent of the production in 1980-81. But, this proportion had risen to 18 percent in 1990-91. In 1999-2000, government had procured as much as 23 percent of the production of foodgrains, which formed more than 4/5 of the total marketable surplus of the production. The FCI has, thus, emerged as the biggest hoarder of foodgrains in India.

Hoarding inevitably leads to increase in prices and large hoarding leads to large increases in prices. No wonder, therefore, that the prices of foodgrains have been rising faster than the prices of manufactured articles in spite of large increases in the production of foodgrains and the huge stocks of foodgrains with the FCI.

Between 1986-87 and 1999-00, the wholesale price index with 1993-94 as the base had risen from 129 to 176 for foodgrains; from 129 to 137 for manufactures; and from 133 to 145 for all commodities. This comparatively much larger increase in prices of foodgrains belies the claim that FCI operations control the prices of foodgrains.

The comparatively larger increases in prices of foodgrains are more hurtful for the poor because 5/6 of them buy their foodgrains from the market and a very large part of their income is spent on buying of foodgrains.

The large increase in the prices of foodgrains is largely due to the large increases in the margins of the FCI. In 1965 when FCI was constituted private traders used to have a margin of about 10 percent in the sale of foodgrains and the Foodgrains Policy Committee had recommended that FCI should keep its margins low with a view to reducing the margins of the trade. But the margins of FCI itself have risen to over 40 % of the procurement price.(table 7.11). And, taking advantage of the high margins of the FCI, the traders have also raised their margins to a very large extent.

7.11 ECONOMIC COST AND MARGINS OF FCI

Wheat

Rs./Quintal

Year	Procurement Price(Rs.)	Economic (Cost(Rs.)	Margin of FCI Rs.	(Col 2-1) % of col 2
	1	2	3	4
1991-92	275(70)	391	116	42
1992-93	330(65)	504	174	53
1993-94	350(66)	532	182	52
1994-95	360(65)	551	191	53
1995-96	380(65)	584	204	54
1995-96	380(65)	584	204	54
1996-97	475(74)	640	165	35
1997-98	510(64)	799	276	54
1998-99	550(68)	800	247	45
1999-00	580(70)	872	245	42

Note: Figures in brackets indicate procurement price as % of Economic Cost

The very high margins of the FCI have also resulted in the farmers not getting proper prices for their foodgrains. Between

1991-92 and 1999-00, the procurement price of wheat has been about 2/3 of the Economic Cost of wheat. (table 7.11).The margin charged by the FCI had, thus, been about half of the procurement price paid to the farmer.

After taking into consideration the retailers' margin also, the share of the producer in the consumer's rupee comes to about 60 paisa only against the share of about 80 paisa at the time of the constitution of FCI in 1965. For being able to increase producer's share in consumer's rupee the large margin of the FCI will have to be reduced. If only half of the subsidy now being paid to the FCI is transferred to the farmer it will give a big boost to the production of foodgrains in India.

Deductio Absurdum

The long period of over 35 years of the functioning of PDS is an example of deductio absurdum i.e. pursuing wrong policies upto the point of reaching a manifestly absurd situation. In 1997, Shri C. Subramaniam the former Agriculture Minister, had suggested that FCI should be disbanded and decentralised arrangements should be made for sale and purchase of foodgrains in the country. The salient features of a rational policy of Food Administration of India are as under:

1. Farmers' Cooperatives should be organised.
2. These Cooperatives should give loans to the farmers against hypothecation of their crops.
3. Loans should be adjusted against the value of the produce after it is sold.
4. Cooperatives should decide as to when and at what price the produce should be sold.
5. Cooperatives should be given loans by the state governments, the central government and banks.

6. The poor should be covered by a suitable system of food stamps and food for work programmes.

An extremely important endeavour on these lines had been made by the Australian Wheat Board(AWB), and, consequently, a grower owned and controlled commercial structure has been operating in Australia since July 1999.

The above-mentioned approach is based on the principle of giving full freedom to the farmer for the production and sale of crops. This approach has also been incorporated into the Ninth Plan under the caption "Towards a National Market", the Plan says:

"The domestic market should be free and there should be a free movement of commodities. We must proceed towards a full national market by removing unnecessary restrictions. The free movement in domestic market would lead to movements of commodities from surplus regions to deficit regions.(Vol. II para 4.1.60)

Further, under the caption "Foodgrains Self-Sufficiency", the Plan says:

"Foodgrains self-sufficiency refers only to the country as a whole and there is no need for self-sufficiency at the state or regional levels. The states should be encouraged to produce crops according to their comparative advantage. Each region or state should use land to its best advantage." (Vol. II para 4.1.59)

The Plan also aims at encouraging 'direct marketing by producers'. Under the caption 'Agricultural Marketing' the Plan says:

"The agricultural marketing structure has not kept pace with the accelerated growth of productivity in India. This has resulted in significant post harvest losses of agricultural produce. During the Ninth Plan period, panchayats will also be encouraged to involve themselves actively in creating marketing infrastructure at the rural level. Direct marketing will be promoted in the interests of both the producers and the consumers.(Vol. II para 4.1.64)

The Plan proposals relating to India's food security system say that the Public Distribution System will be restructured in order to provide foodgrains at substantially lower prices to the poor.

Chapter Eight

Industrial Growth

FULL-FLEDGED liberalisation had started in 1991. But, liberalisation of the policy measures in the industrial sector, had started in the early 1980s. The stagnation of industrial production between the mid sixties and the late seventies had induced some serious new thinking. There emerged a growing consensus that Indian Industry was exhibiting a slow-down in growth due to low productivity, high costs, low quality of products and obsolete technology. Three important committees were set up in the early eighties: The Abid Hussain Committee on Trade policy; The Narsimha Rao committee on the shift from the physical to the fiscal controls; and the Sen Gupta Committee on Public Sector. These Committees recommended an easing up of trade policy, substitution of physical and quantitative controls by fiscal and other means of macroeconomic management, promotion of greater public sector autonomy in business and operational decisions and the need for measures for enhancing productivity, efficiency and modernisation.

Consequently, a process of liberalisation of economy had been initiated around 1985. The major measures taken in this regard were: delicensing of non-MRTP, non-FERA companies for 31 industrial groups and MRTP/FERA companies in backward areas for 72 industry groups; raising the assets limit for exemption of companies from the purview of MRTP Act; exempting 83 industries under the MRTP Act for entry of dominant industries, etc. The government also took some major decisions regarding the Public Sector reforms e.g limiting the role of the Public Sector to strategic, hi-tech and essential infrastruture areas and withdrawing gradually from other areas. The Sick Industrial Companies Act(SICA) was enacted in 1985 for referring the sick industries to the Board for Industrial & Financial Reconstruction(BIFR). Partial disinvestment was introduced in order to encourage wide public participation and greater public accountability. Other reforms were also announced, such as professionalisation of the Boards of Directors of the Public Enterprises and evaluation of performance through Memoranda of Understanding(MOUs). These liberalisation measures and improvement in the infrastructure sector viz power, coal, etc. contributed to a significant growth in industrial production during the Seventh Plan period(1985-90).

Review of Policy Reforms

With the announcement of the new Industrial policy in July 1991, a more comprehensive phase of policy reforms was ushered in with a view to consolidating the gains already achieved in the Seventh plan period and providing greater competitive stimulus to the domestic industry. This was followed by a series of reforms in the fiscal, trade and foreign investment policies. With these reforms, the Indian economy in general, and industry in particular, was freed from controls and opened to international competition for integration with the world economy. The policy reforms continued through the Eighth Plan period and thereafter.

A number of policy measures were undertaken during the Eighth Plan period. The thrust of new industrial policy was towards a substantial reduction in the scope of industrial licensing, simplification of procedures, rules and regulations, reforms in the

Monopolies and Restrictive Trade Practices (MRTP) Act, reduction of areas reserved exclusively for the Public Sector, disinvestment of equity of selected PSEs, enhancing limits of foreign equity participation in domestic industrial undertakings, liberalisation of trade and exchange rate policies, rationalisation and reduction of customs and excise duties and personal and corporate income taxes, extension of the scope of MODVAT etc. The basic objectives are to promote growth, increase efficiency and international competitiveness.

The number of industries requiring licensing was reduced to six. Only four industries were reserved for Public Sector. Separate policy measures were announced for Export Oriented Units/Export Processing Zones and Technology Parks. Foreign Direct Investment Policy was further liberalised. In July 1996, a new list of nine industries was approved where joint ventures upto 74 percent of foreign equity were to be cleared automatically in sectors like infrastructure, non-conventional energy, electronics, software, and sectors having a significant export potential. The list of industries eligible for automatic approval upto 51 percent of foreign equity was also expanded from 35 to 48. Trade liberalisation has reduced effective protection to import substitution activities and encourage export oriented activities based on comparative advantage. Thus, the policy initiatives have focussed on changing the basic orientation of industry from inward looking to outward orientation and closer linkage with the global economy. Highlights of policy reforms and major initiatives during the Eighth Plan period are as under.

Industrial Policy Reforms and Major Initiatives:

1. Number of Industries requiring industrial licenses reduced to six. Only four industries reserved for Public Sector.
2. Foreign Direct Investment policy liberalised.
3. Disinvestment Commision Constituted for preparing an

overall long term disinvestment programme for PSEs referred to it and the modalities of disinvestment decided.

4. Sick Industrial Companies Act(SICA)1985 amended to bring PSEs within the ambit of SICA1985 and BIFR

5. National Renewal Fund set up to protect the interests of workers likely to be affected due to restructuring or closure of industrial units.

6. Growth Centre scheme taken up to develop infrastructure in backward areas to promote industrialisation.

7. To promote development of specific hilly, remote and inaccessible areas, transport subsidy scheme extended till March 2000.

8. Drugs price Control Order amended to give freedom to private sector including fixation of drug prices. Number of drugs under price control reduced from 143 to 72.

9.New National mineral Policy announced, opening Mining Industry to Private Sector including 50 percent foreign equity in 13 minerals.

10.Tecnology Development Board set up to facilitate development of new technologies and assimilation of imported technologies.

The Industrial Policy statement of 1991 envisaged disinvestment of a part of the government holding in the share capital of selected PSEs. The disinvestment of government-owned equity constituted a major step for improving the performance of PSEs, increasing public accountability and broad basing their management and ownership. A programme of Partial disinvestment in PSEs was set in motion. Disinvestment Commission was constituted in 1996. The government referred 73 PSEs to the Disinvestment Commission upto end of March 2000. The Commission has submitted 8 reports covering all the 59 PSEs.The Commission recommended varying level of disinvestment in some of the PSEs and strategic sale/trade, sale/closure and sale of assets in some of these PSEs. Some of its general recommendations relate to corporate governance of PSEs, professionalisation of management, setting up of Disinvestment Fund, restructuring of PSEs, greater autonomy to PSEs etc.

In pursuance of these recommendations of the Commission, the government has decided to disinvest its equity at different levels in GAIL,IOC, MTNL, CONCOR, ITDC, Modern Food Industries Ltd.and VSNL.

The Sick industrial Companies Act(SICA) 1985, was amended in 1993 to bring the Public Sector Enterprises also within the ambit of the BIFR. Since its inception in May 1987, 3148 references had been registered with BIFR upto March 1998 under the SICA 1985, both in respect of private companies and the PSEs. The BIFR has approved/sanctioned 625 rehabilitation schemes and had recommended winding up in 579 cases. As many as 202 companies, including four PSEs, had been declared "no longer sick"on successful completion of the rehabilitation schemes sanctioned by the BIFR.

The national Renewal Fund (NRF) was established on February 3, 1992 for protecting the interests of the workers likely to be affected by technological upgradation and modernisation in Indian industries. The aim of the NRF is to provide a social safety-net for labour. The major objectives of the Fund include providing assistance to cover the cost of re-training and re-deployment of employees and providing funds for employment generation schemes both in the Organised and the Unorganised sectors. The NRF has been strengthened with the setting up of Employees Resource Centres(ERC) and Employees Assistance Centres(EAC).

For promoting industrialisation of backward areas in an effective manner by developing the infrastructure, a Centrally sponsored scheme of Growth Centres was taken up during the Eighth Plan period. By March 1998, 66 Growth Centres had been established against a target of 71 centres.

To promote industrialisation of specific hilly, remote and inaccessible areas such as Jammu & Kashmir, Himachal Pradesh, Sikkim, North-Eastern states, Andaman and Nicobar Islands, Lakshadweep, eight hill districts of Uttar Pradesh and Darjeeling district of West Bengal, the government of India had extended the Transport Subsidy Scheme till end of March,2000, and between 1971 and March 1998, government had spent an amount of Rs.361 crores under this scheme.

A new Drug Policy was announced in 1994 and Drug Price Control Order 1986 was amended in 1995 with the objective of giving more freedom to private sector in regard to fixing of prices of drugs. The number of drugs under price control was reduced from 143 to 72.

In 1993, the government announced a new National Mineral policy for non-fuel and non-atomic minerals and also further amended the Mines & Minerals (Regulation & Development) Act 1957 under which the mining industry was opened to private sector for 13 minerals and direct investment was allowed upto 50 percent of equity participation. Beyond this, approval was to be given after considering each case separately. The other important objective of the New National Mineral Policy is to give more powers to the states for the development of minerals. The mineral concession rules and procedures have also been simplified for the benefit of investors.

A number of initiatives were taken under the new R&D policy for strengthening technological capabilities of Indian industries. In 1996, a technological development board was established with the mandate to facilitate development of new technologies and assimilation and adaptation of imported technologies by providing catalytic support to industries and the R&D institutions for enabling them to work in partnership. A system of Matching grants to R&D institutions showing commercial earnings through technology services was introduced in 1996.

The Prime Minister's Rozgar Yojana (PMRY) was launched on October 2,1993. Under this scheme, self employment opportunities to educated Youths, both rural and urban, are being provided with financial assistance from banks/financial institutions upto Rs. one lakh, with a subsidy of 15 percent of the project/venture cost, subject to a maximum of R.7500, without collateral guarantee.

A number of measures have been initiated for promoting the growth and development of food processing sector. These include:

(a) Deregulation of the food processing industry except for beer and alcohol.
(b) Allowing foreign equity investment and automatic investment upto 51 percent foreign equity in high priority industries including food processing industries.
(c) Delicensing of almost all food products excepting brewing and distillation of alcoholic beverages and items reserved for small scale industries.
(d) Making easier the foreign technology import procedures, agreements etc.

Performance of Industrial Sector

The Industrial sector recorded an annual compound growth rate of 4.6 percent between 1970-71 and 1979-80 and 6.6 percent between 1980-81 and 1989-90(at constant prices). It achieved a high growth rate of 8.5 percent during the Seventh Plan period(1985-90). The main reason for the good performance was starting of liberalisation process and a number of policy measures taken during the plan period, *inter alia*, including changes in the area of licensing and procedures, import of technology, import of capital goods coupled with a reasonable rate of public investment and almost total protection to domestic industries from international competition through quantitative restrictions on imports as well as high tariff rates.

The Eighth Plan had started with a backdrop of an impressive industrial growth during 1970s and 1980s. Though the average annual growth rate of industrial sector including mining, manufacturing and electricity generation during the Seventh Plan period and the Annual Plan 1990-91 was 8.5 percent, it had shown a recession in 1990-91 when the average industrial growth rate had fallen to 0.6 percent. Even so, the growth rate achieved during the Eighth Plan period was encouraging, as may be seen from the table 8.1 given below.

8.1 GROWTH RATES IN EIGHTH PLAN PERIOD(%)

Year	Manufacturing	Mining	Electricity	General
Plan Target	7.30	8.00	7.80	7.40
1992-93	2.18	0.53	5.02	2.30
1993-94	6.07	3.50	7.45	6.00
1994-95	9.80	7.47	8.48	9.40
1995-96	13.00	7.07	8.17	12.10
1996-97	8.00	1.20	3.80	6.80
1992-97	7.80	3.80	6.50	7.30

Source: *Ninth Plan Volume II, page 587.*

The overall rate of industrial growth gradually increased from 2.3 percent in 1992-93 to 6.0 percent in 1993-94, 9.4 percent in 1994-95 and to 12.1 percent in 1995-96. However in 1996-97 it had fallen to 6.8 percent resulting in an average growth rate of 7.3 percent against a target of 7.4 percent for the Eighth plan period. While manufacturing maintained an upward trend in the growth between 1992-93 and 1995-96, mining and electricity generation maintained upward trend in growth only upto 1994-95 and declined thereafter. The year 1996-97 witnessed lower growth in all the sub-sectors of industry compared to previous years. On the whole, the annual growth rates during the Eighth Plan period have been lower than those in the Seventh plan period in all the three sectors of industrial activity though the growth rate in the manufacturing sector has been higher than targeted.

The group-wise industrial growth rates indicate that Food products, manufacture of chemicals and chemical products, manufacture of electrical machinery and miscellaneous manufacturing industries recorded significantly lower growth rates during the Eighth plan period as compared to the growth rates during the Seventh plan period. However, beverages, tobacco & tobacco products, cotton textiles, paper and paper products, basic metal and alloy industries, manufacture of Transport equipment and parts achieved higher growth rates.

The most important reason for the lower growth rates during the Eighth plan period as compared to the Seventh Plan period seems to be that the industrial sector, which had been almost totally protected from both internal as well as external competition during the previous four decades, was suddenly exposed to foreign competition through a significant liberalisation of imports and a drastic reduction in import duties. The industry was hardly prepared for it and the slow down was only to be expected as is reflected in the very low growth rates realised in the first two years of the Eighth Plan. By far the worst affected was the capital goods sector. First, the user sector now had the option of importing the most modern capital goods and equipment which was often not available indigenously and which was imperative for enabling these sectors to modernise themselves and thus be in a position to meet the challenge of the opening up of the economy. Second, with a progressive reduction in the import duties, many of the user sectors preferred to adopt a 'wait and watch' policy and postponed their investment plans. The capital goods sector with a weight of 16.4 percent in the Index of Industrial Production(IIP),recorded growth rates of (-)12 .8 percent, (-)0.1 percent and (-)4.1 percent in 1991-92, 1992-93 and 1993-94 respectively. The capital goods sector took a number of steps like import of drawings and designs and upgradation of technology to meet this challenge assisted by a resumption of investment in number of sectors, the capital goods sector was able to achieve a phenomenal growth of 24.8 percent in 1994-95 and 17.8 percent in 1995-96.

A number of industries were not able to meet external competition due to a variety of reasons, an important one being their historical background. For example, the development of copper industry in the country was taken up on strategic considerations even though the quality of domestic ore is very poor by international standards. The standard import duty reduction effected in the last few years has been accompanied by a drastic fall in the international prices of copper resulting in the only producer viz Hindustan Copper Ltd. cutting down its production, incurring severe losses and not being in a position to make even essential renewals and replacements. The paper industry was unable to meet the foreign competition due to non-availability of captive plantations to the industry. In Hydrocarbon sector also, a number of petroleum intermediates were imported while the domestic capacity languished. A number of commodities faced the problem of dumping. The machinery for investigation of dumping was not adequate to deal with increasing number of cases.

According to the Ninth Plan, a major reason for the slow down of growth rate in the recent past has been the slow down of investment. It says: "As is well known, the pace of public investment came down rather significantly. The government effort to control fiscal deficit resulted in a substantial decrease in the plan expenditure, which coupled with a larger proportion of plan investment going to sectors like rural development, poverty alleviation and other social sectors, considerably reduced the public investment. The rate of private investment also came down drastically due to a)capital market being in a bad shape, b) high cost of borrowings, and c) introduction of minimum alternate tax(MAT). With considerable freedom being granted to the private sector in the pricing of issues, a large number of companies came into the market with unduly high rates of premium. Besides, some of the other steps taken by the government, *i.e.* change in Badla system, affected investors confidence adversely. As a result, even good companies were not able to raise funds from the capital market. With very high rate of interest prevailing in the market during the last couple of years, public limited companies have been in no position to come up with viable proposals and raise funds from any source (Vol. II page 589).

Inadequate availability of infrastructure like power and transportation bottlenecks, inadequate handling facilities at ports, also affected industrial production. More importantly, the quality of infrastructure, e.g. frequent interruption of power and unduly long handling times at ports added to the real cost of manufacture and thus affected competitiveness of the domestic industry. The addition to the power capacity in the Eighth Plan period in absolute terms was less than the addition during the Seventh Plan period. With electricity generation having a weight of 11.43 percent in the Index of Industrial Production, a low rate of growth of electricity generation also depressed the growth rate of industrial production. Second hand machinery and large scale imports of basic materials and intermediate goods and components due to anomalies in the tariff structure, uneconomic scales of domestic production in a number of cases and the inability of domestic industry to meet external competition by ensuring quality of its products, keeping to delivery schedule, etc., depressed industrial production. There was also low value addition within the country, particularly in high growth sectors like automobiles and electronics due to increase in imports of components and intermediates to a considerable extent. There were also a number of anomalies in tariff structure such as the case of fertilizer sector and refineries, where the finished capital goods enjoyed 'zero' rate of import duty but the domestic manufactures were subject to taxes and duties and import duties on intermediates and components.(para 590)

The above said analysis of the industrial growth during the period of Eighth plan is based on the Index of Industrial Production as per base year1980-81. In May 1998, the Central Statistical Organisation revised the base year to 1993-94. A revised series of indices for the period April 1994 to October 1997 has been brought out, taking into account the changes in the industrial structure during this period. With these changes, there has been a slight change in the yearly industrial growth rates since 1994-95. A comparative position of the industrial growth rates based on 1980-81 and 1993-94 series is shown in table 8.2 given below.

8.2 INDUSTRIAL GROWTH RATES(%)

Year	Base 1980-81	Base 1993-94
1994-95	9.4	8.4
1995-96	12.1	12.7
1996-97	7.1	5.6
1997-98	4.6	5.8

Source: *Ninth Plan Volume II, page 591.*

Similarly, the Ninth Plan says, there has been some change in the growth rates in mining, manufacturing and electricity sub sectors.

Public Sector

Nehru who had created the Public Sector had died in 1964. But, the Public Sector continued to grow after his death. The government continued to give large sums of money for the expansion and technological up-gradation of industries in the Public Sector. This resulted in a large growth of Public Sector Industries (PSEs). In 1951, there were only five PSEs with a total investment of Rs. 29 crores. In 1998-99, there were 235 PSEs with a total investment of Rs. 2737 billion. All the PSEs in India, however, belong to the following four categories:

1. The legacies of the colonial British government, namely departmental enterprises such as Railways, Post and Telegraph, Ordinance Factories and Ports.

2. Enterprises nationalized by the government, such as Hindustan Shipyard, Hindustan Aircraft; Coal, copper and Zinc; Life Insurance and General Insurance; the predominant portion of commercial banking.

3. New PSEs such as Public Sector steel plants, heavy Engineering Corporation, Bharat Heavy Electricals, and the Public Sector refineries in terms of the policy declaration in the IPR-1956.

4. The sick industrial units taken over by the government with a view to preventing their closure and the consequential loss of employment by their workers, such as National Textile Corporation, Hindustan Cycle Corporation, the heavy engineering units such as Jessop, Briathwaite, Burn & Co.

Industry was given the highest priority in the Second Plan and its share in total outlay was raised from 8 percent in the First Plan to 20 percent in the Second Plan. On the other hand, agriculture and irrigation was given a low priority and its share in the total outlay had been reduced from 35 percent in the First plan to 21 percent in the Second Plan. During the 24 years period upto the launching of Sixth Plan in1980-81, the share of industry in the total outlay ranged between 20 and 25 percent. Thereafter, the share of industry in the total outlay had fallen to 22 percent in the Seventh Plan, to 17 percent in the Eighth Plan and to 8 percent in the Ninth Plan(table 8.3)

Public Sector expanded phenomenally during the sixties and seventies. In the early eighties, Public Sector accounted for as much as 61 percent of production capital employed in the factory sector.

The pace of growth of the Public Sector slowed down in the Eighties and almost stagnated in the nineties.

8.3 PUBLIC SECTOR OUTLAYS IN FIVE-YEAR PLANS (%AGES)

Sector	Plan								
	Ist	2nd	3rd	4th	5th	6th	7th	8th	9th
Agriculture	15	12	13	15	15	12	13	14	14
Irrigation	20	9	8	8	10	10	7	6	7
Power	7	10	14	18	19	17	17	19	26
Village & Small Industries	–	4	3	2	2	2	2	2	–
Industry and Minerals	8	20	20	18	23	25	22	17	8
Transport & Comm.	24	27	25	19	17	16	17	19	19
Social Services	26	18	17	20	17	18	22	23	24
Science and Techn.	–	–	–	–	–	–	–	–	2
Environment									
Total	100	100	100	100	100	100	100	100	100

Sources: 1. *Development Planning by Sukhmoy Chakravarty (table [illegible])*
2. *Statistical Outline of India by Tata Services (table 253)*
3. *Ninth Five year plan Volume I page 178.*

India's record of industrial growth before the reforms of 1991 can be divided into three distinct periods: 7.7 percent annual growth over the period of first three plans(1950-65); 4.0 percent annual growth over the plan holiday(1966-69) and the periods of the Fourth and Fifth plan(l969-79); and finally recovery to about 7.7 percent growth over the periods of Sixth and Seventh plan(1980-90). (table 8.4). The period 1966 to 1980 is the dark period of the Indian economy. This period encompassed a number of exogenous shocks; the devastating three year drought of 1965-68; the aftermath of increased defence expenditure resulting from the 1962 war with China and two wars with Pakistan; the oil price shocks of 1973 and 1979; and the downturn in the availability of foreign resources. During this period, the Indian economy was constantly struggling to adjust. That there should have been some slow down relative to previous period is, therefore, not surprising. The severity of the slow down could have been avoided by an adjustment in planning outlook suited to the changing characteristics of the external environment.

The share of industrial sector in the GNP has shown a continuous increase, except during the period of dark years. Similarly, the share of industrial employment had also been rising continuously. The change in the latter has, however, been slower than what could have been accomplished. The size of industrial employment, particularly in organised manufacturing, did not grow during the 1980s.

8.4 LONG TERM GROWTH RATES OF INDUSTRIAL PRODUCTION

(Percent per annum)

Period	Overall	Mining and Quarrying	Manufac- turing	Electricity
		Base: 1980-81		
1950 to 1965	7.7	5.1	7.8	12.7
1966 to 1980	4.0	3.4	3.6	8.7
1980 to 1990	7.7	8.4	7.3	9.0
		Base: 1993-94		
1993 to 1999	7.4	3.8	8.0	6.7

Sources: *1. Central Statistical Organisation.*

2. Indian Economic Survey 1999-2000(S-37)

3. The Indian Economy by Bimal Jalan, page 103.

As may be seen from table 8.3, during the 29 years period between 1956 and 1985, the Industrial Sector had been receiving investment between 18 to 25 percent of the total investment. However, this investment fell from the peak share of 25 percent for the sixth plan to 22 percent for the seventh plan, to 17 percent for the Eighth Plan and to only 8 percent for the Ninth Plan. In spite of a reduced investment during the Seventh Plan period, the growth rate of industrial production rose to the record level of 8.5 percent per annum which was 2.1 percentage points higher than the growth rate of 6.4 percent for the Sixth plan period. This was due to the fact that during this period the infrastructure sectors of energy, transport and communication had received a large investment of as much as 45 percent of the total investment. The explicit importance attached to the functioning of infrastructure during this period had paid off in terms of enhanced all round economic growth. The actual growth rate of industrial production during the 24 years period between 1956 and 1980 has always been below the planned growth rates. This may be seen from the table 8.5 given below.

The period 1966-80 is the dark period of Indian economy, and this was due to the extremely regulated nature of the economy, which is generally described as the period of 'Quota Permit Raj'. According to Shri Rakesh Mohan, the then Economic Adviser in Ministry of Industries, "The difficulties of the mid to late 1960s, both political and economic, led to further rigidities in the system. The introduction of the MRTP Act in 1969, the enactment of FERA in 1973, the reservation of many items for small scale industry and the amendment of the Industrial Disputes act during the emergency, all contributed to the slow down of the industrial system during the 1970s..... The industrial and regulatory arteries hardened after the mid 1960s: controls became more rigid; original objectives were lost sight of ; additional controls and regulations were overlaid upon the already overburdened industrial and trade control system and tariff protection became progressively hogher. The period 1965 to 1980 can, therefore, be truly described as the dark age of the Indian Industrial economy." (The Indian Economy by Bimal Jalan, pages 107 and 109)

As stated above, several corrective measures had been taken during the 1980s. The Eighth Plan document attributed the problems of the economy to the failure of the Public sector. It said:

" The Public Sector as envisaged by Jawaharlal Nehru, was to contribute to the growth and development of the nation by providing surplus reinvestible resources. This ha not happened as it should have. Many PSEs make substantial losses and have become a continuing drain on the exchequer, absorbing resources, which are drawn from sectors where they are desperately needed to achieve other developmental goals. Apart from the fact that the present fiscal situation does not permit any more accumulation of unsustainable loses, there is also the fact that many loss making PSEs do not serve the goal for which they were set up. A policy of the government meeting the cash losses of so many enterprises for all times to come is just not sustainable." (Eighth Five Year Plan Vol.I page 16).

8.5 GROWTH RATES OF INDUSTRIAL PRODUCTION —PLANWISE

(percent per annum)

Plan (period)		Target	Actual
First Plan	(1951-56)	-	7.3
Second Plan	(1956-61)	8.3	6.6
Third Plan	(1961-66)	11.1	9.0
Fourth Plan	(1969-74)	8 to 10	4.7
Fifth Plan	(1974-79)	7.0	5.9
Sixth Plan	(1990-85)	7.0	6.4
Seventh Plan	(1985-90)	8.0	8.5
Eighth Plan	(1992-97)	7.4	7.3
Ninth Plan	(1997-2002)	7.5	3.9*

* - Anticipated growth rate.

Sources: *l. The Five year Plans.*
2. The Indian Economy by Bimal Jalan, page 105.

The biggest problem of the Public Sector is the very low return on capital. During 1977 to 1987, the return in Manufacturing was about 3 to 5 percent in the Public Sector as against the return of 17 to 23 percent in the Private Sector. A large number of PSEs have been incurring huge losses for several years. In 1992-93, 104 out of 237 PSEs had shown losses aggregating to Rs. 3951 crores. The low return in the Public Sector is largely due to a conspicuous inefficiency, pervasive corruption and excessive use of capital and labour.

The lack of efficiency in the Public Sector is not a problem peculiar to India alone and is a universal problem. And, by far the greatest sufferer in this regard has been the USSR, from whom we borrowed the idea of "Public Sector occupying the commanding heights of economy." In his famous book titled PERESTROIKA, Michail Gorbachev, the ex-Prime Minister of Russia, says:

"An absurd situation was developing. The Soviet Union, the World's biggest producer of steel, raw material, fuels and energy, has shortfalls in them due to wasteful and inefficient use. One of the biggest producers of foodgrains, it has to buy millions of tons in a year. We have the largest number of Doctors and hospital beds per thousand of population, but, still, there are glaring shortcomings in health-services. Our rockets can find Hailey's comet and fly to Venus with amazing accuracy. But, alongwith these scientific and technological triumphs there is an obvious lack of efficiency in making use of scientific achievements for meeting economic needs of the people. Many soviet household appliances are of poor quality." (page 21)

He further says: "It was obvious to everyone that the growth rates were sharply dropping and that entire mechanism of quality control was not working properly; there was a lack of receptivity to the advances in science and technology; improvement in living standards was slowing down and there were difficulties in the supply of foodstuffs, housing, consumer goods and services." (page 21)

It is important to note that Gorbachev had written PERESTROIKA in 1987 i.e 70 years after the revolution of 1917.

Gorbachev is a person who is still proud of being a communist; but, PERESTROIKA written by him is the most ruthless denunciation of communism.

In India also, Public Sector has done incalculable harm to the economy. In 1955, i.e. just before implementation of the IPR-1956, India's Industrial Sector measured in terms of volume of industrial value added was eighth largest in the world. In 1987, India's ranking had come down to tenth. In the same year, Republic of Korea, a small country of 43 million population, was close behind India with a ranking of eleventh, and Brazil ranking eighth, was ahead of India.

Nehru had been given wrong estimates about the potentials of the IPR-1956. He was told that with the passage of time, Public Sector would generate surpluses on an increasing scale. Actually, Professor Mahalanobis had told Nehru that the surpluses would be so large that there would be no need for taxation in about 15 years time. But, the promised surpluses were never realised and the financing of the PSEs became a big drain on the Central Revenues and a cause of internal indebtedness leading to a fiscal crisis in 1991.

The Eighth Plan held Nehru responsible for the precarious state of Indian economy. And, significantly, the Foreword to the Eighth Plan is written by Shri P.V.Narsimha Rao, the then Prime Minister of Congress Government in the center, and the Preface is written by Shri Pranab Mukherjee as Deputy Chairman of the Planning Commission. And, both of these gentlemen had been foremost in asking people to vote congress in the name of Nehru!

Politico Bureaucratic Nexus

The Eighth Plan has described the failures of Public Sector, but these failures have been there inspite of the very strict supervision and control exercised by the government. Actually, excessive control by the government has been the basic cause of the poor performance of the PSEs. Several Committees had emphasized from time to time the desirability of autonomous functioning of the PSEs. Shri L.K. Jha, in his Economic Administration Reforms Commission Report released in 1986, had strongly recommended that the freedom of management envisaged in the IPR-1956 should be restored to the PSEs. No action had been taken on this recommendation for a long period of time. The system of signing MOUs introduced after the reforms has become another form of a vexacious control by the bureaucrats.

Politico-bureaucratic nexus has a vested interest in retaining control over PSEs. The kith and kin of the politicians and bureaucrats, most of whom did not have the requisite qualifications, continued to get appointment in the PSEs. And, as the Politicians and the bureaucrats continued to move from place to place, the number of the sifarashi employees in the PSEs continued to grow. This is the cause of the PSEs having a work force far in excess of their requirements. And, this is the main cause of the losses of PSEs.

The politico-bureaucratic nexus had created means for pressurising and blackmailing the CEOs for doing things, which they would not do in the normal course. For example, the guidelines for the PSEs ran into 1400 pages! It was just impossible for any CEO to abide by all the guidelines. And, it was quite easy for a politician or a bureaucrat to point out as to how and why the action suggested by the CEO was in violation of the guidelines. The natural anxiety of the CEOs to show good progress in their work compelled them to have a good equation with the concerned politician and the bureaucrat by acceding to their wishes even if they were against the rules. Only in January 1973 did the central government issue a guideline to the PSEs to ignore all earlier guidelines, if the Board of Directors so desired. Much damage to the PSEs had already been done by that time.

The politicians and the bureaucrats have also been responsible for most of the PSEs remaining without a CEO for long periods of time. Every politician / bureaucrat wants to have a CEO of his choice and uses all fair and unfair means for getting his man appointed, and also for getting other candidates rejected. This has been the main cause for the situation of so called "toplessness" of a very large number of PSEs, which is a major cause of the inefficiency and inordinately large losses of the PSEs. How the PSEs could be expected to control the commanding heights of the economy, when a large number of them did not have a commander for themselves?

For about ten years after 1956, there was fast expansion of the Public Sector industries, and, thanks to the generous 'recommendations' of the politicians and the bureaucrats, there was a largescale recruitment of people who would not have been selected on merit. But, after this period of initial expansion, opportunities for employment in the existing industries showed a declining trend and that meant curtailment of the power of the politicians and bureaucrats to give jobs and promotions to their near and dear ones. So, both of them reached the conclusion that "socialism in India needs to be strengthened', and that could be done only by extending the scope of industries in the Public Sector. Consequently, a Parliamentary Committee in its 40th report underscored the importance of Public Sector entering the area of consumer goods.

After the Third Plan period (1960-66), thus, there was an indiscriminate expansion of the Public Sector and it entered the sphere of bread baking, food products, soft drinks, bicycles, two wheelers, textiles and hotels. Actually, there was no economic rationale for Public Sector to involve itself in the production of consumer goods when Private Sector could produce cheaper and better quality goods, sell them at competitive prices and make profits. There was no economic justification for wasting scarce public resources on manufacture of goods, which were often shoddy and could not stand competition even within the country. Entering the area of consumer goods has been another cause of the steadily rising losses of the PSEs.

Most of the corruption in India concerns the PSEs who own nearly 75 percent of India's industrial assets, inclusive of the Railways and the State Electricity Boards. India cannot achieve the desired rate of growth without reorganizing the PSEs and reducing corruption in their working.

White Paper

The government has not issued a White Paper on the working of the PSEs inspite of repeated demands and several promises made by the government. As early as in 1963, the Estimates Committee of the Parliament had made a reference to the British White Paper on Public Enterprises and had asked the government to prepare a similar White Paper on India's PSEs, stating therein the broad principles regarding the financial and economic obligations of the PSEs in India. The government has not issued any White Paper in spite of several promises made in the Parrliament. During the budget session in February 1987, the Prime Minister Rajiv Gandhi had said: "The government will further improve the working of Public Sector Enterprise. We will enhance their autonomy and make them accountable for results. The government will bring before the Parliament a White Paper on the Public Sector." This promise to the Parliament made by the Prime Minister in 1987 is yet to be requited. The Politico-bureaucratic nexus has succeeded in the scuttling the publication of the White Paper and they would not permit it to be published in future, unless exceptionally serious efforts are made by a government in this regard.

The return on investment in the PSEs has always remained very low. During the first twenty years, the Public Sector did not show any profits, and for several years thereafter, profits remained around a measly 2 percent, which was also mainly because of the PSEs paying about half the interest rate paid by the Private sector. The government tried to sell shares of the PSEs, but the return was very much below expectations. The Rangarajan Committee had suggested a total withdrawal of government investment from the PSEs. But, the recommendation was not accepted by the government. However, the budgetary support for the PSEs in the Plan investment, both equity and loans, had been reduced gradually from 24 percent in 1991-92 to 12 percent in 1995-96.

Exit Policy and VRS

The government has made several efforts for reducing the number of employees in the Organized Sector. In 1993, the Finance Minister had made a proposal for an Exit Policy which was expected to displace about 1.8 million workers, mostly from the coal mines, steel industry and the bureaucracy. A large number of the workers to be displaced from the coal mines had existed only on paper and their emoluments were being received by criminals. This was a case of politico-criminal nexus. The Exit Policy was strongly opposed by the trade Unions.

Some PSEs, however, implemented the Voluntary Retirement Scheme (VRS), or the Golden Handshake Scheme, under which an employee was given a good amount of money as a compensation for the loss of his job. But, this scheme created several difficulties for the PSEs. In some PSEs, it resulted in an acute shortage of qualified and talented hands in critical areas of their functioning. And, in most of the cases, these talented people joined the competitors of these enterprises. In most of the cases, the efficient and the young left the Enterprise and the inefficient and the old remained in their posts. Some of the PSEs opting for the VRS discontinued its operation.

Disinvestment

The policy of disinvestment had started in 1990 with the government decision to divest 20 percent of its equity in a few PSEs. The Industrial Policy statement of 24 July 1991 envisaged disinvestment of part of the government share holdings in order to provide financial discipline and to improve the performance of PSEs. On 23 August 1996, government set up the Disinvestment Commission to advise the government on disinvestment. The important recommendations made by the Disinvestment Commission are as under:

1. A Disinvestment Fund should be set up wherein all receipts from disinvestment would be deposited and then utilized inter alia for restructuring PSEs, or for strengthening marginally loss making PSEs, with a view to preparing them for disinvestment.
2. The MOU system should be revamped with a view to giving greater autonomy to the PSEs along with proper delineation of accountability.
3. The delegation of autonomy should be on a graded scale with greater autonomy to better managed PSEs.
4. The government, so long as it remains the single largest shareholder even after disinvestment, should facilitate election of Directors who would represent the minority shareholders in the PSEs.

In 1998-99, a positive policy of disinvestment was announced in the budget speech, specifically stating that the government shareholding will be reduced to 26 percent in all PSEs excepting those involving strategic consideration. Disinvestment Department was established for bringing about systematic policy approach. Excepting the strategically important enterprises related to defence and atomic energy, and Railways, all PSEs were placed in the non-strategic category of PSEs.

Upto November 2000, as many as 72 PSEs had been referred to the Disinvestment Commission. After going into the details of the functioning of each enterprise, the Commission gave its recommendation for the process of disinvestment for 58 enterprises.

The amounts raised through disinvestment have been much lower than the targets set by the government. The realisations were only Rs. 350 crores against a target of Rs 7000 crores for 1996-97 and Rs.1200 crores against a target of Rs.5000 crores for 1997-98. In 1999-2000, government could raise Rs.1500 crores only against a target of Rs.10000 crores. For 2000-2001 also the government set a target of Rs. 10000 crores, but the realisation was only Rs.1869 crores. For 2001- 02, a target of Rs 12000 crores was set and the realisation is expected to be much better than in the past.

On 14-11-2000, the Lok Sabha Speaker put the entire disinvestment process under Parliamentary scrutiny by directing. that the working of Disinvestment Ministry be supervised by Parliamentary Standing Committee attached to the Ministry of Finance. Transparency is to be the key word in all sell off transactions and the Comptroller and Auditor General Will prepare a report on each and every case which will be tabled in the Parliament.

On 16-11-2000, the government approved a legislation for lowering its stake in 19 Public Sector banks from 51 percent to 33 percent. The State Bank of India was not among the 19 banks as it is governed by a separate Act. The RBI is to continue to hold a majority stake in the SBI, which along with its associate banks, controls one-third of the banking business of the country. The objective of the government is to enable the nationalised banks to raise capital from the markets for meeting the capital adequacy norms for expanding their business. There will be no sale of the government stake in the banks and the Public Sector character of the bank will be maintained along with the supervisory control of the Parliament. The law will not permit anyone to hold more than one percent stake in the Public Sector Banks. Bank Unions viewed this legislation as a step towards privatisation and decided to oppose it.

Privatisation

Privatiation is in the nature of a reaction to the excessive intervention of state in the functioning of the economy of a country. Privatisation can be called a capitalist revolution in so far as it is an attempt to destroy the structure of a Command Economy which is integral to the communist thought system, and, is said to be an endeavour to build, instead, a structure of economy which permits free interaction of the forces of demand and supply and is responsive to the signals thrown by their interaction. In terms of the communist terminology, Privatisation can be called an antithesis of the thesis of Command Economy, which is to be followed by a synthesis of the two approaches of economic development.

Privatisation spread around the world with some speed in the Eighties and has been implemented in over 100 countries. The global volume of the sell offs had increased nineteen-fold during 1984-98, with most of the increase having taken place after 1990.

In England, there was a large-scale privatisation of industries after the mid-eighties, and it had far reaching impact in the whole world. In Italy, a big programme for privatisation was launched in 1992 which had a great impact on its economy. In China, the Economic Reforms introduced in 1978 had opened the way for privatisation in agriculture, industry , services and trade. In Russia, a bold initiative for privatisation was a part of the 'Radical

Economic Reforms' which had been approved by the Politburo in 1987 and were launched in 1988 by Mikhail Gorbachev.

In India, privatisation has become important only after nine years of the Economic Reforms launched in July 1991. Privatisation in India meets opposition at two levels. Firstly, it is opposed by the politico-bureaucratic nexus because they lose their powers if the PSEs are privatised. Secondly, privatisation is opposed by the Communist parties and their front organisations because of the ideological dogma that a PSE should never be privatised. However, for tactical reasons, privatiation is often sought to be opposed by raising secondary issues in order to rope in those who do not share the left's total opposition to privatisation, but may be experiencing a vague sense of unease over 'national' assets being sold off.

A favourite tactic here is to argue that shares are being sold for a song. A particularly favourite tactic is to argue – as in the case of Modern Food Limited – that the land on which the unit stands is being undervalued. However, the price which an acquirer wishes to pay for a unit is based on his estimate of the future profitability of the unit. The value of land will only matter if the idea was to close down the factory and use the land for other purpose. It is interesting to note in this context that for the sale of the Great Eastern Hotel in Calcutta, the value of land was not taken into consideration for determining the price.

Another favourite tactic is to say that the government should recover loans from defaulting industrialists. But, on the other hand, left is adamently opposed to the scrapping of the Sick Industrial Companies Act (SICA) which protects industrialists from their creditors.

In 1992, the CPM had stalled the repeal of the IISCO nationalisation Act. One of the reasons was the low value of the bid put forward by Mukund. Today, IISCO is at death's door and desperate efforts are being made to sell it to whoever is willing to buy it. Similarly, the Rashtriya Ispat Nigam Ltd. had to be repeatedly bailed out by the government and it is now clearly headed for BIFR.

For privatisation to take off, therefore, both sources of opposition will have to be tackled.

Small Scale Industries

Schumachar had said that small is beautiful. For India, small is bountiful also because of its substantial contribution to the national endeavours for reducing the number of India's poor, most of whom live in the rural areas. India's world famous prosperity was largely due to the high quality of the products of its small scale industries and handicrafts, for which buyers in the foreign countries paid fancy prices in the form of gold.

India's small scale industries which included handicrafts, constituted the second string of the bow of India's farmer. The British used all of their might and resources for destroying India's small scale industries with a view to creating market for the products of British industries. The entire plan of laying railway lines and their functioning was guided by the considerations of reducing the price of raw materials exported from India and reducing the price of the products of British industries imported into India.

India's Village and Small industries (VSI) have a very large potential for reducing poverty because they have very low Incremental Capita Output Ratio (ICOR). The investment needed for generating a particular level of income is very low in the small scale industries as compared to the investment needed for generating the same level of income in the big size industries. Therefore, investment needed for creating one job in a small scale industry ranges between 10 % and 20% of the investment needed for creating one job in a big size industry.

The Ninth Plan says that the Village and Small Industries (VSI) sector comprises modern and the traditional segment of industry. The modern segment includes Small Scale Industries (SSI) and powerlooms, which use modern technology in the manufacturing process. The traditional segment consists of handloom, agriculture, Khadi and Village Industries (KVI), coir industry, handicraft and wool development in the unorganised sector. (page 637, para 5.274)

8.6 SMALL SCALE INDUSTRIES EIGHTH AND NINTH PLAN PERIOD

Plan/Year	Units Millions	Emloyees Millions	Output Rs..billions*	Exports Rs.billions*
1991-92	2.1	13.0	1787	139
		Eighth Plan		
1992-93	2.2	13.4	2093	178
1993-94	2.4	13.9	2416	253
1994-95	2.6	14.7	2940	291
1995-96	2.7	15.3	3562	365
1996-97	2.8	16.0	4126	392
Growth % p.a	6.7	4.2	18.2	23.0
		Ninth Plan		
1997-98	2.9	16.7	4626	439
1998-99	3.1	17.2	5207	490
1999-00	3.2	17.9	5729	540
2000-01	3.4	18.6	6455	630
2001-02(target)	3.3	18.5	7250	789
Growth % p.a	2.6	2.9	11.9	15.0

* - *at current prices.*

Sources: *1. Indian Economic Survey 2001-02.*
2. Ninth Five Year Plan(1997-2002)

The Ninth plan also says that because of the immense potential for creating new jobs at low cost, the Village and Small industries sector (VSI) has been accorded high priority. The Ninth plan has set targets for production, employment and exports to be achieved during the period of the Plan. The targets and the actual growth during the Ninth plan period are given in table 8.6

The Low targets

In spite of the Ninth Plan giving high priority to the SSI, their targets for the Ninth Plan period are much lower than the growth rates achieved during the Eighth Plan period.

During the Ninth Plan period , the number of SSI is expected to rise at the rate of 2.6 percent per annum, which is less than half of the growth rate of 6.7 per cent per annum achieved during the Eighth Plan period

During the Ninth plan period, the number of employees in SSI is expected to rise at the rate of 2.9 percent per annum, which is 2/3 of the growth rate of 4.2 percent per annum achieved during the Eighth plan period.

During the Ninth Plan period, the output of SSI is expected to increase at the rate of 11.9 percent per annum, which is less than 2/3 of the growth rate of 18.2 percent achieved during the Eighth Plan period.

During the Ninth Plan period, exports of SSI are expected to rise at the rate of 15.0 percent per annum, which is less than 2/3 of the growth rate of 23.0 percent per annum achieved during the eighth Plan period. It is important to not that during the Eighth Plan period, the rate of growth of exports of the SSI was about double of the growth rate of India's exports.

Fixing the Ninth plan targets at a level much below the level achieved during the period of Eighth Plan is in contradiction to the Ninth Plan claim of giving high priority to the SSI. How this could happen?

Is it due to an oversight by the Planner or a mistake by the printer? There are several mistakes in the Ninth plan. For example, statement 5.6 on page 665 gives the number of employees in the SSI in "crores of rupees."! This is a serious mistake and raises the suspicion that there may be several mistakes in the plan document.

A close scrutiny of the related facts, leads to the conclusion that the fixing of low targets for the SSI in the Ninth plan is due to the planners' anxiety to make the Plan conform to the WTO stipulations for scrapping all quantitative restrictions on imports from April 1, 2001, which will adversely affect the growth of SSI.

The dire necessity of reducing poverty necessitates a high priority to the SSI; but the compulsion of following the WTO directives resulted in giving a low priority to SSI in the fixing of targets. Removing poverty and following the WTO directives are two mutually contradictory goals. Pursuing the first means defying WTO, and pursuing the second means betraying the people of India.

Industrial Sickness

Sickness in an industrial unit and in the industry at large, causes suffering which goes far beyond the individuals directly concerned, and more often than not, strikes those who have not even remotely contributed to the dreaded situation.

The consequences of industrial sickness are at once disastrous and deleterious to the general economy of the entire nation. This monster brings in its trail loss of production, loss of employment and loss of revenue to the central and state governments. It locks up investible funds of the Banks and financial institutions. It spreads its fangs to the ancillary industries, and, thus, a chain reaction is set into motion.

There are a variety of reasons why a given industrial unit turns sick and is sometimes afflicted with terminal illness. The causes may be militant labour leaderhip, liquidity problem, mismanagement, unforeseen competition, sudden disappearance of market or cheaper substitutes becoming available, and/or faulty government policies.

Based on the report of the Tiwari Committee, a bill was prepared with the title "the Sick Industrial Companies - Special Provisions Bill 1985". On August 22,1985, the Union Finance Minister introduced this Bill in the Lok Sabha. The legislation defined the sick industrial company as an industrial company registered for not less than seven years, which, at the end of any financial year, accumulated losses equal to or exceeding its entire net worth, and has also suffered cash losses in such financial year and the financial year immediately preceding such financial year.

But, the number of sick industries continued to grow at a fast pace. Between December 1980 and March 1990, the number of sick industries had risen from 24550 to 221097, indicating a growth rate of 27.7 percent per annum. The small industries had a slightly higher growth rate of 28.4 percent per annum. The proportion of small industries in the total number of sick industries had risen from 94 percent in 1980 to 99 percent in 1990.

During the same period, Outstanding Bank Credit rose from 1809 crores to 9353 crores indicating a growth rate of 22.8 percent per annum. But, the growth rate for the small industries was higher at 29.5 percent per annum.

Between March 1990 and March 2001, the number of sick industries rose from 221097 to 252947 and the Outstanding Bank Credit rose from Rs. 9353 crores to Rs.25775 crores. But the Ninth Plan period shows a faster growth of sick industries and a still faster growth of Outstanding Bank Credit. During the four years of the Ninth plan upto 2001, the number of sick industries had risen at the rate of about 4000 per annum as against the annual growth rate of about 2000 during the preceding seven years. The outstanding Bank credit has risen by around Rs. 3000 crores in a year during the four years of the Ninth Plan as against the annual increase of about Rs.600 crores during the preceding seven years.(table 8.7)

8.7 INDUSTRIAL SICKNESS

Sick/Weak units

End of	Large & Medium	Small	Total
	Number of units		
Dec 1980	1401	23149	24550
Mar 1990	2269	218828	221097
Sept.1992	2427	233441	235868
Mar 1993	2524	238176	240700
Mar.1994	2500	256452	258952
Mar.1995	2391	268815	271206
Mar.1996	2374	262376	264750
Mar.1997	2368	235032	237400
Mar.2001	3317	249630	252947
	Outstanding bank credit (Rs. Crores)		
Dec.1980	1502	306	1809
Mar.1990	6926	2427	9353
Sept.1992	9241	3346	12586
Mar.1993	9691	3443	13134
Mar.1994	10015	3680	13695
Mar.1995	10192	3547	13739
Mar.1996	10027	3722	13749
Mar.1997	10178	3609	13787
Mar.2001	11825	4506	25775

Source: Economic Survey 2001-02.

SSI Redifined

In January 2002, the RBI defined a SSI as sick where the borrower accounts of the unit remain sub-standard for more than six months and if any of its borrower accounts remains overdue for one year. It could be termed as sick unit even in cases where the erosion in the net worth is due to accumulated cash losses upto 50 percent of its net worth during the previous accounting year.

The RBI said that the unit could be regarded as potentially viable if it is in a position, after implementing a relief package, to service its repayment obligations without any concessions. The relief package should not exceed five years

The RBI also said that units becoming sick on account of willful mismanagement, willful default, unauthorised diversion of funds, disputes among partners or promoters should not be considered for rehabilitation.

Chapter Nine

Public Debt

AT THE TIME of independence in 1947, India was one of the poorest countries of the world, but it was not an indebted country. By the end of World War II (1939-45), India had paid off its debt of Rs.450 crores and had also accumulated assets worth Rs. 1700 crores in pound sterling because of Britain's war time purchases in India, which were a sort of forced savings imposed upon the people of India.

India's assets of Rs. 1700 crores in 1947 meant that every Indian had assets of about Rs. 50. But, in 1950-51, government of India had acquired total liabilities of Rs. 2 thousand crores in the form of internal debt, which was equal to 21 percent or about 1/5th of the GDP and means a per capita debt of Rs.56. (table 9.1).

Total Liabilities

Total liabilities of the government of India have risen from Rs. 2 thousand crores in 1950-51 to Rs 1182 crores in 2000-2001 which is equal to 61 percent or about 2/3 of the GDP and means a per capita debt of Rs.11820. During 53 years of freedom, thus, the liabilities of the government have risen from an amount equal to 21 percent of the GDP to an amount equal to 61 of the GDP, and the financial status of an average Indian has changed from a creditor of Rs.50 to a debtor of Rs.11820. Nehru's talk of 'tryst with destiny' at the time independence in August 1947 has turned out to be a 'tryst with debt and destitution' for its people.

As may be seen from table 9.1, the internal debt has risen much faster than other liabilities of the government of India.

In 1980-81, government of India had total liabilities of 50 thousand crores, out of which 48 percent was internal debt and 20 percent was external debt. But, in 2000-2001, the proportion of internal debt in total liabilities had risen from 48 to 69 percent and the proportion of external debt had fallen from 20 percent to 5 percent.

While in 1980-91, internal debt was 2.4 times larger than the external debt, in 2000-2001, the internal debt was 14.4 times larger than the external debt.

Between 1980-81 and 2000-2001, the internal debt as a percentage of GDP had risen from 18 percent to 42 percent, whereas, external debt as a proportion of GDP had fallen from 8 percent to 3 percent.

Between 1980-81 and 2000-2001, total liabilities of the government of India had risen at the rate of 17.1 percent per annum due to a growth rate of 20.2 percent per annum during the eighties and a growth rate of 14.1 percent during the nineties. During the same period, the internal debt had recorded a growth rate of 19.3 percent per annum due to a growth rate of 20.4 percent during the eighties and a growth rate of 18.2 percent during the nineties. The growth rate of 19.3 percent for the internal debt was higher than the growth rate of 17.1 percent for the total liabilities and was more than double of the growth rate of 9.0 percent for the external debt.

In the year 2000-2001, the internal debt was Rs.821 thousand crores, which was more than 14 times of the external debt and had formed 70 percent of the total liabilities of the Union Government.

9.1 TOTAL LIABILITIES OF GOVERNMENT OF INDIA
(Rs. Thousand crores)

Year	External debt	Internal debt	Other internal liabilities	Total liabilities	Per capita debt(Rs.)
1950-51	-	2(21)	-	2(21)	56
1980-81	10(8)	24(18)	16(12)	50(38)	735
1990-91	32(6)	154(30)	129(25)	315(61)	3706
1997-98	55(4)	389(28)	334(24)	778(56)	8189
1998-99	57(3)	460(28)	375(23)	892(54)	9196
1999-00	58(3)	729(41)	244(14)	1031(58)	10414
2000-01	57(3)	821(42)	302(16)	1182(61)	11820
Growth rate % p.a					
1950-81	-	8.6	-	-	9.0
1980-91	12.3	20.4	23.2	20.2	17.6
1990-01	5.9	18.2	8.9	14.1	12.3
1980-01	9.0	19.3	15.8	17.1	14.9

Note: Figures in brackets indicate % share of GDP at current prices.
Source: *Economic Survey 2000-2001 (page 36).*

India's per capita debt, which was Rs.56 in 1950-51, had risen to Rs.735 in 1980-81, to Rs.3706 in 1990-91 and to Rs.11820 in 2000-2001. The annual growth rate of per capita debt, which was 9.0 percent during the 30 years period upto 1980-81, had risen steeply to 17.6 percent during the eighties and was 12.3 percent during the nineties. The large increase in per capita debt after 1980-81 is due to the large increase in total liabilities of the government on account of the very fast growth of Internal Debt of the government.

Internal Debt

India is lying caught in the trap of internal debt. And, this fact has been admitted by the government in the Eighth Plan which says: "While working out the financing pattern of the Eighth plan, one of the major concerns was to avoid the trap that we had got into during the period of Seventh Plan. At the time of the formation of Seventh Plan, it was envisaged that nearly 40 percent of the total public sector outlay would be financed by the balance from the current revenues (BCR) and by the contribution from the public enterprises. Actually, the contribution from BCR and public sector enterprises turned out to be only 20 percent of the total outlay and the balance was met through borrowings. That created an internal debt trap and acute BOP crisis. We want to avoid that situation and confine the Public Sector outlay to an irreducible minimum level essential for ensuring the targeted growth." (page vi of the Preface to Eighth Plan written by Shri Pranab Mukherjee, as Deputy Chairman of the Planning Commission).

In October 1987, Reserve Bank of India had published a paper titled "The burden of Public Debt in India", prepared by Dr. Seshan. This paper says: "Internal debt trap is a situation in which borrowings have to be resorted to just to keep up with the servicing of debt." Dr. Seshan had warned that "a situation is fast approaching when the government will have to borrow money just to pay for amortization of debt and interest on domestic borrowings." He expressed concern for the rising trend in the internal liabilities of the government.

The Comptroller and Auditor General of India (CAGI) has several times warned the government about the dangerous consequences of the fast growing internal liabilities of the government. In their report released on 29-7-1988, CAGI had said that with public debt forming 64 percent of the GDP, the government was rapidly approaching the brink of bankruptcy. The report had suggested putting a ceiling on government borrowings under article 292 of the Constitution.

In their report released in December 1994, CAGI said that with 86 percent of the government borrowings being spent in meeting debt-service obligations, the country seemed to be in a vicious trap of internal debt.

Again, in their report released on 3-5-1995, CAGI expressed their horror over the fact that interest payment had started swallowing over half of the Central Revenues.

In spite of the warnings by the RBI, the CAGI and several eminent economists, the government continued with its profligacies and borrowings. A Joint exercise conducted by the Finance Ministry and the Planning commission found that the position in regard to availability of resources had turned grim. Consequently, insufficient funds were provided to the states and to the central plan.

In spite of the serious concern expressed in the Eighth Plan document, the RBI report and the reports of CAGI, the actual situation became even worse during the period of Eighth Plan. The Ninth Plan says: "Contrary to the projections, the BCR of both the Centre and the States turned out to be negative during each of the five years of the Eighth Plan. Thus, the combined BCR of Centre and States turned out to be minus Rs. 39563 crore as against the positive BCR of Rs.35005 crore projected for the Eighth Plan period." (Ninth Plan Vol I page 154).

The difference of Rs,74568 crore between the plan projection for the BCR and its actual realisation is just shocking and is a serious reflection on the nature and quality of our planning.

9.2 FINANCIAL PATTERN OF EIGHTH PLAN
(Rs. in crores at 1996-97 prices)

Item	Projected	Realised
BCR	35005	(-) 39563
PSEs	148140	131449
Borrowings	202255	240215
Net flow from abroad	28700	19234
Deficit Financing	20000	33037
Aggregate Resources	434100	384372

Source: *Ninth Plan (1997-2002) Volume I page 177.*

The raising of resources by Public Sector and the net inflow from abroad were also much short of the Eighth Plan projections. Therefore, borrowings and the order of deficit financing were very much in excess of the projections of Eighth Plan. (Table 9.2)

Government Expenditure

The problem of financial resources remaining short of the plan projections, coupled with the fact of government expenditure increasing faster than the revenues, resulted in the problem of government expenditure exceeding the government revenues by continuously growing margins. (Table 9.3)

As may be seen from the table 9.3, the revenues had been larger than expenditure upto 1978-79, and the year 1979-80 was the first year when revenue was 94 percent of the expenditure. Between 1979-80 and 2000-01, the proportion of revenue to expenditure fell from 94 to 77 percent and the revenue deficit rose from Rs. 694 crores to Rs.69821 crores.

During each of the five decades ending with 2000-01, the growth rate of expenditure has been larger than the growth rate of revenues. Therefore, the entire period of fifty years shows a growth rate of 14.3 percent for expenditure, as against the growth rate of 13.2 percent for the revenues.

During the eighties, the growth rate of expenditure at 18.7 percent per annum had shown the largest excess of 2.6 percentage points over the growth rate of 16.1 percent for revenues. This high growth rate of expenditure during the eighties pushed up the growth rate of expenditure for the last 20 years to 16.5 percent per annum, which was 3.6 percentage points higher than the growth rate of 12.9 percent for expenditure during the first thirty years, and was 1.5 percentage points higher than the growth rate of 15.0 percent for revenue during the last twenty years. (Table 9.4)

9.3 REVENUE DEFICIT OF THE GOVERNMENT OF INDIA

(Rs. Crores)

Year	Revenue	Expenditure	Deficit	Revenue as % of expenditure
1950-51	406	347	(+) 59	117
1960-61	877	826	(+) 51	106
1970-71	3342	3179	(+)163	105
1978-79	9792	9362	(+)430	105
1979-80	1134	12034	(–)694	94
1980-81	12419	14454	(–)2035	86
1990-91	54954	73516	(–)18562	75
1998-99	149510	217419	(–)67909	69
1999-00	181434	250595	(–)69161	72
2000-01	203673	281097	(–)77424	72
2001-02 (Budget)	231745	301566	(–)69821	77

Source: *Indian Economic Survey 2001-02 (Table 2.2)*

9.4 GROWTH RATES OF REVENUE AND EXPENDITURE
(1950-51 to 2000-01)

(Percentages

Years	Growth Rate	
	Revenue\	Expenditure
1950-51 to 1960-61	8.0	9.1
1960-61 to 1970-71	14.3	14.4
1970-71 to 1980-81	14.0	15.4
1980-81 to 1990-91	16.1	18.7
1990-91 to 2000-01	14.0	14.4
1950-51 to 1980-81	12.1	12.9
1980-81 to 2000-01	15.0	16.5
1950-51 to 2000-01	13.2	14.3

The continuing situation of expenditure growing at a rate higher than that of revenue resulted in the emergence and growth of financial deficit. In 1980-81, the revenue deficit of Rs.2035 crore formed 26 percent of the financial deficit of Rs.7733 crore. But, in 2000-01, the revenue deficit of Rs. 77424 crore had formed as much as 70 percent of the fiscal deficit. (Table 9.5)

9.5 REVENUE DEFICIT AS PERCENTAGE OF FISCAL DEFICIT

(Rs. Crores)

Year	Revenue Receipts	Revenue Expenditure	Revenue Deficit	Fiscal Deficit
1980-81	12419	14454	2035(26)	7733
1990-91	54954	73516	18562(49)	37606
1998-99	149510	217419	67909(75)	90322
1999-00	181434	250595	69161(65)	106124
2000-01	203673	281097	77424(70)	111275
2001-02	231745	301566	69821	N.A.

The large increase in the fiscal deficit was due to the high growth rate of Non-plan expenditure which mainly consisted of expenditures on interest, defence, administration and subsidies. (Table 9.6)

During the twenty years period between 1980-81 and 2000-01, the Non-Plan expenditure had been increasing at the rate of 15.8 percent per annum, as against the growth rate of 14.5 percent for the total expenditure of the government. Consequently, the share of Non-Plan Expenditure in total expenditure had risen from 59 percent in 1980-81 to 74 percent in 2000-01. During the same period, the share in total expenditure had risen from 21 to 28 percent for Administration; from 12 to 30 percent for interest; from 16 to 17 for defence; and had declined from 9 to 8 percent for major subsidies. The comparison of revenue with Non-Plan expenditure is even more disquieting as may be seen from table 9.7 given below.

9.6 TOTAL EXPENDITURE AND NON-PLAN EXPENDITURE
1980-81 to 2000-01

(Rs. crores)

Year	Total Expenditure	Non-Plan Expenditure Total	Interest	Defence	Admin.	Subsidies
1980-81	22495	13262	2604	3600	1603	1851
		(59)	(12)	(16)	(21)	(9)
1990-91	98272	69907	21948	15426	7040	9581
1998-99	256339	189521	77882	41200	94768	21269
1999-00	299294	222339	91861	48504	83894	23160
2000-01	338487	250387	101266	58587	85890	21491
		(74)	(30)	(17)	(28)	(8)
2001-02	375223	275123	112566	66126	97560	22531
(Budget)		(73)	(30)	(16)	(26)	(6)
Growth rate % p.a.						
1980-91	15.9	18.1	23.8	11.6	15.9	17.9
1990-01	13.2	13.6	16.8	14.1	28.7	8.4
1980-01	14.5	15.8	20.1	12.9	22.2	13.0

Note: Figures in brackets are percentages of total expenditure.
Source: *Indian Economic Survey 2000-01 (table 2.2).*

Administration

For the 20 years period upto 2000-01, the expenditure on Administration shows a very high growth rate of 22.2 percent per annum due to a growth rate of 15.9 percent per annum during the eighties followed by a record growth rate of 28.7 per cent per annum during the nineties. Expenditure on Administration mainly comprises expenditures on the salary and pensions of the government servants and the money given by central government to the state governments. And both these items of expenditure have shown very high rates of growth.

The Economic Survey of 1998-99 had expressed concern over the very high rate of growth of expenditure on the payment of salaries and pensions to the employees of the central government. The Survey says: "One of the factors which has strained the fiscal position of the Central Government has been the sharp escalation in the salary bill (pay and allowances) and pension payments. Consequent to the implementation of the recommendations of the Fifth Pay Commission, the salary bill and the pension outgo of the Central Government civil ministries and departments including defence services (excluding Telecom, Post & Railways) escalated sharply by 33.6 percent and 35 percent respectively in 1997-98. Salary bill and pension payments now absorb more than one-fifth of the total receipts of the Central Government (table 9.8).

9.7 REVENUE AND NON-PLAN EXPENDITURE
1980-81 to 2000-01

(Rs.crores)

Year	Revenue	Non-Plan Expenditure				
		Total	Interest	Defence	Admin.	Subsidies
1980-81	12419	13362	2604	3600	1603	1851
		(108)	(21)	(29)	(13)	(15)
1990-91	54954	69907	21948	15426	7040	9581
1998-99	149510	189521	77882	41200	9476	21269
1999-00	181434	222339	91861	48504	834	23160
2000-01	203673	250387	101266	58587	890	21491
		(123)	(50)	(29)	(42)	(10)
2001-02	231745	275123	112566	66126	97560	22531
(Budget)		(119)	(49)	(28)	(42)	(10)
Growth rate % p.a.						
1980-91	16.0	18.1	23.8	11.6	15.9	17.9
1990-01	14.0	13.6	16.8	14.1	28.7	8.4
1980-01	15.0	15.8	20.1	12.9	22.2	13.0

Note: Figures in brackets are percentages of Revenue.

Source: *Indian Economic Survey 2000-01 (table 2.2)*

9.8 SALARIES AND PENSION OF CENTRAL GOVERNMENT

(Rs. Crores)

Item	1995-96	1996-97	1997-98	1998-99(BE)
(A) Salary Bill	14895	17013	33732	26484
(18.1)	(14,2)	(33.6)	(16.5)	
(B) Pension	4300	5108	6896	7356
(17.3)	(18.8)	(35.0)	(6.7)	
(C) Total (A+B)	19195	22121	29627	33840
	(17.9)	(15.2)	(33.9)	(14.2)
As % of Revenue Receipts (net to centre)				
1. Salaries	13.5	13.5	16.4	16.3
2. Pension	3.9	4.0	5.0	4.5

Note: Figures in brackets show % change over preceding year
Source: *Indian Economic Survey 1998-99, page 23.*

The Survey further says: "Expenditure on salaries and Pensions alone of the Central Government Civil Ministries and departments including defence services (Telecom, Post & Railways) accounted for about 2 percent of GDP in 1997-98. Salary and Pension payments being in the nature of contractual obligations, divert resources away from vital social and infrastructure sectors. Most Public pensions are paid out of current revenues and not from payments made by present recipients during their working lives. The pension obligations are likely to rise further as life expectations improve and the ratio of pensioners to workforce in central government increase in the coming years."

The Survey also says: "The direct expenditure on salaries does not fully reflect the true cost of workforce employed since there are large associated costs in the form of consumption of goods and services by those employed in the government. The implementation of the Fifth Central Pay Commission recommendations at the Centre also provided a benchmark for pay revisions at state level. This led to a substantial increase in their salary and pension outgo, thereby adversely affecting the fiscal health of the state governments."

The Fifth Pay Commission had recommended a 30 percent job cut across the board. But, the number of employees of the government has been rising inspite of the recommendation, as may be seen from table 9.9 given below.

9.9 TOP TEN EMPLOYERS IN CENTRAL GOVERNMENT
(Employees in thousands)

Employer	1998	1999	2000	% change 1999	% change 2000
Communication	604	610	618	0.9	1.3
Defence	36	40	40	12.0	–
Finance	27	28	28	3.4	–
Home & Family Welfare	30	30	30	–	–
Home Affairs	25	29	30	15.4	2.7
I & B	49	52	58	5.9	11.2
Railways	1564	1621	1621	3.7	–
Urban Affairs	37	37	36	–	–
Atomic Energy	31	34	35	8.9	6.5
U.T. without legislature	22	24	25	7.8	2.3
Others*	1361	2193	1425	61.1	–
Total	3787	3902	3946	3.0	1.1

* - Over 25 departments
Source: The Economic Times dated 7-2-2000

Railways is by far the largest employer in India. In 2000, Railways accounted for about 40 percent of around 40 lakh employees of the central government. And about 40 percent of the employees of Railways are estimated to be in excess of the need.

On june 26 2000, the Supreme Court issued an order which said: "Have we not reached a stage where services of government or semi-government employees should be regulated in such a way that only such persons who can render useful service be continued and not the indolent, infirm and those of doubtful integrity, reputation or utility." Shri Arun Shourie, the Union Minister of Administrative Reforms, said that the above observation of Supreme Court made in respect of the Judicial Officials should also be applicable to government officials.

In 2000, the government had set up the Expenditure Reforms Commission. The Commission has submitted their report in regard to the government staff and their recommendations in this regard have been published in Indian Economic Survey 2000-2001, page 50. The recommendations are as under:

1 A cut of 10 percent on the staff strength as on 1-1-2000, to be carried out by the year 2004-05. Besides, an annual direct recruitment plan for all cadres to be prepared by a Screening Committee.
2 There should be a total ban on creation of new posts for two years.
3 Staff declared surplus should be transferred to the Surplus Cell to be redesignated as the Division of retraining and Deployment, which will pay their salary, requirement benefits etc.
4 Surplus staff should be made eligible for a liberal Voluntary Retirement scheme recommended by the Fifth Central Pay Commission, with the exception that commutation entitlements will be as at present and the ex-gratia amount will be paid in monthly instalments covering a five year period.
5 Those who do not opt for Voluntary Retirement Scheme and are not deployed within one year will be discharged from service.

In his budget speech for the year 2001-2002 delivered in

February 2001, the Finance Minister had said that the pension liability of the government has reached unsustainable proportions: as a percentage of GDP, it has risen from about 0.5 percent in 1993-94 to 1.0 percent in 2000-2001. As such, it is envisaged that those who enter central government service after October 1, would receive pension through a new pension programme based on defined contributions. In order to review the existing pension system and to provide roadmap for the next steps to be taken by the government, he proposed to constitute a High Level Expert Group, which would give its recommendations within 3 months.

Interest

The interest paid by the government on its borrowings had risen from Rs 2604 crores in 1980-81 to Rs.101266 crores in 2000-01, indicating a growth rate of 20 percent per annum, which is about four times larger than the GDP growth rate of 5.7 percent during the same period. This may be seen from table 9.10 given below.

In 1980-81, interest payment accounted for only 34 percent of the fiscal deficit, or the borrowings. This ratio had risen to 57 percent in 1990-91.

Between 1980-91 and 1995-96, the proportion of borrowing expended on developmental programmes had fallen from 66 percent to 43 percent. During the four years period upto 2000-01, the proportion of borrowing expended on developmental programmes ranged betwee 9 to 14 percent only. This situation of the preponderant proportion of fresh borrowing being expended for making payments of the interest on old borrowing has been described as a situation of lying caught in the trap on internal debt.

The proportion of central revenue expended on interest payment has risen from 21 percent in 1980-81 to 50 percent in 2000-01. During the same period, interest as a proportion of GDP has risen from 2 to 5 percent.

9.10 FISCAL DEFICIT AND INTEREST PAYMENTS
(1980-81 to 2000-01)

(Rs. 000 crores)

Year	Fiscal Deficit		Interest	
	Amount	% of GDP	Amount	% of deficit
1980-81	7733	5.7	2604	34
!990-91	37606	6.6	21498	57
1995-96	50253	4.2	50045	100
1996-97	56062	4.1	59478	106
1997-98	73205	4.8	65637	90
1998-99	90322	5.1	77882	86
1999-2000	106724	5.5	91861	86
2000-2001	111275	5.1	101266	91

Source: *Indian Economic Survey 2000-2001.*

The very high growth rate of interest payment is due to a high growth rate of borrowings coupled with a high growth rate of interest charges. During the 20 years period upto 1989-90, share of long-term securities of 5 years and above had risen from 57 to 89 percent; interest rate on long term securities had risen by more than 100 percent; and average interest rate on Centre's Domestic Debt had risen by about 50 percent.

Subsidies

The amount of major subsidies has risen from Rs 1851 crores in 1980-81 to Rs. 28100 crores in 2000-01. During the twenty years period between 1980-81 and 2000-01, the share of major subsidies in the central revenues had fallen from 15 percent to 11 percent and their share in total expenditure had remained constant at 8 percent. This may be seen from table 9.11 given below.

During the 20 years period upto 2000-01, the subsidy on fertilizer has risen at the rate of 18.5 percent per annum which is 2.8 percentage points higher than the growth rate of 15.7 percent for food subsidy. Therefore, the fertilizer subsidy, which was 78 percent of the food subsidy in 1980-81, had grown to be 124 percent of the food subsidy in 2000-01.

9.11 MAJOR SUBSIDIES
(1980-81 to 2000-01)

(Rupees crores)

Year	Food subsidy	Fertiliser subsidy	Total subsidy	Total Subsidy as % of Central Revenue	Total Subsidy as % of Total Expenditure
1980-81	650	505	1851	15	8
(35)	(27)				
1990-91	2450	4389	9581	17	10
1998-99	8700	10026	21269	14	8
1999-00	8210	13250	23160	13	8
2000-01	12125	15000	28100	11	8
	(43)	(53)			
Growth Rate % p.a.					
1980-91	14.2	24.1	17.9		
1990-01	17.3	13.1	11.4		
1980-01	15.7	18.5	14.6		

In 2000-01, the fertilizer subsidy alone accounted for 53 percent of the total subsidies. The expenditure Reforms Commission(ERC) has looked into the situation of a fast growth of the fertilizer subsidy and is of the view that the Retention Price Scheme(RPS) with the unit wise working out of the retention price is a cost plus scheme. It results in high cost of fertilizers, excess payment to industry and provides no incentive to be cost efficient. The ERC has suggested a package of measures in order to rationonalise fertilizer subsidy, which will also take care of small farmers and proposes to bring fertilizer prices to the level of import parity price in a gradual and phased manner over a period of time. The package is as follows:

1. To protect small farmers and marginal farmers two options are suggested: (a) introduction of dual price scheme under which all cultivator households are given 120 kgs. of fertilizers at subsidized prices and; (b) expansion of Employment Guarantee Scheme and Rural Works Programme to provide additional income to small farmers.

2. Dimantling of control system in a phased manner, leading to a decontrolled fertilizer industry which can compete with import, albeit with a small level of protection and a feedstock cost differential compensation to naphtha/liquefied natural gas(LNG) based units for ensuring self-sufficiency.

3. A 7 percent increase in the prices of urea in real terms every year from 1-4-2001. With this order of increase open market price will reach Rs.6903 per tonne by 1-4-2006, a level at which the industry can be freed from all controls and be required to compete with imports at the farm gate at Rs.7000 per tonne of urea. While no concesion will be necessary from this date onwards for gas based fuel oil/ light sulphur heavy stock and mixed feed stock plants, existing naphtha plants converting to LNG as also new plants and substantial additions to existing plants will be entitled to a feedstock differential with that for LNG plants serving as a ceiling.

4. The farm gate prices of nitrogenous, phosphatic and potassic fertilisers should be set to promote a desired balance of fertiliser use. The price of urea should be re-determined every six months and the prices of potassic and phosphatic fertilisers should be suitably adjusted to ensure the desired NPK balance. It will be useful if government could announce in advance the formula to be adopted for fixing the prices of P & K fertilisers with reference to a given urea price.

With a view to reducing subsidy on food, ERC has suggested several measures which include the following:

1. Efforts to ensure that quantities allocated for below the

poverty line (BPL) population reach them at the prices fixed by the Government of India. To this end, State governments would need to identify BPL population in a transparent manner.

2. In those States where the total distribution under the PDS is in excess of the quantities earmarked for the BPL population , the Government of India could provide the subsidy amounts directly to the State governments, leaving it to them to procure the foodgrains required for the BPL population.

3.National Food Security Buffer Stock of 10 million tonnes – 4 million tonnes of wheat and 6 million tonnes of rice – should be maintained at all times.

4. The cost of buffer stock held in excess of above requirement be treated as "producers subsidy" and action taken to phase it out over the years through (a) moderating the increase in minimum support prices and (b) moving towards procurement of single (common) variety of paddy/rice, as in the case of wheat. Besides, through a suitable adjustment in price mechanism, reduce procurement of paddy and increase procurement of rice through a levy system. (c) Encouraging State governments and private sector to enter procurement, trade and export of foodgrains through an assurance of continuity of policy over the next 15 years. The objective of the procurement policy should be to maintain a Food Security Buffer of 10 million tonnes and availability of 21 million tonnes per annum for distribution throgh the PDS. Thus, the total average stocks to be maintained for distribution and buffer stock should not be more than 17 million tonnes or so, compared to a likely level of 24 million tonnes in the current year.

Every effort should be made to minimise FCI's overhead charges and the methodology for allocation of FCI's overheads as between distribution and buffer stocks needs to be modified to ensure that the consumers, particularly those below poverty line are not made to pay for the cost attributable to excess stocks or FCI's inefficiencies.

Chapter Ten

External Sector

INDIA WAS one of the poorest countries of the world. But, it was not an indebted country, and it was not having trade deficits. On the contrary, India had been having trade surpluses for a very long period of time before independence.

By the end of World War II, India had paid off its public debt of Rs.450 crores and had built up sterling assets of over Rs.1700 crores because of Britain's war time purchases in India, which were a sort of forced savings imposed upon India during the period of war.

Before independence, India had to have export surpluses in line with the export orientation of the colonised countries and its export surpluses was a part of the 'annual transfer of wealth' from India to Britain, which was known as the 'drain'.

Ratio of Exports to Imports

During 1840-69, India's ratio of Exports to Imports was as high as 172 percent and it had declined to 148 percent during 1870-1912 and to 133 percent during 1913-38. After independence, however, India's exports have always been smaller than its imports and the ratio of exports to imports has varied between 53 in 1980-81 and 93 in 1970-71, as may be seen from table 10.1.

10.1 INDIA'S RATIO OF EXPORTS TO IMPORTS (%)
(After 1947)

1949-50	79
1960-61	57
1970-71	93
1980-81	53
1985-86	55
1990-91	75
1995-96	87
1996-97	86
1997-98	84
1998-99	78
1999-00	74
2000-01	88
2001-02	66

Source: Economic Survey 2001- 02 (S .78)

World Trends in Exports

After independence, India's exports did not show any growth for quite some time. During 1950-60, the average annual growth rate of India's exports was 0.0 percent, while it was 6.3 percent for the world, 7.0 percent for the developed countries and 2.9 percent for the developing countries. During the same period, the growth rate was 2.1 percent for Latin America, 4.0 percent for Africa, 0.2 percent for South and South-east Asia and 2.8 percent for Asian Middle East.

During 1950-70, the average annual growth rate of India's exports was only 2.1 percent, while it was 7.4 percent for the

World, 8.0 percent for developed countries, 4.7 percent for developing countries, 3.4 percent for Latin America, 6.1 percent for Africa, 3.3 percent for South and South-east Asia and 5.1 percent for the Asian Middle East. This may be seen from table 10.2 given below.

10.2 AVERAGE ANNUAL GROWTH RATE OF EXPORTS
(*percent*)

Region	*1950-60*	*1960-70*	*1950-70*
World	6.3	9.2	7.4
Developed Countries	7.0	10.0	8.0
Developing Countries	2.9	7.2	4.7
Latin America	2.1	5.5	3.4
Africa	4.0	9.2	6.1
South & S.E. Asia	0.2	6.4	3.3
Asian Middle East	2.8	7.7	5.1
INDIA	0.0	3.5	2.1

Source: United Nations' Handbook of International Trade and Development,1972.

Dr. Tarlok Singh, who was head of the Planning Commission during its first seventeen years upto 1967, has used table 10.2 in his book "India's Development Experience" published in 1974. In regard to the very low growth rate of India's exports he says:

"A root cause of the lag in exports, had been the failure to treat foreign trade as an integral part of the plan of development. When the Draft outline of the First Plan (1951-56) was drawn up, economic policy was focussed to an overwhelming degree on the prevailing inflation and shortage of food and agricultural raw materials. From this aspect, the accent was for obtaining import surplus and fully utilising releases from sterling balances accumulated during the war. Although export performance during the plan period was poor, the government did not take any action for improving it. This neglect of exports was due to several factors.

First, it was due to the favourable payments position at the end of the period: only Rs.1380 million had been drawn from the sterling balances, against Rs. 2900 million anticipated earlier. Second, there was a fortuitous rise in the exports in 1950-51 and 1951-52 on account of the Korean War. Third, import of capital goods was low. Fourth, agricultural production had risen. And, fifth, the level of investment was low. Before long, these circumstances changed." (page 343)

Dr, Tarlok Singh further says that "the Second Five Year Plan (1956-61) was influenced strongly by the long-range objectives of industrialisation, especially the development of basic and heavy industries. It was argued that only after industrialisation had proceeded some way, increased production could be reflected in larger export earnings."(page 344)

India's Trade Deficits

This "inward looking character of industrialisation' introduced in the mid-fifties, has done incalculable harm to the prospects of developing export potential in the country. While causing a great setback to the entire process of India's economic growth it has resulting in increasing the already crippling burden of external debt. India's exports, imports and the trade deficit since 1951 are given in table 10.3 .

Actually, the neglect of exports in the early years of planning was a part of the approach of the planning based on the Mahalanobis or Nehruvian model of growth. And this neglect has been justified by Shri Sukhmoy Chakravarty, a well known communist, who had been holding crucially important positions in the central government for a long period of over 20 years upto 1994, when he was chairman of the Policy Planning Committee of the Cabinet. In his book titled "Development Planning – The Indian Experience", Shri Chakravarty says: "The inward looking character of the industrialization process has been one of the more persistent traits of the strategy of planning adopted by India during the mid-fifties. This decision had been derived from a specific understanding of the structural constraints limiting Indian growth." (page 69)

10.3 INDIA'S EXPORTS, IMPORTS AND TRADE DEFICITS

Plan-wise

(Rs. Crores)

Plan		Exports	Imports	Deficit
First Plan	(1951-56)	3027	3676	649
Second Plan	(1956-61)	3029	4865	1836
Third Plan	(1961-66)	3764	6202	2438
Fourth Plan	(1969-74)	9050	9863	813
Fifth Plan	(1974-79)	23641	27689	4048
Sixth Plan	(1980-85)	44835	73415	28580
Seventh Plan	(1985-90)	86911	125561	38650
Eighth Plan	(1992-97)	431283	488045	56762
Ninth Plan	1997-98	130100	154176	24076
	1998-99	139752	178332	38580
	1999-00	159561	215236	55675
	2000-01	203571	230873	27302
	2001-02(P)	159593	242337	82744
Total	(1997-02)	792577	1020954	228377
Ninth Plan target		800900	936100	135200

Sources: 1. *Indian Economic Survey 2001-2002(S-78).*
2. *Ninth Plan Volume I, page 55.*

P-Provisional

The total value of exports during the Ninth Plan period is expected to be around Rs.793 thousand crores which is Rs.8 thousand crores less than the target of Rs.801 thousand crores. And the total value of imports is expected to be around Rs.1021 thousand crores which is Rs.85 thousand crores larger than the target of Rs.936 thousand crores. Consequently, the trade deficit of the Ninth Plan is expected to be around Rs. 228 thousand crores which is Rs.93 thousand crores larger than the target of Rs.135 thousand crores, and is four times larger the trade deficit of

57 thousand crores for the Eighth Plan period. This may be seen from table 10.4 given below.

10.4 TRADE DEFICIT DURING NINTH PLAN PERIOD
(Rs. 000 crores at 1996-97 prices)

	1996-97 (Pre-Plan)	2001-02 Target	2001-02 Actual	Total Ninth Plan Target	Total Ninth Plan Actual	Total Ninth Plan Difference
Exports	118	205	160	801	793	(–) 8
Imports	138	221	242	936	1021	(+) 85
Deficit	20	16	82	135	228	(+) 93

The fact of the trade deficit during the Ninth Plan period being much larger than the target is due to the imports rising at a higher rate of 11.7 percent per annum as against the target of 10.8 percent and exports rising at a rate of 6.1 percent per annum against the target of 11.8 percent.

The phenomenon of India's imports growing at a rate much higher than the target growth rate, observed during the Ninth Plan period, is a repetition of what had happened during the period of Eighth plan. During the Eighth plan period also, while the growth rate of exports at 13.1 percent per annum was less than the target growth rate of 13.6 percent, the imports had recorded a growth rate of 17.3 percent per annum which was more than double of the target growth rate of 8.4 percent.(table 10.5). And, this big failure in limiting the growth of imports as per plan target had taken place in spite of the Eighth Plan document emphasising repeatedly the dire necessity of reducing the trade deficit by limiting the growth of imports during the period of Eighth Plan.

The Ninth plan says that "Export performance will be critical in determining our ability to achieve high growth rate while also achieving the objective of self reliance. Maintenance of Balance of Payments stability depends upon our ability to achieve high rates of export growth. Without a strong export performance, there is danger of being pushed into unsustainable balance of payments deficits, which could lead to increased external indebtedness." (Ninth Plan Vol. I page 5)

10.5 GROWTH RATES OF EXPORTS AND IMPORTS
- TARGETS AND ACTUALS
Percent Per Annum

	Eighth Plan		Ninth Plan	
	Target	Actual	Target	Actual
Exports	13.6	13.1	11.8	6.1
Imports	8.4	17.3	10.8	11.7

The abovesaid para from the Ninth plan has only reiterated the ideas already expressed in the Eighth plan document. The trade deficit during the Eighth Plan period was larger than the target in spite of the Plan's resolve to reduce it. This was considered unfortunate. But, more unfortunate is the fact that in spite of the Ninth Plan repeating the resolve to reduce the trade deficit, the plan is expected to show a trade deficit which will exceed the plan target by a disquietingly bigger margin!!

This situation underscored the dire necessity of the government understanding the gravity of the situation and preparing the Tenth Plan in a way that the demon of large and growing trade deficits could be controlled within sustainable limits, with a view to ending it ultimately.

Seven Sources of Investment

Investment of capital is necessary for the expansion and growth of the economy of a country. But, the pace and pattern of the growth of an economy is not entirely determined by the quantum of the investment and it is also influenced by the facts as to who is making the investment and in which sector the investment is made. Therefore, it becomes necessary to make a critical assessment of the different sources of investment and their chemistry. Broadly speaking, there are seven sources of investment. They are:

1. Investments made by individuals/families within the country.
2. Investment by Domestic Corporate Sector.
3. Investment by Domestic Government.
4. Investment by International Agencies.
5. Investment by Non-resident citizens.
6. Investment by Foreign Private Sector, foreign citizens, foreign corporations and financial institutions.
7. Investment by Foreign Governments.

Each source of investment brings different dimensions to the economic and political arena of the country, as may be seen from the following.

Investment by Individuals/families

As private individual does not spend his resources without expectation of some return, the productivity of investment is guaranteed. It eliminates wastefulness. Since this kind of investment eliminates intermediaries, a direct link is established between individuals, investment, productivity and economic rewards. This investment allows people to consider not only money as investment, but also land, skills, ideas, labour, and almost everything. Thus, it brings about revolution in scope of investment, entrepreneurship and wealth creation, which, in addition to guaranteeing progress also ensures that its fruits go directly to the people in direct proportion of their investments, without any need for wasteful schemes of supervision, administration, political intervention and controls. It ensures that there is no misappropriation, robbing and improper transfer of wealth among people within the country. The wealth of the country remains within the country and with the people of the country. People become the makers of their destiny. Nations become the makers of their destiny.

It should be the goal of every nation and its political process to bring about such state of self sufficiency in investment. Other sources of investment can be used only for supplementing the domestic investment in the interim period. Merit of any economic policy, economic measure and source of investment has to be judged by how much it facilitates and brings about such amalgam of economic freedom and growth in a country.

Investment by Corporate Sector

Investment by Corporate Sector facilitates large-scale economic activity. It has unmatched efficiency and productivity of the investment. It brings collectivism in economic arena, which can undertake things that are not possible in non-corporate sector. Use of innovation in technology, administration and financial matters can make it a formidable tool for economic progress. Inherent motive of profit and direct rewards lend it vitality and viability. It has very little scope for inefficiency, wastefulness and failures. With all these merits it also has certain demerits.

First of all, Corporate Sector results in collectivism instead of individualism. Thus, it demotes individuals and family as compared to a sort of fluid collectivism. Thus, the idea of fair distribution of wealth and economic prosperity gets ignored. Corpocracy also demotes man. It gives primacy to capital, efficiency, profits, and subordinates man. Man is marginalised, subordinated and exploited and kept numb with bribery of high life styles which are available to only those who strengthen corpocracy. The division of labour makes man vulnerable. Division of knowledge makes man ignorant. Division of ownership disfranchises man and makes him helpless. Corpocracy is also expansionist. It seeks to expand commercialisation. It cannot be confined within the boundaries of either basic necessities or geographic/demographic entity of a nation. The goal of corpocracy is not to maximise employment and distribution of wealth, but to minimise payrolls and maximise concentration of economic power and wealth.

The capital formation potential of private sector depends on the pattern of wealth distribution, entrepreneurial climate and the savings rates, which are very much unevenly distributed under corpocracy. Thus, under the corpocracy, means of production are not available to all but to few. The few would control the economy while the rest have to toil for the gains of the few rich. It is, thus, a complete antithesis of investment by individuals.

It needs to be understood that whatever the source of investment, it will always produce income disparities and classes. Any attempt to abolish classes through state and state-sponsored ideologies have failed and multiplied problems. Nations have no choice but to manage the antithesis represented by investment by non-corporate private sector, and investment by corporate sector. Nation has to achieve economic progress by creating realities that complement each other rather than allowing corporate sector to create a negation of non-corporate sector. There are things that corporate sector can do well. But, corporate sector must not be allowed to gain upper hand or free rein because it is inherently expansionist and subjugative.

Nation has to manage the economy through private sector made up of corporate and non-corporate enterprises. Howsoever uneven the growth and distribution of wealth might be, it remains within the nation. The best that a nation can do under the trade and investment based economic model is to ensure that everybody is able to participate in the creation of wealth.

Investment by Domestic Government

There is no reason for the government to get involved into the business of business. It is the responsibility of the government to exercise control over those engaged in business. The government might have a stake in overseeing the economy of the nation; but it can not justify acquiring total control over the functioning of the economy. Government has a tendency to enlarge the area of its operations. A government that acquires control over the economic power in addition to the political power, can act like a tyrant.

State may be tempted to enter into business in an underdeveloped country, where private sector is still emerging, where the growth of capital and skills is slow, where there is no experience of working with the trade and investment model. It might even proclaim that it is merely jump-starting the economy. The infrastructure, literacy, energy, communication, transportation, defence etc, cannot be left to the private sector because nation has great stake in their faster growth and control. Thus, when economic power is controlled by state, it attracts those who would like to play politics with it and hold the nation hostage. They would keep the economic power hostage and would release it only in exchange for usurpation of political power from people. In this situation, state acquires suspicion about people, private sector and decentralisation. Investment and economic decisions are no more governed by principles of economics and economic growth gets retarded. This is what most nations guided by socialism and communism have experienced. They attest to the truth that investment by state impoverishes nation. The only people who benefit and gain power are politicians-cum businessmen, political parties, middlemen and power brokers.

Investment by state is a complete antithesis of investment by private sector. Nation has to make economic progress by creating realities that complement each other rather than allowing Public Sector to create a negation of Private Sector. There are areas where Public sector can do well e.g. defence, energy and communication. But, public sector must not be allowed to gain upper hand or free rein because it is inherently inefficient, wealth-negating and political in conception.

Nation must empower Private Sector and particularly non-corporate sector. The key word is economic decentralisation as against economic centralisation in corpocracy or economic centralisation in state or economic centralisation in global order in which nation has an atomized and marginalised entity. Unless every citizen is allowed to become producer, people cannot achieve economic growth and nation cannot progress.

The word domestic is very critical because dire straits of Private Sector and Public Sector would invite international sharks who would pounce upon the nation in its weakest moments. These sharks will come up with fake promises and self-serving paradigms and work for undermining the existence and independence of nation. The same politicians who push the nation to a state of economic paralysis will try to rescue their political careers and ensure a continuity of their lucrative hegemony by selling the nation to the international sharks for short term gains.

Investment by International Agencies

Many nations that followed the economic policies of promoting investment by corporate sector as a substitute for investment by non-corporate sector, and investment by government as a substitute for investment by private sector, found their economic policies going nowhere without the help from international agencies. The international agencies stepped in and supported such defective policies which were never found working. Such nations, instead of discarding those wrong policies, found themselves caught in a trap because the international agencies supported the wrong policies. And for pursuing the wrong policies adopted by them they had become dependent upon the support from the international agencies, the IMF and the World Bank.

Even though the IMF/WB are no fiefdoms of any single nation, the G-7 nations collectively drive their policies and strategies through these institutions.. The G-7 nations have their macro-level and geo-political objectives in making investments in other countries through the IMF/World bank. The operations of IMF/WB are rooted in specific ideologies, specific economic theories, and specific political and economic needs of the G-7 countries.

The IMF and World Bank are accountable to the G-7 nations and not to the borrowing nations. The G-7 nations carry out their economic engineering and designs on other nations through the IMF/WB. So, when nations borrow money from the IMF/WB, they allow their economies to be macro managed and pushed into directions that primarily benefit the G-7 nations.

All the nations who have traditionally depended on the IMF/WB are in the worst economic state. For every failure of their mandated policies, the IMF/WB blame the next set of hurdles that they want to clear. For every crisis created due by their blunders, IMF/WB give more rescue loans with even more stringent conditionalities that lead to even more strict macro-management of the borrowing country, and this process goes on until IMF/WB take over the complete policy making of the indebted country. The IMF/WB do not stop at macro-management only and go further even to micro-manage the economies of the debtor countries by preparing the budgets for them. They do not stop even at the formulation of policies through the budgets, they want to supervise their implementation also.

The investments made by the IMF/WB have two sets of conditionalities, out of which the risky and highly sensitive conditionalities are kept secret in order to prevent political fall out in the borrowing countries. Actually, the IMF/WB conspire against the borrowing countries in order to wreck their economies and their political process in order to make them weaker and more dependent upon them. The main purpose of the IMF/WB is to achieve ideological, geo-political and economic goals of the G-7 nations.

Investment from IMF/WB is extremely risky and is a slippery slope of crises which lead to bail-outs and dependence on foreign doles. Nations fail to realise that they are being macro-managed by IMF/WB, and, consequently, are being hit by strings of crises. At the first sign of any trouble in a nation, these agencies toughen their conditionalities. International agencies often engineer a crisis in order to further tighten their noose on the nation by 'bailing out' with more strings attached with the loans.

When nations in a state of crisis look around for help, they find that nobody is running charities anywhere and that everything comes with a political cost. Heavy costs. Long term costs. If the aim of national rulers is to help the people, they must avoid international agencies as much as possible, and try to solve their problems with the national resources. And, if that means a little lower rate of growth for the GDP that should be preferred to a little higher growth rate achieved through larger use of foreign loans.

Investment by Non-resident citizens

Unlike any other sources of investment, the investment by nationals abroad has no strings attached to it. Successful non resident citizens abroad can transfer valuable wealth, skills, technology, know-how and experience back to their country of birth. Investment by non resident citizens also paves the way for investment by foreign nationals and foreign institutions. This investment lies between domestic investment and the foreign investment and forms the bridge between the two.

However, the investment by non resident citizens abroad, though quite welcome, has an element of risk also. This investment will be the first to flee the country at the first sign of trouble. Nation can not base any sound or lasting policies on the basis of this investment. These investments can be resorted to only in times of crisis, but, cannot be utilised for normal functioning of nation's economy.

Investment by Foreign Nationals

Investment by foreign nationals has no conditionalities and has unlimited availability. In fact, foreign nationals and foreign companies are too eager to make investment in other countries. The multinational Companies (MNCs) go all over the world for discovering and securing new markets as additional sources of profits, savings and wealth generation, with a view to increasing their stock of capital. Market is the presiding deity of capitalism. All of a sudden, nation has ceased to be a nation – it has become a market. The same countries, which, in the recent past, were described as 'third world', 'poor countries', 'under-developed countries' or 'developing countries', have, all of a sudden, become 'emerging markets' or 'underserved' markets.

Investment and location of economic operations in the market nation are decided upon as an extension of economic activity in the home country. This kind of economic activity links two economies in which investor country acquires ownership interests in the weak market-nation. Because fruits of economic activity go largely to the source of investment, the economic progress resulting from the investment also goes to the foreign country making the investment. Consumerism and job creation goes to the market nation and wealth creation goes to the investment making foreign country. Job creation does not add to the wealth of the market nation as it is neutralised by consumerism that leads to the transfer of wealth to the investment making foreign countries.

Foreign investment does not come alone to market nations, it joins the large company of market seeking goods and services to tap the existing and newly created wealth of nation. Once foreign nations become dependent on prosperity at home due to transfer of wealth from abroad, they begin to look at such common-wealth market as sustainer of their tax base and welfare state at home. As market nations lose their wealth and capital formation due to consumerism and become dependent on foreign investment for sustaining their life styles and job base, they cannot get rid of their dependency on foreign investment. In the meanwhile, foreign investment sucks the wealth out of the nation and, at the same time, acquires hegemonistic ownership interests in market-nation's economy. Foreign nations start taking active interest in the political process of such market-nation in order to safeguard their ownership and economic security interests. Prosperity brought back to the home country through investments made abroad allow foreign nations to offer tax-cuts and wage-hikes. Because much of the domestic prosperity, domestic statism, domestic employment, domestic wages, domestic taxation, fitness of corporate sector become dependent upon wealth transfer from foreign market nations, the investment making foreign nations can not remain helpless spectators about internal affairs and internal political process of the market nations.

Growing encroachment of foreigners in market nations can produce strong nationalistic and patriotic counter-forces. Thus, political situation becomes very vulnerable inside such market nations and poses serious danger to the ruling elite. On the other hand, nationalist challenges make their political life miserable. Also, loss of policy making and political sovereignty of nation make the ruling elite stealthy and defensive. They retain their power only through the support of foreigners. In exchange of this support, the foreigners retain their rule over the market nation. Foreigners become the king-makers. They extract all kinds of self serving and one-sided treaties from the puppet rulers.

Another trait of foreign investment is that it flees at the first sign of trouble. Draconian policy changes imposed by foreign investors in order to serve their own interests also unleash political instability. Financial crisis, inflation, devaluation, collapse of currency, collapse of stock market, trigger troublesome times for all. Each bail out brings about more conditionalities and stringencies. Because of vulnerability faced by foreign investment, foreign government have to acquire direct stake in the political process of the market nation. It can take several forms, viz. starting war with neighbour; extending help to separatist movements; demonization of nation's history and culture; trade sanctions and embargo; military blockade; arms twisting on sovereignty negating treaties; organised international terror through global agencies etc.

Foreign investment can create a short-term illusion of prosperity, job growth, foreign exchange growth, export-import growth, flood of quality good and services, latest technology and flourishing life styles, while losing everything else that make and sustains a nation. People begin to wake up only when even these short term bribes begin to disappear. Unlike wealth, the ideas of nationhood, sovereignty, independence are not transferable from one generation to another. Everybody has to strive for and earn them year after year and generation after generation. When a nation loses its inherent strength, all goodies provided by globalism begin to vanish.

Investment by Foreign Countries

This is the final act on the road to dependence on foreign sources of investment. It completes the antithesis of investment by domestic sources. Since domestic investment and foreign investment are complete antithesis of each other, they bring about opposite consequences.

When a foreign nation's prosperity, wages, cost of living, standard of living, job base and political balance depend on getting wealth from other countries, the government of that nation can not sit idle. It has to regard any likely disturbance in wealth transfer as national crisis and national security issue. Unlike private foreign investors, a foreign nation does not run away at the first sign of trouble in the market nation. Instead, it rushes to market nation for intervening politically, diplomatically, economically, and militarily, in order to turn situation in its favour. Rulers can be overthrown, parties can be made and unmade, local resistance can be crushed, policies can be imposed, one-side treaties and bailouts can be imposed on nations for creating favourable situations for the foreign nation. Foreign private investment may not have the security of army; but, foreign nation can deploy its secret armies, gun-boat diplomacy and even army in order to safeguard its investments, property rights and ownership rights. It will also bring the full weight of its trade-tank-missionary axis to bear on the market nation.

Investment from foreign nations becomes necessary when other sources become inadequate. And, the investment making foreign nations use this opportunity for making as much investment as possible and use several unfair means for doing it. Investment not guided by purely economic factors, however, fails to show the projected and promised growth of economy. It creates a vicious circle where market nation goes through series of crises and every bailout by foreign nation causes loss of economic and political sovereignty, until nation is left with none. If investment by the government of the market nation cannot have good results, how investment by the government of a foreign nation can show good results?

Normally, investment by international agencies hook a poor nation to the addiction of borrowing external capital. Its tough conditionalities make the nation look for any no-strings-attached sources of foreign investment, and the investment by foreign nation is considered to be such an investment. This leads to the foreign nation capturing the economy of the market nation through successive packages of investment. Foreign private sector might treat the captured economy as a market, but the foreign state treats the people of the market nation as its subjects. It is recolonisation through money power.

The investment world is not monolithic in form and substance. Investment by domestic sources is not the same as investment by foreign sources. Both are antithesis as far as their consequences for the market nation are concerned. Unless investment is further qualified by its source, no judgement can be made in regard to its likely impact on the economy of the market nation. Investment cannot automatically imply growth and development. One should really be suspicious of the politicians who call investment as panacea of all ills. One should be suspicious of them if they put all sources of investment at par and conceal the antithetical nature of investment from different sources. Politicians are generally a part of the machinations of the foreign nations for subjugating the economies and the people of the market nations.

There are no short cuts to economic progress and there are no alternatives to living within the means. However long it takes to achieve the desired level of economic growth, a nation has to depend largely on its own resources, local conditions and local investments. This is the core of the rational approach to development. With this approach comes pride, dignity, respect and independence. Without it comes their loss.

External Debt

The growth of external debt is a far more serious matter than the growth of internal debt. Internal debt can be deferred or even repudiated at some political cost. But, failure to repay external has an adverse effect on country's international relations, impedes further flow of capital and disturbs trade flows. Secondly, internal debt can be monetised i.e. repaid by printing money; but, external debt cannot be repaid in this way. Thirdly, internal debt can be repaid by privatisation; whereas, selling of national assets to foreigners in order to repay external debt can jeopardise country's security and sovereignty. Finally, and most important, internal debt can be serviced if the return on capital is more than the cost of borrowing and amortisation. In the case of external debt, however, this will not be adequate. In addition, it will have to be ensured that foreign exchange earnings, through exports or otherwise, should rise in relation to the servicing of external debt.

India's external debt, which was $21billion in 1980, had risen to $84 billion in 1990 and to $94 billion in 1999. In 1999, India was the tenth most indebted country of the world, as may be seen from table 10.6 given below.

10.6 TOP FIFTEEN INDEBTED COUNTRIES OF THE WORLD 1999

Country	Total External Debt Billion dollars	Debt to GNP Ratio(%)	Debt Service to Exports Ratio(%)
1. Brazil	245	34	380(severe)
2. Russia	174	46	141(Moderate)
3. Mexico	167	36	119(Less)
4. China	154	16	61(Less)
5. Indonesia	150	113	246(Severe)
6. Argentina	148	54	429(Severe)
7. Korea	140	32	73(Less)
8. Turkey	102	54	168(Moderate)
9. Thailand	96	80	128(moderate)
10. INDIA	94	21	114(Moderate)
11. Poland	54	36	118(Less)
12. Phillippines	52	65	111(Moderate)
13. Malaysia	46	63	50(Moderate)
14. Chile	38	56	172(Moderate)
15. Venezuela	36	36	155(Moderate)

Source: Indian Economic Survey 2001-2002(page 159).

Note: Words in brackets show the class of indebtedness.

In March 2000, India had an external debt of $100 billion which included $31 billion from multilateral sources, $17 billion from bilateral sources, $24 billion from commercial debt and $16 billion from NRI deposits.

10.7 INFLOW AND DEBT SERVICING OF EXTERNAL LOANS
(Rs.Crores)

Year	Gross Utilisation	Debt total	Servicing Amortisation	Interest	Net inflow
1980-81	1625 (2054)	804 (1017)	518 (655)	286 (362)	821 (1038)
1990-91	6704 (3737)	4282 (2386)	2329 (1298)	1953 (1088)	2422 (1350)
1991-92	11615 (4689)	6656 (2720)	3650 (1492)	3006 (1228)	4959 (1969)
1992-93	10982 (3589)	9102 (2970)	4788 (1562)	4314 (1408)	1880 (619)
1993-94	11783 (3769)	9532 (3052)	5333 (1707)	4199 (1345)	2251 (717)
1994-95	10940 (3484)	10408 (3315)	5773 (1839)	4635 (1476)	532 (169)
1995-96	11023 (3296)	12649 (3782)	7569 (2263)	5083 (1519)	-1626 (-486)
1996-97	11979 (3374)	11940 (3363)	7070 (1992)	4870 (1372)	39 (11)
1997-98	11806 (3177)	12345 (3322)	7550 (2031)	4795 (1290)	-593 (-145)
1998-99	13238 (3147)	14072 (3345)	8880 (2111)	5192 (1234)	-834 (-198)
1999-00	14405 (3324)	15166 (3500)	9686 (2235)	5480 (1265)	-761 (-176)

Note: Figures in brackets show the amount in million dollars
Source: *Tata's Statistical outline of India 2001-02 (table 218).*

As may be seen from table 10.7, the payments for debt servicing has been growing fast and is at present about equal to or even larger than the amount of fresh loans. In other words, India has been caught in what is called the external debt trap and all money received through new loans gets preempted in making payments of the debt servicing charges of the old loans. This meant foreclosing of the option of using external debts for financing the developmental programmes of the country which compelled the government to have greater reliance on the Foreign Direct Investment(FDI).

Foreign Direct Investment

The Foreign Direct Investment (FDI) has been the principal means of the Multinational Companies (MNCs) for increasing their control over the economies of the developed and developing countries. The stock of capital owned by the MNCs had grown at a very fast pace during the last decade of the twentieth century. According to the World Investment Report 2000, published by the United Nations Conference on Trade and Development (UNCTAD), the number of MNCs in the world had risen to 63000 in 1999 and they had around 690,000 foreign affiliates and a plethora of inter-firm arrangements covering virtually all countries and economic activities. Consequently, the report says, MNCs have emerged as a formidable force in the world economy.

FDI in the world, which had stagnated around $159 billion during the eighties, had risen very fast thereafter. Between 1991 and 1995, the world FDI had risen from $159 billion to $355 billion, which meant an annual average increase of $49 billion. But, after 1995, the FDI grew much faster and rose to the level of $1150 billion in 2000, indicating an annual average increase of $159 billion, which was about three times of the rate of increase for the preceding period of four years upto 1995.(table10.8)

10.8 FDI IN DEVELOPED AND DEVELOPING COUNTRIES
1981 to 2000

(Billion dollars)

Countries	Year 1981	1991	1995	2000
Developed	131	115	306	1046
	(82)	(72)	(86)	(91)
Developing	28	42	49	100
	(18)	(26)	(14)	(9)
World*	159	159	355	1150

*- Includes countries of Central and Eastern Europe.
Note: Figures in brackets indicate % share in world total.
Source: *World Investment Report 2001 (page 296)*

The growth rate of FDI in developed countries which was (–)1.3 percent per annum during 1981-1991 had risen to 27.7 percent during 1991-1995 and to 27.9 percent during 1995-2000. In the developing countries, the growth rate of FDI had fallen from 4.1 percent per annum in 1981-1991 to 3.9 percent in 1991-1995 and had risen to 15.3 percent during 1995-2000. The growth rate of the FDI in the world was 22.2 percent per annum during 1991-1995 and it had risen to 26.9 during 1995-2000.This may be seen from table 10.9 given below.

10.9 GROWTH RATE OF FDI
(percent per annum)

Countries	1981-1991	1991-1995	1995-2000
Developed	(-) 1.3	27.7	27.9
Developing	4.1	3.9	15.3
World	Nil	22.2	26.9

The very high growth rate of FDI in developed countries after 1991 is due to a wave of Mergers and Acquisitions (M&As), which are mostly confined to the developed countries. Therefore, the share of developed countries in the world FDI, which had declined from 82 percent in 1981 to 72 percent in 1991, had risen to 86 percent in 1995 and to 91 percent in 2000. On the other hand, the share of developing countries, which had risen from 18 percent in 1991 to 26 percent in 1991, fell to 14 percent in 1995 and to 9 percent in 2000. (table 10.8)

International Production

The production in different countries taking place under the common governance of MNCs has been described as 'International Production' in the World Investment Report 2000 published by the United Nations Conference on Trade and development (UNCTAD). The report says: "The international production is growing faster than other economic aggregates. The nature of international production is changing. Falling transportation and communication costs are allowing MNCs to integrate production and other corporate functions across countries in historically unprecedented ways. This is giving rise to a 'cohesive global production system', with specialised activities located by MNCs in different countries which are linked by tight, long-lasting bonds. The system is growing rapidly to span many of the most dynamic activities in the world. If it represents best practice in international economic activity then all countries have to come to grips with its dimensions and implications."(page 3)

The report further says: " The MNCs have strong preference for M&As as a mode of FDI. But, this causes concern regarding an erosion of national economic sovereignty; a weakening of national enterprises; and a loss of control over the direction of national development and the pursuit of social, cultural and political goals. These concerns are linked to fears regarding globalisation and the perceived power of MNCs."(page 196).

But, in the end, the report says: "Greenfield FDI is more useful to developing countries because it brings a package of resources and assets and simultaneously creates additional productive capacity and employment. On the other hand, M&As involve a number of risks at the time of entry, and, when there are competing firms, their entry has negative impact on market concentration and competition, which can persist beyond the entry phase.(page 198).

Several countries have enacted laws for protecting their economies from the harmful effects of the M&As. The United States Omnibus Trade and Competitiveness Act of 1988 provides authority to the president of USA to suspend or prohibit any foreign acquisition, merger or takeover that is likely to threaten the national security of USA. This authority can also be exercised under section 71 of the Act of 1988, which is also known as the 'Exxon Florio Provision.'

In Canada, all foreign takeovers of Canadian companies are subject to notification to the government. Foreign takeover proposals are assessed on the basis of their 'net benefit' to Canada, which is determined on the basis of a study of the various factors related to the takeover in question.

In Malaysia, the Foreign Investment Committee(FIC) guidelines of 1974 were formulated to establish a set of rules regarding the acquisition of assets or any interest, mergers or takeovers of companies and businesses. Through these guidelines, the government tries to reduce the imbalances in distribution of corporate wealth and to encourage those firms of private investment that would contribute to the development of the country in consonance with the economic objectives. The guidelines provide that the proposed acquisition of assets or any interest, merger or takeover should:

i) result in a more balanced Malaysian participation and control;

ii) lead to net economic benefits to Malaysia in terms of Malaysian participation, particularly Bhumiputra participation, ownership and management, income distribution, growth, employment, exports, quality range of products and services, economic diversification, processing and upgrading of local raw materials, training, efficiency and research and development; and

iii) not have adverse consequences in terms of national policies in such matters as defence, environmental protection or regional development.

Some countries have instruments to screen cross-border M&As for particular purposes, e.g. national security considerations. Moreover, governments may reserve the right to approve some projects and reject or modify others in order to preserve important public interests. Also, governments have, sometimes, kept "golden share" in privatised companies in order to be able to preserve essentially strategic interests and preventing undesirable changes in ownership and control of privatized company.

Sale and Purchase through M&As

The WIR 2000 gives information about M&As for the period 1997-1999. According to this information, the number of cross-border M&As of value above $ 1 billion had varied between 7 and 33 in a year during 1987-1994, and, thereafter, it rose to 64 in 1997, to 86 in 1998 and to 109 in 1999. This shows that the number of M&As has risen steeply after 1997.

In 1999, the sales through cross-border M&As had risen to $720 billion, out of which M&As worth $645 billion related to enterprises located in developed countries. Out of this sale of $645 billion by developed countries, more than half was accounted for by USA ($233 billion) and UK ($125 billion). In 1999, the USA continued to be the single largest target country with the M&As sale of $233 billion to foreign investors. In the same year, US firms had acquired foreign firms valued at $112 billion through M&As. The US purchases were, thus, $121 billion less than the sales. In the same year, however, the purchases had exceeded the sales by $85 billion for UK; by $60 billion for France; and by $ 2 billion for Italy. The loss of USA was, thus, the gain of EC countries. (table 10.10).

10.10 SALES AND PURCHASES THROUGH M&AS - 1999
Important Countries

(Billion Dollars)

Country	Sales	Purchases	Difference
USA	233	112	(–) 121
UK	125	210	(+) 85
Germany	42	84	(+) 42
France	23	83	(+) 60
Italy	11	13	(+) 2

Source: *WIR 2000 (pages 240-248)*

Actually, the so called wave of M&As is an economic war between the EC countries and America, which constitute the two most powerful segments of the world economy. The EC countries have a share of 15 percent in the inflow of world FDI and a share of 29 percent in its outflow. America has a share of 27 percent in the inflow of world FDI and a share of 32 percent in its outflow. Of the several consequences of this economic war, special mention needs be made of the following two:

Firstly, because of America's sales far exceeding its purchases, there was an increased demand for dollar, which pushed up the value of dollar vis-a vis other currencies.

Secondly, the wave of M&As has been followed by downsizing of firms and increased the number of unemployed in the developed countries.

The large increase in the number of unemployed in the developed countries has resulted in a widespread and strong opposition to the policies of the World bank, which became manifest in the strong demonstrations against the WEF meeting at

Davos in January 2000, the UNCTAD meeting at Bangkok in February 2000 and again against the WEF meeting in Melbourne in September 2000.

The opposition to World Bank policies is more widespread and stronger in the developed countries because of a preponderantly large proportion of the workforce there being employed in the industrial and the services sector which have been adversely affected by M&As. It looks most likely that the workers in the developed countries will have the honour of burying the policies of the World bank.

Ayurveda says that whichever diseases are found in an area, the medicine for those diseases are also found in the same area.

Chapter Eleven

Unemployment

UNEMPLOYMENT and underemployment has been the most important cause of poverty in India. During the 567 years of Muslim rule upto 1757, the policy of Delhi Sultans to tax agriculture heavily for financing their military campaigns, and not paying attention to the need for extending irrigation to the newly cultivated lands, resulted in a very large proportion of agricultural land remaining without irrigation. This resulted in a very low intensity of land-use, a very low productivity of land, and, consequently, smaller employment opportunities and incomes in the rural areas.

During the 190 years of British rule, the main objective of government policies was to destroy village industries and handicrafts in order to create market for the products of British industries. The consequential decline and destruction of village industries and handicrafts resulted in a substantial reduction in employment opportunities in the rural areas and millions of families falling back upon agriculture for their livelihood.

During the period of Muslim rule, heavy taxes on agriculture had only destroyed the prosperity of agriculture and it did not cause much poverty, because, good grade land was available aplenty, and anybody could earn a living by cultivating the land, unemployment after the estimates given in the Third Plan document.

But, then, the government had started giving estimates of people below poverty line. And, these estimates, as is explained in the following chapter 12 on poverty, are even more unreliable than the estimates of unemployment. The question arises as to why the government discontinued giving estimates of unemployment and started giving estimates of poverty?

The answer lies in the fact that the government felt very much embarrassed on account of the steep increase in the number of unemployed in the country and stopped publishing the number of unemployed by adopting the common practice of appointing a Committee.

Ninth Plan (1997-2002)

The Ninth Plan document says; "One of the most daunting challenges facing the Ninth plan is to provide employment not only for the additions to the labour force during the plan period, but also to reduce the backlog of unemployment accumulated from the past. This imperative needs to be seen in the context of both an acceleration in the growth of labour force and a secular downward pressure on the employment intensity of the growth process. Despite an expected reduction in the growth rate of population to 1.58 percent per annum by the end of the Ninth plan, the labour force growth reaches a peak level of 2.51 percent per annum during the Ninth plan period; the highest it has ever been and is ever likely to attain. Population is projected to increase by 78 million during the Ninth plan period (1997-02) to a level of 1029 million by the end of the Plan. However, the age-structure of population changes in response to fertility behaviour experienced in the past, and projected for the future, so that the proportion of the population in the most active age-group of 15 to 59 years goes up significantly during the Plan period. This is a reflection of the high rates of population growth observed during the late 1970s and early 1980s. Moderation in growth of population that has been brought by a decline in birth rate in recent years, starts getting reflected in decline in labour force growth only in the post Ninth Plan period. (Ninth Plan Volume I, page 185).

On the basis of age and sex structure of the population and the Labour Force Participation Rates (LFPR), the labour force is projected to increase by 52.4 million during the Ninth Plan period on the usual status concept, as shown in table 11.1 given below.

11.1 LABOUR FORCE PROJECTIONS BY AGE GROUPS

(Millions)

Age Group	1997	2002	Growth % p.a.
15-19	40.31	45.03	2.24
20-24	55.45	62.91	2.55
25-29	56.89	61.47	1.56
30-34	52.64	58.88	2.26
35-39	46.60	52.80	2.53
40-44	39.56	46.04	3.08
45-49	32.90	38.13	2.99
50-54	25.86	30.27	3.20
55.59	18.86	22.45	3.55
60 +	28.15	31.64	2.37
!5 +	397.22	449.62	2.51

Source: *Ninth Plan Volume 1 page 187*

As may be seen from the above table, the absolute number of persons in the 35-60 age group of labour force increases sharply during the Ninth Plan period because of the change in age structure, which leads to 3 percent or higher growth occurring in labour force age groups of 40 to 59, despite an expected reduction in the LFPR of this age group. If the motivation to attain higher education levels or the exoected level of economic well-being and social security do not materialise, the LFPRs of lower age groups may turn out to be higher and put even further pressure on the labour market.

NSSO Surveys

The National Sample Survey Organisation (NSSO) provides estimates of the rates of unemployment on the basis of its quinquennial surveys and it uses three different concepts of unemployment. First, a person is considered unemployed on Usual Status (US) basis, if he/she was not working, but was either seeking or was available for work for the major part of the reference year. Second, on the basis of a week as the reference period, a person is considered unemployed by Current Weekly Status (CWS), if he /she had not worked even for one hour during the week, but was seeking or was available for work. The third concept of unemployment is the Current Daily Status (CDS), which is in terms of total person days of unemployment, and is the aggregate of all the unemployment days of all persons in the labour force during the reference week. The US unemployment rate is generally regarded as the measure of chronic open unemployment during the reference year. The CWS unemployment rates also measure chronic unemployment, but with the reduced reference period of a weak. The CDS is considered to be a comprehensive measure of unemployment, including both chronic and invisible unemployment.

The NSSO also prepares estimates of elasticity of employment to GDP, which are given in the table 11.2.

The Ninth Plan says that the rate of growth of labour force is expected to accelerate during the period of the plan, which requires a commensurate increase in the rate of growth of employment opportunities. Therefore, the Plan document has suggested a structure of growth corresponding to the GDP growth rate target of 6.5 percent, which is indicated in the table No 11.3 given below.

11.2 ELASTICITY OF EMPLOYMENT TO GDP

Sector	1972-73 to 1977-78	1977-78 to 1983	1983 to 1987-88	1987-88 to 1993-94	1997 to 2002
Agriculture	0.75	0.45	0.45	0.53	0.50
Mining	0.94	0.80	1.00	0.39	0.60
Manufacturing	1.00	0.67	0.29	0.42	0.25
Electricity etc.	1.00	0.73	0.73	0.33	0.50
Construction	0.33	1.00	1.00	1.00	0.60
Trade	1.00	0.78	0.63	0.59	0.55
Transport & Communication	0.74	1.00	0.25	0.68	0.55
Financial & Business services	0.00	1.00	0.11	1.00	0.53
Social & Personal services	0.73	0.83	0.27	0.92	0.50
All Sectors	0.59	0.53	0.38	0.43	0.38

Note: All figures are actuals except for 1997-2002, which are projected estimates.

Source: *Ninth Plan Volume 1 page 189.*

11.3 PROJECTION OF WORK OPPORTUNITIES 1997-2002

Sector	GDP Growth % p.a (1997-02)	Work Opportunities (Million) 1997	2002
Agriculture	3.9	238.32	262.48
Mining	7.2	2.87	3.54
Manufacturing	8.2	43.56	48.22
Electricity etc.	9.3	1.54	1.93
Construction	4.9	14.74	17.03
Trade	6.7	34.78	41.67
Transport &\ Communication	7.3	11.96	14.57
Financial & Business services	8.5	4.55	5.68
Social & personal services	7.1	38.98	46.41
All Sectors	6.5	391.30	441.52

Source: *Ninth Plan Volume 1 page 190.*

The projections of labour force and work opportunities created during the periods of Eighth and Ninth Plan are given in table 11.4. According to these projections the average rate of unemployment is expected to decline from 1.87 percent during Eighth Plan period to 1.66 percent during the Ninth Plan period.

11.4 LABOUR FORCE AND EMPLOYMENT
Eighth and Ninth Plan Periods
Millions

	Eighth Plan (1992-97)	Ninth Plan (1997-02)
Labour Force	374.2	423.4
Employment	367.2	416.4
Unemployment	7.0	7.0
Rate % p.a.	(1.87)	(1.66)

Source: *Ninth Plan Volume 1 page 190.*

The Ninth Plan further says: "Every effort would need be made for attaining full employment in the post-plan period. Since labour force is expected to be at its peak in the Ninth Plan period, attainment of near full employment by the year 2007 may not be an unreasonable target, provided that the conditions are created for further acceleration in the growth rate and the intensity of labour absorption is not substantially reduced. It is estimated that full employment by 2007 is contingent upon acceleration in growth of employment in post Ninth Plan period to 2.8 percent compared to a realised growth of 2.36 percent (1978-94) and projected growth rate of 2.44 percent in the Ninth Plan. This would require GDP to grow at 7.7 percent per annum during the post Ninth Plan period, which is well within the realm of feasibility." (page 191)

Estimates for population, labour force and employment for the 24 years period upto the end of Ninth Plan(1997-2002) and the projections for the Tenth Plan(2002-07) are given in table 11.5

11.5 POPULATION LABOUR FORCE AND EMPLOYMENT

(Million)

	1978 (a)	1983 (b)	1994 (a)	Eighth Plan (1992-97) (f)	Ninth Plan (1997-02) (f)	Tenth Plan (2002-07) (f)
Population(c)	438	718	895	951	1029	1113
		(2.19)	(2.12)	(1.89)	(1.58)	(1.58)
Labour Force	256	287	369	374	423	479
		(2.09)	(2.42)			
Employment	249	281	362	367	416	475(d)
		(2.23)	(2.42)			
Unemployment	6.7	5.4	7.0	7.0	7.0	4.1(e)
Unemployment Rate (%)	2.63	1.89	1.89	1.87	1.66	0.86

Source: *Ninth Five Year Plan, Volume I page 191.*

Notes: 1. Estimates of Labour Force and Employment are on Usual Status concept and pertain to 15 years and above.

2. Figures in brackets are compound growth rates in the preceding period.

(a) As on 1st January; (b) As on 1st July ; (c) population at the terminal year of the plan

(d) Required to attain near full employment.

(e) Unemployment reduces to negligible level by 2007.

(f) Labour force, employment and unemployment are stated as annual averages during the plan period.

NSSO Survey 1999

Since about the middle of 1990s fierce debates have been going on among economy observers in regard to the effect of economic reforms on employment generation in the country. While economic growth has been sustained at around or over 6 percent in the recent years, it is commonly perceived that the response of employment to growth has been poor. Some observers even consider the growth experience as 'jobless' growth. The findings of the 55th survey round of NSSO on employment trends released in March 2001, has facilitated an objective consideration of the impact of reforms on the employment situation in the country. The survey pertains to the period July 1999 to June 2000 and, since it is based on a large sample, its findings can be compared with the findings of the earlier large sample round i.e the 50th round, which pertains to the July 1993-June1994 period.

Shrinking of Labour Supply

The labour force, which denotes the supply side of the labour market, includes all those unemployed persons who are available for work. The labour force obviously excludes all those who are unemployed voluntarily. People may remain out of labour force in pursuit of further studies or to look after domestic work or because of physical inability to work.

Perhaps the most interesting aspect of the results of the latest NSSO round lies in the fact that the supply of labour force has shrunk in relative terms. Out of every 1000 persons, only 406 make themselves available for work now, as against 428 in 1993-94! This ratio has fallen very drastically, for rural females. It has dipped also for rural males and urban females. However, if one excludes the subsidiary status labour, then the fall is from 384 to 376 which is much less dramatic.(table 11.6)

Subsidiary status labour reflects the category of those persons who are not available for work for most of the year, but make themselves available for some period. These people are occasionally working people. The above table shows that it is this particular category which has really shrunk in size between 1993 and 1999.

The fall in the number of subsidiary status labour is particularly marked among rural females. Such an outcome is possible in two scenarios. One, if the male members are earning well, the females may be less inclined to work.. The second possibility is that the male members are not finding higher remuneration non-farm jobs and, consequently, remain on the farm, thereby making it less necessary for the females to turn up for work. But, as is said later on, rural non-farm jobs have risen at a much faster rate than the farm jobs. So, the second explanation is less likely to hold.

11.6 LABOUR FORCE PER 1000 PERSONS

	Usual Status - All		Usual Status - Principal	
	1993-94	1999-00	1993-94	1999-00
Rural Male	561	540	549	533
Rural Female	331	302	237	235
Urban Male	542	542	537	539
Urban Female	164	147	132	126
Overall	428	406	384	376

Source: *NSSO Survey 55th round Report page 2.*

The first explanation appears to be more acceptable. Higher procurement prices and the consequent rise in rural prosperity during the nineties is evidenced also by the rural consumption series of fast moving consumer goods. This factor could have made the 'occasionally working' rural females less inclined to be in the labour market, thereby, affecting the labour force participation rates.

There is also another reason for the decline in relative labour supply. Age-wise labour supply figures indicate that for both rural and urban males, the fall in the labour supply is concentrated mostly in the age-groups 10-24 and above 50-55 years. The fall in the age-group 10-24 is a positive sign because it indicates that more persons in this group may have been able to pursue studies. The fall in the labour participation rate of the aged again indicates the likely positive impact of other family members earning enough. In case of rural and urban females, the fall in labour participation is spread across the age groups.

On the whole, the fall in the relative labour supply could be basically a reflection of higher income for the traditional main bread earner of the family, which makes it less urgent for others to offer themselves for work, especially the occasional workers. So more of females can stay back at home, more of the aged can afford to take rest and more of the younger ones can pursue studies. However, the survey says that more research is needed for identifying the causes for the fall in the relative labour supply. It is important to note that the above situation has been there despite the proportion of population in the age group 15-59 remaining steady at 57.1 percent.

Fall in Employment Ratio

The trends in employment ratios are a reflection of what has happened to the supply of labour. Thus, out of every 1000 persons, only 397 were employed in 1999-00, compared to 419 persons in 1993-94. However, the ratio of employed persons to labour force has dipped only marginally from 98.1 percent to 97.9 percent. In other words, employment has worsened marginally during 1993-1999.

In 1999-00, out of 1000 labour force, 22 were unemployed compared to 19 in 1993-94.(table 11.7)

11.7 NUMBER OF UNEMPLOYED PER 1000 LABOUR FORCE

	1993-94	1999-00
Rural Male	14	17
Rural Female	9	10
Rural	12	15
Urban Male	41	45
Urban Female	61	57
Urban	45	47
Overall	19	22

Source: NSSO Survey 1999 page 3

The unemployment rate has gone up from 1.9 percent to 2.2 percent. Due to relative contraction of supply of labour for rural families, unemployment rate is almost static for this category. But, unemployment rate has gone up somewhat sharply for urban males where relative supply of labour was nearly steady.

Poor Growth of Jobs

An extremely disquieting finding of the survey is that the rate of growth of jobs during 1993-99 has been only 0.9% p.a., which is 1/3 of the growth rate of 2.55% p.a. anticipated on the basis of the elasticity of 0.38 percent projected by the Planning Commission. This is due to the fact that elasticity has actually been only 0.13 percent, which is 1/3 of elasticity of 0.38 projected by the Planning Commission. This may be seen from table 11.8 given below.

11.8 EMPLOYMENT ELASTICITY OF ECONOMIC GROWTH
1993-1999

Sectors	GDP Growth % p.a.	Elasticity% p.a Planned	Elasticity% p.a Actual	Job Growth% p.a. Planned	Job Growth% p.a. Actual
1. Agriculture	3.1	0.50	0.01	1.55	0.0
2. Mining	4.7	0.60	(-)6.63	2.82	(-)3.0
3. Manufacturing	7.8	0.25	0.17	1.95	1.3
4. Electricity, etc.	6.8	0.50	(-)0.93	3.40	(-)6.3
5. Construction	6.3	0.60	0.96	3.78	6.1
6. Trade, Hotels	9.2	0.55	0.63	5.06	5.8
7. Transp.,Communs	8.7	0.55	0.57	4.79	5.0
8. Financial services	8.4	0.53	0.57	4.45	4.8
9. Personal services	8.4	0.50	(-)0.20	4.20	(-)1.7
TOTAL	6.7	0.38	0.13	2.55	0.9

The 0.9 percent per annum growth rate of jobs during 1993-99 is mainly due to the jobs in agriculture showing a growth rate

of '0.0' percent per annum. During the same period, the growth rate of jobs was 6.1 percent in Construction; 5.8 percent for Trade and Hotels; 5.0 percent in Transport & Communication; and 4.8 percent in Financial & Business services. Manufacturing has also shown a growth rate of jobs which is much less than the planned growth rate.

Another important cause of the very low growth rate of jobs during 1993-99 has been the negative growth rates in three sectors namely 1) Mining; 2) Electricity; and 3) Personal social services. This means that the growth in these sectors has been achieved by reducing the number of employees in these sectors.

Disparate Growth of Jobs

During 1993-99, employment growth in the rural areas was only 0.63 percent per annum, which was about 1/3 of the employment growth of 1.72 percent in the urban areas. The employment for the rural females was only 0.23 percent per annum, which was about 1/9 of the employment growth of 2.03 percent for the urban males. (table 11.9).These widely disparate figures of employment growth in the country are due to the situation of near stagnancy in agricultural employment and a better performance of growth of employment in some of the service activities

11.9 GROWTH OF EMPLOYMENT – 1993-1999

Category	Growth rate(% p.a)
Rural Male	0.85
Rural Female	0.23
Rural All	0.63
Urban Male	2.03
Urban Female	0.54
Urban All	1.72
OVERALL	0.86

Underemployment

As stated above, NSSO measures employment according to three concepts. The first is usual status (US), which considers a person employed if he/she was employed for a major part of the year. The second is current weekly status (CWS), which considers a person employed if he/she was employed for at least one hour on any one day during the reference week. And the third is current daily status (CDS) which considers a person employed if he/she was employed on that particular day of reference.

Underemployment is considered to be the difference between employment ratios based on US and CDS. A larger difference means a higher number of persons who are normally employed during the year, but do not have work on each day of the year. For the entire population, this difference has declined marginally from 6.5 percent of the population in 1993-94 to 6.2 percent in 1999-00. But, there are divergent trends under this ratio. The difference has gone up from 4.9 to 5.3 percent for rural males and from 2.2 percent to 2.8 percent for urban males; but, it has declined from 10.8 percent to 9.5 percent for rural females and from 3.4 percent to 2.8 percent for urban females.

Increase in Casual Labour

Even in the past rounds of NSSO, the type of employment showed a shift towards casualisation, which has continued in the latest round also. Out of every 1000 persons employed in 1993-94, 316 were casual labour. This proportion has gone up to 331 persons in 1999-00. Interestingly, contrary to what is commonly believed, the share of regular employees has also gone up from 131 in 1000 to 140. This may be seen from table 11.10 given below

The number of employees in the "Self Employed' category has declined from 549 in 1993-94 to 529 in 1999-2000. This category includes owner farmers and their family members, and owners of small business like the local paanwala. The detailed breakup shows that this fall is mainly in the case of rural workforce. It could be because of shift of smaller farmers to other professions and/or some consolidation of farms.

11.10 TYPE OF EMPLOYMENT PER 1000 PERSONS

	1993-94			1999-00		
	Self Employed	Regular Employees	Casual Labour	Self Employed	Regular Employees	Casual Labour
Rural Male	579	83	338	550	88	362
Rural Female	585	28	387	573	31	396
Rural	581	63	356	558	68	374
Urban Male	417	421	162	453	333	168
Urban Female	454	286	162	453	333	214
Urban	425	392	162	422	400	177
OVERALL	549	131	316	529	140	331

Source: NSSO Survey 1999, page 5

Agro Employment Stagnant

Agricultural employment has been stagnant during the six years period upto 1999. The latest round of 1999 shows that agriculture accounted for 62 percent of India's total employment.

Industrial employment and services employment, however, grew at 2.1 percent and 2.5 percent respectively. Industrial employment grew at a faster rate in the rural areas. Even in absolute terms, over 9.2 million new jobs were created in non agricultural activities in rural India, which is nearly 4 times of the additional jobs created in agricultural activities.

The NSSO Survey of 1999 has also given sectorwise growth ratios of labour for males and females in the rural and urban areas, which are indicated in the table 11.11 given below.

Trends in employment differ substantially across the states. Kerala, the most developed state in terms of social indicators fares very poorly in regard to unemployment rate. At the other extreme, Gujarat and Rajasthan have a very low unemployment rate of just 0.7 – 0.8 percent. (table 11.12)

11.11 COMPOUND AVERAGE GROWTH RATE IN EMPLOYMENT

Percent per annum

	Agriculture	Industry incl. Construction	Services	Overall
Rural Male	0.2	2.8	2.4	0.8
Rural Female	0.1	1.4	0.8	0.2
Rural	0.2	2.4	2.1	0.6
Urban Male	(–)3.1	2.0	2.8	2.0
Urban Female	(–)4.9	0.7	2.8	0.5
Urban	(–)3.8	1.7	2.8	1.7
OVERALL	0.0	2.1	2.5	0.9

Source *NSSO survey 1999, page 6.*

As my be seen from table 11.12, Kerala which is the number one state in regard to education is also the number one state in regard to the number of unemployed persons per thousand of its labour force. With higher education, the quality of employment goes up, but not the certainty of finding a job. In fact, there seems to be some inverse relationship between the level of education and the employment rate. In 1990, only 0.4 percent of the illiterate labour force was unemployed, compared to a huge 10 percent of the graduate labour force! But, the severity of educated unemployment has shown some decline during the nineties. The unemployment rate for the graduates has come down from 11.1 percent in 1993-94 to 10 percent and that for higher secondary category has fallen from 11 percent to 9 percent. In absolute terms, however, the number of unemployed in these two categories has gone up over this period by nearly four lakh and one lakh respectively.

Within the overall educated labour force, women find it even more difficult to find a job. In 1990-00, graduate females had an unemployment rate of 21 percent, compared to 8 percent for males. Unemployment rates for the higher secondary category are also broadly similar. This unemployment rate does not consider those persons who remain out of the labour force voluntarily.

11.12 UNEMPLOYMENT RATE PER 1000 LABOUR FORCE
Major States

State	Rural	Urban	Total
1 Kerala	82	102	87
2. Assam	39	97	46
3. West Bengal	28	75	38
4. Maharashtra	13	58	28
5. Orissa	20	67	26
6. Tamil Nadu	19	39	25
7. Bihar	18	75	24
8. Punjab	18	28	21
9. Uttar Pradesh	9	41	15
10. Andhra Pradesh	7	39	14
11. Haryana	8	27	13
12. Karnataka	7	33	13
13. Madhya Pradesh	4	36	10
14. Gujarat	4	20	8
15. Rajasthan	3	25	7
AllIndia	15	47	22

Source: *NSSO survey 1999, page 7.*

On the whole, the education profile of the workforce has improved over the period 1993-99. The ratio of the illiterate in the workforce fell from Nearly 49 percent in 1993-94 to 44 percent in 1999-00. On the other hand, the proportion of those with at least secondary education rose from 15 to 19 percent.

During these six years, the number of graduates has gone up by over 14 millions, and the proportion of graduates staying out of the labour market has risen from 27 percent to 38 percent. The graduate workforce rose by 5.2 millions. The number of graduates staying out of labour force voluntarily had risen by 9 millions.

The survey poses the question as to why so many people pursue higher studies despite the high incidence of educated unemployment? And it answers the question by saying that "The ninth plan document recognizes the reason as high private rates of returns on higher education, to a large extent resulting from low private cost." The Plan document had also noted that "While shortage of middle level technical and supervisory skills are often experienced, graduates and post-graduates in arts, commerce and science constitute a large proportion of the educated unemployed."

11.13 UNEMPLOYMENT RATE PER 1000 LABOUR FORCE
Education-wise

Category	Illiterate	Upto Primary	Middle	Secondary	Higher secondary	Graduate & above
Rural Middle	4	12	28	52	73	107
	(3)	(8)	(30)	(67)	(100)	(134)
Rural Females	2	10	45	148	222	337
	(3)	(10)	(53)	(198)	(302)	(364)
Rural	3	12	30	62	85	133
	(3)	(8)	(33)	(79)	(116)	(153)
Urban Males	13	32	56	55	83	66
	(11)	(27)	(57)	(64)	(86)	(64)
Urban Females	7	25	113	144	189	163
	(5)	(41)	(162)	(201)	(224)	(205)
Urban	11	31	61	65	97	83
	(9)	(28)	(67)	(79)	(104)	(89)
OVERALL	4	16	39	63	90	100
	(4)	(13)	(43)	(79)	(110)	(111)

Note: Figures in brackets show unemployment rate in 1993-94.

Chapter Twelve

Poverty

INDIA HAS the largest number of the poor in whole world. The number of poor in India, estimated at around 350 millions in 1998, formed about 33 percent of world's poor, and was about double of India's share of 17 percent in the world population. The number of India's poor at 350 million in 1998 was about double of the number of poor in 1947.

The poverty ratio for India is estimated to have declined from 36 percent in 1994 to 26 percent in 2001; but it is still short of the Ninth Plan target of 16 percent to be achieved in 2001-02. The Tenth Plan (2002-07) has set a target of reducing the poverty ratio to 20 percent in 2007 and to 10 percent in 2012. India's target of 10 percent poverty ratio in 2012 is more than double of China's poverty ratio of 4.6 percent achieved in 1998!

WDR-2001

In India, the progress in regard to the goal of poverty reduction has been very slow during the nineties. According to the World Development Report 2000-01, "the pace of poverty reduction in India had slowed down during the 1990s, particularly in rural areas. This occurred against a backdrop of strong economic growth (GDP growth of 6.1 percent a year during 1990-98 (according to National Accounts (NAS). There are signs of rising inequalities due in large part to rising average consumption in urban areas relative to rural areas."(page 26)

The Report further says, "In the past, poverty reduction in India lagged behind that of East Asia because of slower growth and significantly less progress in promoting mass education and basic health. More recently, however, growth has accelerated and poverty has fallen, although the actual impact of growth on poverty reduction remains controversial because of measurement problems.

The Report also says that there are marked differences within India – with the South, particularly the state of Kerala, having better education and health. Kerala has life expectancies greater than those in Washington, D.C., despite vastly lower income levels. The effectiveness of public action in Kerala has been attributed to its strong tradition of political and social mobilization.

According to the report, Accelerated rate of poverty reduction in India will require faster growth, which in turn demands liberalization, especially in agriculture, and better provision of infrastructure, sorely lacking in India. In areas with deep deprivation in health and education, the development of social infrastructure is critical. Expanding education and health services will require that state governments reverse the deterioration in their fiscal positions, as subsidies to their loss-making power sector crowd out spending in the social sectors. The higher spending will need to be matched by better service provision. This will require deep improvement in governance, often weakest in India's poorest regions, and in combating teacher absenteeism. Also needed is equitable service provision, which will require empowering women and the members of lower castes.

The Ninth Plan also makes a mention of the link between growth performance and poverty. It says: "the most significant feature of the 7.4 percent growth perspective is that over the course of the next 15 years private consumption is likely to grow at around 7 percent per annum in real terms. With a growth rate of population averaging 1.54 percent per annum during this period, the per capita private consumption is likely to grow at an average annual rate of 5.5 percent per annum. In other words, per capita private consumption in India in the terminal year of the perspective period may be over 2.2 times of the level that is likely to be achieved in the base year of the Ninth Plan. With such substantial increase in per capita private consumption, the incidence of poverty in the country can potentially reduce significantly." (Volume I, page 26)

The Plan further says: "The Planning Commission has been estimating the incidence of poverty at the national and the state level as an integral component of formulating appropriate growth strategies. For the ninth plan, the quantitative index of poverty has been developed on the basis of the recommendations of the Expert Group on Estimation of proportion and number of Poor, constituted by the Planning Commission in 1989. The estimates of poverty since 1993-94 have been revised on the basis of the Expert Group methodology and are indicated in table 12.1 given below.

12.1 PERCENTAGE AND NUMBER OF POOR

Year	Poverty Ratio(%)			No of poor (in million)		
	Rural	Urban	Combined	Rural	Urban	Combined
1973-74	56	49	55	261	60	321
1977-78	53	45	51	264	65	329
1983	46	41	45	252	71	323
1987-88	39	38	39	232	75	307
1993-94	37	32	36	244	76	320

Source: Ninth Plan Volume I, page 27.

Between 1973-74 and 1993-94, the incidence of poverty expressed as percentage of people below the poverty line is observed to have declined from 56 percent to 37 percent in rural areas and from 49 percent to 32 percent in urban areas. For the country as a whole, the percentage of people below the poverty line had fallen from 55 percent to 36 percent. However, the number of poor in the country remained more or less stable at around 320 million due to rise in population.

The state-specific poverty lines in rural and urban areas for 1973-74 and 1993-94 are given in table 12.6. The state-wise poverty ratios and number of poor in rural and urban areas as well as for the state as a whole for 1973-74 and 1993-4 are given in table 12.7 and 12.8. It may be seen that the decline in poverty ratios during the 20 years has been uneven among the states. The pace of poverty reduction was relatively rapid in Kerala, Andhra Pradesh, Tamil Nadu, Gujarat, Punjab and West Bengal. However, The decline in poverty ratios was not enough to reduce the number of poor in eight major states namely, Assam, Bihar, Haryana, Himachal Pradesh, Madhya Pradesh, Maharashtra, Orissa and Uttar Pradesh.

Hunger is closely related with poverty. The percentage of persons without two square meals a day for some months of the year is often termed as " hunger ratio". The Ninth Plan says: "about 19 percent of India's rural population and 7 percent of urban population had remained hungry in 1983. In 1993-94, the proportion had come down to about 5 percent for rural areas and 2 percent for urban areas. In 1983, the percentage of chronically hungry people in total population in rural areas was 35-40 percent in Bihar, Orissa and West Bengal. In 1993-94, the percentage had come down to 7 percent for Bihar and 14-16 percent in Orissa and West Bengal. The fact of hunger ratio remaining less than the poverty ratio means that all the poor people do not remain hungry. However, any incidence of chronic hunger is still a cause of concern."(page 27)

The Ninth Plan has examined the likely effects of the relatively faster growth of private per capita consumption on the incidence of poverty during the next 15 years. It says: "It is necessary to project the behavior of poverty ratio on the basis of the trends that are likely to obtain in the macro-economic variables. There are a number of ways in which such projections can be made. One method would be to relate the past trends in poverty ratios with major macro-economic variables such as expenditure on anti-poverty programmes. This approach, however, has the disadvantage that it is unable to capture certain facets of the behaviour of poverty and inequality in Indian economy. An alternative methodology is to explicitly recognise these specific features and to extrapolate the future trends on the basis of specific assumptions being made regarding the future movement of these variables which are directly involved in the estimation of poverty."(page 28).

Indices of Poverty

The normal method of measuring poverty in India is by the "headcount" ratio, which is simply the proportion of the number of people below the poverty line in the total population. This ratio, however, makes no distinction within the broad category of the poor depending upon their actual levels of consumption and deprivation. As a result, the poverty ratio fails to capture the depth and severity in an adequate manner. A measure for capturing the depth of poverty is the poverty gap(PG) index, which adjusts the poverty ratio with the difference with the per capita consumption of the poor and the poverty line expressed as a percentage of the poverty line. This is, therefore, the magnitude of effort that would be required to shift the consumption of all persons below the poverty line to the level of poverty line. This may be seen from table 12.2 given below.

A more comprehensive measure of the severity of poverty is the squared poverty gap(SPG). The SGP is composed of not only the poverty ratio and the poverty gap ratio, but it also captures the consumption distribution of the poor as measured by the coefficient of variation. This measure explicitly takes into account the higher intensity of efforts that are required for removing the poverty of the people who are progressively further below the poverty line.

12.2 INDICES OF POVERTY AND INEQUALITY

Year (%)	Poverty Ratio Index	Poverty Gap Poverty	Squared Gap	Lorenzo Rural	Ratio Urban
1973-74	54.9	15.95	6.48	0.27581	0.30125
1977-78	51.3	15.15	6.21	0.33861	0.34481
1983-84	44.5	11.96	4.61	0.29759	0.33027
1987-88	38.9	9.32	3.26	0.29826	0.35369
1993-94	36.0	8.30	2.79	0.28190	0.33940

Source: *Ninth Plan Volume 1 page 28.*

The Ninth Plan says: "The average annual rate of decline of poverty ratio during 1973-74 to 1993-94 has been 2.05 percent both in rural and urban areas, and 2.09 percent for the country as a whole. The poverty gap ratio during this period declined by 3.31 percent per year in rural areas; by 2.71 percent in urban areas; and by 3.21 percent per year for the country as a whole. The SPG declined even faster by 4.38 percent, 3.07 percent and by 4.13 percent per year respectively for the rural areas, the urban areas and the country as a whole. The fact that the more distribution-sensitive measures of poverty have declined progressively faster during the last 20 years is a cause for optimism. It implies that the depth and severity of poverty has reduced faster than the incidence. And, that, over time, there has been a trend towards greater clustering of the poor around the poverty line, leading to a situation where economic growth is likely to have a considerably larger impact on poverty reduction than before. This would of course require that the measures of relative inequality do not deteriorate sufficiently to overcome the growth effect." (page 29)

The Ninth plan further says: "Lorenzo ratio is the most commonly used measure of relative inequality. The behaviour of the Lorenzo ratio of household consumption expenditure as given by the NSS surveys shows a very high degree of stability, as can be seen from table 12.2. The near constancy of this measure of inequality for 20 years gives a certain measure of satisfaction to believe that it may continue to remain more or less stable in future as well. However, there is reason to believe that the measure of inequality based on the NSS consumption distribution may actually understate the true level of inequality in the country. A characteristic consumption behaviour in India, especially in the recent past, has been that the discrepancy between private consumption expenditure as measured by the CSO and household consumption expenditure as obtained from the NSS has been growing. Although a part of this discrepancy may be attributed to consumption by non-household private entities, such as voluntary agencies and non-government organisations, the posssibility cannot be ruled out that there is a growing incidence of under-reporting of consumption expenditure by the higher income categories.

The Ninth Plan projections of the state-wise growth of per capita consumption during 15 years period of the Ninth, Tenth and Eleventh Plan are given in table 12.3.

From the state-wise distribution functions of consumption expenditure, the state-specific estimates of poverty for the Ninth plan and the perspective period are worked out by using state specific poverty lines computed as per the methodology of the Expert Group. These poverty lines have been computed on the basis of the state-wise price indices available for the base year of the Ninth Plan(1996-97) and are assumed to increase at the same rate as the overall rate of inflation for the projection period. Therefore, this exercise assumes that there are no differential rates of inflation between the states over the perspective period. The poverty ratios are worked out separately for each state in rural and urban areas. The estimates of national level poverty ratio in rural and urban areas have been computed as the weighted average of state-wise poverty ratios as per the Expert Group methodology. The poverty ratios at the national and state levels are given in table 12.4. As can be seen from the table, the increase in per capita consumption projected over the perspective period has resulted in a substantial reduction in the poverty ratios in all the states, including the poorest states.

12.3 STATE-WISE PROJECTED GROWTH
in Per Capita Household Consumption
(Percent per annum)

Sl. No	States	Ninth Plan (1997-2002)	Tenth Plan (2002-2007)	Eleventh Plan (2007-2012)
1.	Aandhra Pradesh	4.75	5.26	5.83
2.	Assam	4.62	4.81	5.47
3.	Bihar	4.04	4.58	4.99
4.	Gujarat	4.43	4.94	5.52
5.	Haryana	4.38	4.68	5.32
6.	Himachal Pradesh	3.41	4.36	6.00
7.	Jammu & Kashmir	3.53	4.51	6.20
8.	Karnataka	4.61	5.04	5.65
9.	Kerala	5.01	5.31	6.03
10.	Madhya Pradesh	4.06	4.57	5.04
11.	Maharashtra	4.79	5.17	5.80
12.	Orissa	4.99	5.41	6.00
13.	Punjab	4.79	5.05	5.74
14.	Rajasthan	4.08	4.47	4.97
15.	Tamil Nadu	5.05	5.47	6.08
16.	Uttar Pradesh	3.62	4.18	4.47
17.	West Bengal	4.55	5.00	5.59
18.	Other states/U.Ts	2.39	3.27	4.87
AllIndia		4.29	4.76	5.31

The Ninth Plan says: "these estimates of state-wise poverty, however, are critically dependent on three important assumptions: (a) unchanged inequality in distribution of consumption; (b) unchanged urban-rural per capita consumption differentials; and (c) unchanged poverty norms for all states and the nation. The likely validity of each of these assumptions needs be examined. The structure of consumption growth in the various states when compared with the pace of poverty reduction reveals that reduction in poverty in all the states is not uniformly dependent on the rise in per capita consumption. Some of the poor states are projected to experience a rate of poverty reduction, which is higher than that at the national level, despite a lower rate of growth in per capita consumption as compared to the national average. Bihar, and to some extent Orissa, are examples.

12.4 STATE-WISE PROJECTED POVERTY RATIOS

(Percent)

Sl.No.	State	1996-97	2001-02	2000-07	2011-12
1.	Andhra Pradesh	17.35	11.13	5.35	2.44
2.	Assam	26.46	10.65	3.82	2.07
3.	Bihar	44.09	27.46	14.08	6.52
4.	Gujarat	17.07	9.05	3.94	1.28
5.	Haryana	18.41	10.16	5.00	2.58
6.	Himachal Pradesh	22.38	14.02	7.34	3.14
7.	Karnataka	30.72	17.86	8.68	3.45
8.	Kerala	21.22	11.35	4.76	1.38
9.	Madhya Pradesh	33.38	21.97	12.75	6.81
10.	Maharashtra	32.74	20.66	11.41	5.43
11.	Orissa	40.21	22.93	10.76	4.63
12.	Punjab	8.02	2.98	0.85	0.15
13.	Rajasthan	20.31	10.85	4.70	1.52
14.	Tamil Nadu	30.73	18.11	8.96	3.59
15.	Uttar Pradesh	32.52	21.91	12.88	6.92
16.	West Bengal	25.08	13.54	6.26	2.86
AllIndia		29.18	17.98	9.53	4.37

Source: Ninth Plan Volumel, page 32

The projected poverty reductions in most of the poorer states are quite significant in both rural and urban areas. It appears that the states with relatively lower initial inequality in consumption distribution have been projected to experience a faster reduction in poverty than the states with a relatively higher inequality. This phenomenon arises out of the sensitivity of analysis to the assumed constancy of lorenz ratios. It is recognized, however, that as the more backward states start developing, the relative inequality measure may in fact worsen and become progressively similar to those obtaining for the more industrialized states. As a consequence, the reduction in poverty in these states may not be as sharp as projected above. On the other hand, the proportionately higher growth rate in agriculture relative to the growth rate of GDP projected for the perspective period as compared to the historical proportions suggests that the urban-rural consumption differentials may indeed narrow, which would argue for a sharper reduction in poverty than is projected. In this context it is interesting to note that an agriculturally developed state like Punjab has lower inequality than the more industrialized state of Maharashtra. This appears to suggest that the focus that is being placed on agriculture in the Ninth Plan is more likely to be poverty reducing than an industry based strategy. In so far as the constant poverty lines are concerned, it is not possible to project the inflation rates for different states and, therefore, no statement can be made regarding the impact of differential rates of inflation. Finally it needs to be mentioned that the observed clustering of the poor around the poverty line and its implication for a faster reduction in the poverty rate has not been taken into account in the above exercise. If this trend continues, the pace of poverty reduction may accelerate even more than projected in this exercise."(page 33)

The projected poverty ratios in the rural and urban areas at the national level are presented in table 12.5.

12.5 PROJECTION OF NATIONAL POVERTY RATIOS
(Percent)

Region	1996-97	2001-02	2006-07	2011-12
Rural	30.55	18.61	9.64	4.31
Urban	25.58	16.46	9.28	4.49
Total	29.18	17.98	9.53	4.37

Source: *Ninth Plan Volume 1, page 33.*

The Ninth Plan says: "The growth in per capita consumption between 1993-94 and 1996-97 reduces the incidence of poverty to 30.55 percent in rural areas, to 25.58 percent in urban areas and to 29.18 percent for the country as a whole. The incidence of poverty in the terminal year of Ninth Plan is estimated at 18.61 percent in rural areas, 16.46 percent in urban areas and 17.98 percent for the country as a whole. By the end of the perspective period, the poverty ratio is projected to be less than 5 percent. The poverty reductions are the impact of consumption growth alone because the inequality in the distribution of per capita household consumption is assumed to remain unchanged during the perspective period. Indeed, since the discrepancy between the household and private consumption is projected to increase, there is an implicit inference that the extent of relative inequality may rise to certain extent. Under the assumptions made, the reduction in poverty is higher in rural areas as compared to urban in the Ninth Plan and also in the perspective period. This is almost entirely due to the fact that relative inequalities are more pronounced in urban areas as compared to rural areas." (page 33)

Poverty lines in Rural and Urban areas are indicated in the table 12.6 given below.

12.6 POVERTY LINES IN RURAL AND URBAN AREAS
(Rs. Monthly per capita)

		Rural		Urban	
S.No	States	1973-74	1993-94	1973-74	1993-94
1.	Andhra Pradesh	41.71	163.02	53.96	278.14
2.	Assam	49.82	232.05	50.26	212.42
3.	Bihar	57.68	212.16	61.27	238.49
4.	Gujarat	47.10	202.11	62.17	297.22
5.	Haryana	49.95	233.79	52.42	258.23
6.	Himachal Pradesh	49.95	233.79	51.93	253.61
7.	Karnataka	47.24	186.63	58.22	302.89
8.	Kerala	51.68	243.84	62.68	280.54
9.	Madhya Pradesh	50.20	193.10	63.02	317.16
10.	Maharashtra	50.47	194.94	59.48	328.56
11.	Orissa	46.87	194.03	59.34	298.22
12.	Punjab	49.95	233.79	51.93	253.61
13.	Rajasthan	50.96	215.89	59.99	280.85
14.	Tamil Nadu	45.09	196.53	51.54	296.63
15.	Uttar Pradesh	48.92	213.01	57.37	258.65
16.	West Bengal	54.49	220.74	54.81	247.53
All India		49.63	205.84	56.76	281.35

Notes: 1. The state-wise poverty lines are based on the methodology of the Expert Group as adopted by the Planning Commission.

2. The poverty lines at All-India level are implicitly derived from All-India poverty ratio and NSS consumption expenditure distribution of the year.

The state-wise incidence of poverty in 1973-74 is indicated in table 12.7 given below.

12.7 STATEWISE INCIDENCE OF POVERTY IN 1973-74
(Population in lakhs)

S.No	State	Rural	Urban	Total
1.	Andhra Pradesh	178(48)	47(51)	225(49)
2.	Assam	76(53)	5(37)	81(51)
3.	Bihar	337(63)	34(53)	371(62)
4.	Gujarat	95(46)	44(53)	139(48)
5.	Haryana	30(34)	8(40)	38(35)
6.	Karnataka	128(55)	42(53)	170(54)
7.	Kerala	111(59)	24(63)	135(60)
8.	Madhya Pradesh	231(63)	45(58)	276(62)
9.	Maharashtra	211(58)	77(44)	288(53)
10.	Orissa	142(67)	12(56)	154(66)
11.	Punjab	30(28)	10(28)	40(28)
12.	Rajastha	101(45)	27(52)	128(46)
13.	Tamil Nadu	173(57)	67(49)	240(55)
14.	Uttar Pradesh	450(57)	86(60)	536(57)
15.	West Bengal	258(73)	41(35)	299(63)
All	India	2613(56)	600(49)	3213(55)

Source: Ninth Plan Volume 1, page 47
Note: Figures in brackets indicate percentages.

State-wise incidence of Poverty in 1993-94 is indicated in table 12.8 given below.

In 1993-94, the poverty ratio was the highest in the four contiguous states of Bihar(55%), Orissa(49%), Madhya Pradesh(43%) and Uttar Pradesh(41%). These four states, often referred to as BIMARU, had a total number of 156 million poor, which formed about half of India's 320 million poor in 1993-94. Assam also had a poverty ratio of 41 percent which is equal to that of Uttar Pradesh. Assam joining the group of BIMARU states is due to the continuing influx of large number of poor families from the adjoining areas of Bangladesh.

12.8 STATE-WISE INCIDENCE OF POVERTY IN 1993-94
(*Population in lakhs*)

S.No	State	Rural	Urban	Total
1.	Andhra Pradesh	79(16)	74(38)	153(22)
2.	Assam	94(45)	2(8)	96(41)
3.	Bihar	451(58)	42(35)	493(55)
4.	Gujarat	62(22)	43(28)	105(24)
5.	Haryana	37(28)	7(16)	44(25)
6.	Karnataka	96(30)	60(40)	156(33)
7.	Kerala	56(26)	20(25)	76(25)
8.	Madhya Pradesh	216(41)	82(48)	299(43)
9.	Maharashtra	193(38)	112(35)	305(37)
10.	Orissa	141(50)	20(42)	161(49)
11.	Punjab	18(12)	7(11)	25(12)
12.	Rajasthan	95(26)	34(30)	129(27)
13.	Tamil Nadu	122(32)	80(40)	202(35)
14	Uttar Pradesh	497(42)	108(35)	604(41)
15.	West Bengal	210(41)	45(22)	255(36)
All India		2440(37)	763(32)	3203(36)

Source: *Ninth Plan Volume 1, page 48.*
Note: Figures in brackets indicate percentages

Tenth Plan(2002-07)

The Tenth Plan(draft) has set a target of reducing the poverty ratio to 20% of population by 2007. Surprisingly enough, this target is higher than the Ninth plan target of reducing poverty ratio to 18% by 2002. This means that the Ninth Plan target of reducing poverty ratio to 18% by 2002 is not expected to be achieved even by 2007. This is a matter for serious concern and disquiet for the whole country.

The Tenth plan also set a target of reducing poverty ratio to 10% in 2012. This projected poverty ratio of 10% in 2012, even if achieved, will be more than double of the poverty ratio of 4.6% achieved by China in 1998. Apparently, India has lagged far behind China in so far as the goal of reducing and removing poverty is concerned.

Now India has become the country having the largest number of poor in the world by replacing China from this position. The number of India's poor estimated at around 350 million in 1998 formed about 33% of world's poor which is about double of India's share of 17 % in the world population.

In 1947, The number of poor in China exceeded the number of poor in India by 95 millions. But in 1998, the number of poor in China was less than that for India by 291 million! (table 12.9)

In 1998, the number of poor in India at 350 millions, was 1.8 times larger than the number in 1947. But, in China, the number of poor in 1998 at 58 millions, was 1/5 of the number in 1947!

12.9 THE NUMBER OF POOR IN INDIA AND CHINA
1947 and 1998 (Millions)

Country	1947	1998
India	194	349
China	289	58
Difference	(+)95	(-)291

It is important to note that India's progress in reducing poverty has been poor in spite of a high growth rate of GDP. This is due to the fact that India's high growth rate of GDP has not resulted in a high growth rate of employment, which has been described in detail in the NSSO report of 1997 and the preceding chapter 11 on unemployment.

The much faster rate of reduction in the number of poor in China is due to the fact that during 1980-98, the "per capita private consumption" in China had a high growth rate of 4.3 percent per annum, which was 2.5 times larger than the growth rate of 1.7 percent in the per capita private consumption in India.

The high growth rate of per capita private consumption in China is due to the high growth rate of agricultural production, which has resulted in a significant improvement in the standard of life of the people in China, as is indicated by the table 12.10 given below.

12.10 COMPARATIVE VIEW OF CHINA AND INDIA

	Item	China	India
1.	Public Expenditure on Health as % of GDP	2.0	0.6
2.	Life Expectancy at birth(1998) in years	72	64
3.	Mortality Rate for under 5 per 1000	36	83
4.	Infant Mortality Rate per 1000 live births	31	70
5.	Maternal Mortality Rate per 100000 live births	65	410
6.	Illiteracy Rate of Adults of 15 years and above	25	57
7.	Arable land hectare per capita	0.10	0.17
8.	Food Production Index (1989-91 = 100)	154	120
9.	Electric Consumption per capita (Kilowat\ hours)	714	363
10.	Services sector as % of GDP	33	46
11.	Gross Domestic Saving as % of GDP	42	20
12.	Gross Domestic Investment as % of GDP	40	24

Source: World Development Report 2000-2001