

CHAPTER 7.1

INDUSTRY

7.1.1 In order to achieve a doubling of per capita income over the next decade, the Tenth Plan targets a gross domestic product (GDP) growth rate of 8 per cent per annum. The corresponding growth target for the industrial sector is 10 per cent. This represents a major step-up in view of the less than 7 per cent growth during the last decade. A task that would have been quite daunting even under normal conditions, becomes much more challenging due to structural deformities and changes that are likely to occur in the internal and external environment.

The Emerging External Environment

- WTO
 - Free Trade
 - Tariffs
 - QRs
 - FDI
- Market access
 - Standards
 - Accreditation
 - Certification
- Regional Trading Blocs
 - NAFTA
 - EU
 - SAARC
- Preferences for green products and processes
 - Environment
 - Health
 - Safety

7.1.2 A highly competitive environment is rapidly emerging, driven by rising economic and social aspirations on the one hand and external conditions predominantly World Trade Organisation (WTO) related market forces on the other. Other important factors emphasising the need for continuous improvements in productivity and efficiency in the allocation of resources are: consumer demand for enhanced value in terms of cost and quality; consumer tastes and preferences shifting perceptibly in favour of environment-friendly products; and regulatory pressures for sustainable industrial processes and practices based on life cycle analysis of the impact on the environment.

7.1.3 Global integration of markets is also challenging the conventional concept of

comparative advantage based on the narrow static interpretation of relative factor endowments of nations. Access, on a global basis, to modern technology, capital resources and markets is now a more critical determinant of international competitiveness.

7.1.4 Comparative advantage is today the aggregate sum total of technical, entrepreneurial and managerial capabilities of the constituent firms of a country. Improvements in transport and technology make it possible to split business processes and locate sub processes in different countries depending on the inherent cost advantage which they can derive from the investment climate and policy environment. Be that as it may, no country can isolate itself completely from the forces being unleashed by a rapidly globalising community of nations. A dynamic policy environment should not, however, be perceived as a looming threat since it also offers immense opportunities to capture much more affluent markets outside the country. It has been estimated that developing countries could realise over \$700 billion in the form of export earnings if industrialised countries end the protection of labour-intensive products. Potential export earnings of developing countries in textiles, clothing and other labour-intensive products alone are estimated to exceed \$500 billion if advanced industrial countries open up their markets (UNCTAD, 2002).

Box 7.1.1

Fortune 500 companies have started sourcing initiatives in India

- ABB
- FORD
- SHARP
- CUMMINS
- GE
- GM
- HP
- FIAT
- EMERSON ELECTRIC
- TOYOTA
- KODAK

Box 7.1.2
Manufacturing is moving to India
(multinational companies which have set up
base in India)

• TOYOTA	• GM
• MAKINO	• HYUNDAI
• FORD	• KODAK

7.1.5 India's inherent strength and comparative advantage lie in the presence of entrepreneurial acumen of the highest quality, an established scientific and industrial base, cheap, skilled English-speaking workforce and a large domestic market. The relocation, by large transnational companies, of their manufacturing base to India and sourcing of products from here by other Fortune 500 companies is evidence of the bright future of Indian industry.

7.1.6 Unless India is proactive in responding to the imperatives of the changing environment, there is a very serious danger that it would be left far behind in today's race for the 'survival of the fittest'. In short, Indian industry has to discard its inward-looking approach and become outward-oriented and learn to operate in an unprotected, internationally competitive environment. Our dream can be translated into reality only if we see apparent threats as genuine opportunities and exploit their potential. Industry and the Government have to work collectively and in tandem to this end. The Tenth Plan requires making a bold departure from the past.

OBJECTIVES OF INDUSTRY SECTOR

7.1.7 The contribution of industry to GDP is an important indicator of a nation's progress in the process of structural transformation from a rural agricultural society to a more urban industrialised one. Further, an increase in per capita income is associated with a rise in the share of industry along with a fall in the share of agriculture in national income. In the early stages of industrialisation, when per capita income is very low, the primary sector occupies a dominant position in the economic structure. As capital and skills accumulate, both productivity and per capita income rise. Industry, in its broad sense of secondary sector, is followed or accompanied by the services sector displacing the relative contribution of the primary sector.

7.1.8 It is significant to note that consumption of manufactured consumer goods is recognised as one of the most widely accepted measures of standard of living and of quality of life. Manufacturing industry provides the driving force for stimulating rapid economic growth. The growth rate of the manufacturing industry normally surpasses that of the agriculture and the service sectors. It is for this reason that industry is considered the backbone of an economy. It is in recognition of this special importance that raising industry's share in GDP is being ranked as the foremost objective for this sector in the Tenth Plan. The comparative cross-country position given in Table 7.1.3 amply justifies this objective. India's share in world industrial output and exports is not commensurate with its size and potential. Unless the pace of industrial growth is accelerated, India is likely to be left behind by the larger community of nations. It is perhaps pertinent to add that traditionally, the political stature of a country has been commensurate with the size and structure of its industry.

Table 7.1.3
Industry's share(%) in GDP

Country	Value added as % of GDP		GNI/cap (\$ in 2000)
	Industry	Services	
India	27	46	460
China	49	34	840
Malaysia	40	48	3380
Indonesia	47	36	570
Philippines	30	53	1040
Thailand	40	49	2010
World Development Report 2002			

GNI (Gross National income) = GDP+ Net receipt of primary income from foreign sources

7.1.9 Participation in world trade is essential for India as it can yield multiple advantages. Rising exports can augment the availability of much-needed imports while also bridging the trade deficit. As a spin off, the concomitant requirements of productivity and quality of exportable manufactured goods would also raise our own standard of living through the improved availability of diverse high quality products. Globally, trade is emerging as a powerful engine of economic growth and

development. Manufactured products are generally traded goods. Their demand also shows price and income elasticity as a result of which the export industry, unlike agriculture, does not face major market constraints. Raising India's share in the world exports of manufactured products is, therefore, the second important objective for the industry sector in the Tenth Plan.

7.1.10 Free markets and competition are not a panacea for all the ills of the developing countries. Complex issues such as the elimination of regional imbalances in industrial development, which has defied all solution in earlier Plans, need innovative alternatives, particularly in the absence of direct intervention measures such as industrial licensing through which location of industry was sought to be influenced earlier. The increasing gap between developed industrialised States and others could have serious implications for the country. This is particularly true for the northeastern States, which have continued to lag behind the rest of the country on account of their poor connectivity, inadequate local infrastructure and small size of their markets. Bringing about a balanced industrial development in the country is, therefore, proposed to be the third objective for the sector.

7.1.11 Employment in India is skewed in favour of the agriculture sector which accounts for about 60 per cent of total employment. As a consequence, there is widespread unemployment and under-employment especially for skilled workers both in urban and rural areas. Demographic projections suggest that about 60 per cent of the population would soon be in the 15-59 year age group, leading to a substantial increase in the workforce. Unless jobs are created in the more productive manufacturing sector, the unemployment situation could become quite alarming. Hence, the fourth objective for the industry sector in the Tenth Plan is to create jobs for skilled workers through industrial growth.

STRATEGY FOR INDUSTRY SECTOR IN THE TENTH PLAN

7.1.12 The Tenth Plan envisages a comprehensive and coherent strategy for attaining these objectives. Deepening and widening of economic reforms to create a positive investment

climate conducive to a dominant private sector role, including setting up state-of-the-art infrastructure, capacity building in industry in order to make it internationally competitive, a level playing field with effective and transparent rules of fair play, augmentation of financial resources and efficiency-enhancing policy instruments are the important ingredients of such a strategy. These have to be viewed in a holistic manner as they are interdependent.

Creating a Positive Investment Climate

7.1.13 The industrial development strategy is being re-oriented towards enabling our vibrant private sector to reach its full entrepreneurial potential, to contribute towards production, employment and income generation. Unless the economic environment is conducive to high levels of private sector participation, there can be little progress in accelerating industrial development and growth. An inward-looking policy environment in the past promoted import substitution with artificial props such as high tariff protection, quota restrictions, entry barriers etc. In order to ensure that the transition from a closed to an outward-looking economy is smooth and non-disruptive, well-conceived government interventions to dismantle existing barriers to industrial growth and accelerating new initiatives to create an enabling environment at par with the rest of the world are needed.

7.1.14 Private initiative depends on a variety of market-related factors and overarching macro economic policies. A conducive investment climate requires a considerable widening and deepening of economic reforms cutting across the Centre and States and local bodies, including panchayati raj institutions (PRIs). These reforms must be aimed at ending rigidities in labour policies, reforming real estate laws, the security, transferability and enforceability of property rights, bankruptcy and foreclosure laws and easing restrictions on the inter-State movement of goods imposed by the Essential Commodities Act, 1955, octroi checkposts and other local levies/regulations. The agenda also covers positive conditions required for a competitive market economy like the establishment of an efficient world-class physical, financial and social infrastructure,

providing a level playing field and rules of fair play which require bold initiatives including removal of artificial compartmentalisation of different sub-sectors. The Government also needs to address the issue of restrictions on market access, dumping and predatory practices on the part of other players, especially the developed nations.

7.1.15 Tariff imposed by the industrialised countries are substantially loaded against manufactured imports from developing countries, making it more difficult for them to undertake downstream processing activities. The use of non-tariff measures, including anti-dumping cases, social safeguards, technical standards and subsidies, have restricted opportunities for developing countries. A re-balancing of the trading system to the mutual benefit of all countries would require, among other things, improved access to developed markets and transfer of technology to developing countries for modernisation leading to enhanced productivity and international competitiveness.

Capacity Building

7.1.16 While the inward-looking policy environment did play an important role in building up the country's diverse scientific, technological and industrial base, it has outlived its utility. Large sections of our industry are characterised by plants of sub-optimal sizes using outdated technologies. As a result, the productivity of capital and labour in Indian industry is comparatively low. Modernisation and technological upgradation is the foremost requirement for competitiveness. The Tenth Plan

plans to give an impetus to the induction of clean production technologies, processes and practices.

7.1.17 Raw materials and low technology products dominate India's export basket today, accounting for over 80 per cent of the total manufactured exports. Against this, the world average ranged between 43 per cent and 35 per cent during 1985 to 1996. India's high technology exports have performed rather poorly and their share has risen by only 1.4 points compared to 7.6 points for the world as a whole during the 1986 to 1996 period. The ratio of high technology products to total manufactured exports in the case of India is only one-fifth of that of China and one-tenth of South Korea and Taiwan. Modernisation and technological upgradation would, therefore, lead to value addition and diversity, lending resilience to our exports.

World Class Infrastructure

7.1.18 The state of the country's infrastructure is far from adequate. Public sector monopoly in the ownership, control and management of infrastructure needs to give way to private financing of infrastructure projects to leverage the private sector's resources and productive efficiency for the benefit of all stakeholders - the service user, the service provider and the Government. This has been demonstrated with success all over the world. Although efforts are being made to augment quality and coverage of all infrastructure, the policy framework to promote private initiative is not yet fully in place. However, the magnitude of the task is too huge for the public sector to handle on its



own. Without public-private partnership in this field, the desired rapid industrial growth would be jeopardised. Some States, notably Maharashtra and Andhra Pradesh, have adopted innovative models for providing state-of-the-art infrastructure. Not only do recent investor surveys accord higher ranks to the investment climate in these states, but the flow of investment, including foreign direct investment (FDI), is greater. While there is no one model that suits all situations, the swiftness with which other States, especially the industrially-backward states including those in the northeast, come up with similar initiatives will determine the pace of industrial growth. The Tenth Plan defines the policy paradigm for infrastructure development in terms of models that encourage efficiency and leverage resource generation.

Augmenting the Resource Base

7.1.19 A considerably higher measure of investible resources is required in order to achieve the industrial growth rate target of 10 per cent per annum. The augmentation of the resource base requires action on several fronts. To begin with, the bleeding of the resource base in the form of unproductive public sector undertakings (PSUs) needs to be checked. The closure of such PSUs needs to be expedited. A number of roadblocks to this process need to be removed.

7.1.20 Simultaneously, vast resources need to be released from areas of low productivity in the public sector. This requires disinvestment of PSUs so that our resources are released and transferred to more efficient management. Taking into account the slow pace of disinvestment, the issue of management of the public sector in the transition period assumes importance.

7.1.21 The subsidy burden also needs to be drastically reduced. The fertiliser sector and the public distribution system (PDS) together account for over Rs. 20,000 crore of subsidies. Powerful vested interests in favour of their perpetuation need to be tackled. Bold steps are required in order to bring about an efficient pricing policy.

7.1.22 In order to mobilise additional resources, it is necessary to evolve a healthy Indian capital and

financial market in order to tap the vast savings potential of the Indian household sector and transfer it to industry through efficient financial intermediaries. Restoration of investor confidence is an absolute necessity for augmenting the resource base. The recent financial sector scandals point to the need for utmost caution on the part of the regulatory institutions which have been set up. Corporate governance cannot be improved unless credible and transparent rules of behaviour are evolved and enforced by industry associations.

7.1.23 Serious attention must also be given to the issue of foreign investment (both portfolio investments and FDI). According to some estimates, a quadrupling of FDI is required in order to achieve a 10 per cent industrial growth rate. FDI is not only an additional source of funds but the technology it brings in and the market access it provides have vast implications for productivity and quality.

Efficiency Enhancing Initiatives

7.1.24 Efficiency enhancing policies call for allowing a free play of market forces during the Tenth Plan. Unless genuine strategic concerns require otherwise, all internationally traded goods would be priced on international parity. Prices of non-traded goods would reflect their true resource costs. Pricing based on the long-run marginal cost of production should be a dominating feature in sectors such as infrastructure services, power, municipal services etc. Market-based instruments and indirect policies would completely substitute direct intervention and the command-and-control approach.

7.1.25 As progress from a regulated economy to a fully competitive economy would be necessarily slow and time-consuming, market imperfections would require a greater role for the State as a watchdog and regulator at least in some important sectors such as drugs and pharmaceuticals.

REVIEW OF THE NINTH PLAN

Major Initiatives

7.1.26 During the Ninth Plan, the major structural changes and modifications in sectoral policies were: delicensing of coal, lignite and petroleum (other than

crude oil), amendment of Mines and Minerals (Regulation and Development) Act, 1957, special package for revival of export growth, repeal of the Urban Land (Ceiling and Regulation) Act, 1976, allowing buy-back of shares and liberalisation of technology imports.

7.1.27 Foreign equity up to 100 per cent was allowed under automatic route for major infrastructure sectors and the time frame for consideration of FDI proposals has been reduced from six weeks to 30 days. A Foreign Investment Implementation Authority has been set up in the Department of Industrial Policy and Promotion to provide a single-point interface between foreign investors and the Government. Prior approval of the Government is not required for increase in the amount of foreign equity within the approved percentage of foreign equity in cases in which the original project cost was up to Rs. 600 crore. The Government has taken steps for simplifying foreign investment procedures, allowed foreign investment in new activities such as Global Mobile Personal Communication Systems besides simplifying procedures for downstream investment to foreign-owned Indian holding companies. FDI up to 26 per cent under the automatic route has been allowed in the insurance sector subject to a licence from the Insurance Regulatory and Development Authority. Progressive liberalisation in the provisions relating to investment are : foreign institutional investors (FIIs) can invest in a company under the portfolio up to 24 per cent of the paid-up capital of the company; and up to 100 per cent FDI is allowed in non-banking financial companies (NBFCs) on a case-to-case basis with the condition that a minimum of 25 per cent of their holding is divested in the domestic market.

7.1.28 The Government's approach to PSUs had a three-fold objective: revival of potentially viable enterprises; closing down of those that cannot be revived; and reducing its equity in non-strategic PSUs to 26 per cent or below. Interests of workers will be fully protected through attractive VRS and other measures. This programme has already achieved some initial successes. The Government is also proposing to set up a National

Company Law Tribunal (NCLT) for sick companies. At present the process of rehabilitation/winding up of PSUs is done through the mechanism of BIFR.

7.1.29 The Department of Heavy Industry has undertaken restructuring of PSUs in line with the Government policy for reform of the public sector. Cases of 20 PSUs have been referred to the Ministry of Disinvestment for disinvestment/formation of joint ventures. Out of 49 PSUs under the Department of Heavy Industry, 26 have been referred to the BIFR. Revival plans for 12 have been sanctioned by BIFR and are under implementation. The BIFR has favoured winding up in the case of another seven, while the cases of the remaining seven are still being considered by the BIFR.

7.1.30 Manpower rationalisation has been adopted extensively to shed surplus manpower. Around 3,69,277 employees have opted for VRS since introduction of this scheme in October, 1988 to November, 2001, the benefits of the VRS for which the Government has provided financial support of about Rs. 1,100 crore over the last nine years. The statutory dues of the employees, which have been pending for long, have also been cleared along with VRS benefits under the separation scheme. The Government has also provided additional support of about Rs. 500 crore for VSS for around 10,000 employees.

7.1.31 Considering the market sentiments and recent developments in the United States and other countries relating to employees stock options etc., it was decided to liberalise certain provisions of the Companies Act, 1956. The Companies (Amendment) Ordinance, 2001 was promulgated in October 2001 and has been replaced with Companies (Amendment) Act, 2001.

7.1.32 The Export Promotion Industrial Park (EPIP), is a centrally sponsored scheme for providing financial assistance to State Governments for setting up and maintaining industrial parks with appropriate infrastructure for housing industrial units with export commitment. An expenditure of Rs. 250 crore was approved by the Cabinet for setting up 25 EPIPs in 25 States. The Central Government's

grant for EPIP would be 75 per cent of the capital expenditure, up to a limit of Rs. 10 crore in each case. So far the Government has approved 20 proposals for setting up EPIPs in Punjab, Haryana, Himachal Pradesh, Rajasthan, Karnataka, Kerala, Maharashtra, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Gujarat, Bihar, Jammu and Kashmir, Assam, Madhya Pradesh, West Bengal, Orissa, Meghalaya, Manipur and Nagaland. Nine EPIPs have been completed so far, and other parks are in various stages of implementation. Proposals from the other States are awaited.

7.1.33 The Critical Infrastructure Balance Scheme (CIBS) scheme envisages investment in areas of critical deficiency in the interest of export promotion. The balancing investment may inter-alia relate to infrastructure in export intensive areas including export processing zones (EPZs), seaports and airports, improvement of feeder roads and effluent treatment units etc. Since its inception, 44 projects have been sanctioned in 16 States. Specific projects assisted include construction of common facilities in the apparel export park at Gundapochampally, power supply to software unit in Export Promotion Industrial Park at Bhubaneswar, infrastructure development at Saharanpur, computerisation in EPZs at Kochi, Vishakhapatnam, Mumbai, Chennai, Falta, Kandla and Noida.

7.1.34 SEZs were set up with a view to enabling hassle-free manufacturing and trading activities for the purpose of exports. The units in these zones will not be subjected to any pre-determined value-addition or export obligation. They shall be treated as being outside the customs territory of the country. Sale in the domestic tariff area by the units in these zones can only be done after payment of full Customs duty. A private sector SEZ covering an area of about 3,500 hectares has been sanctioned at Pipavav in Gujarat. Another private sector SEZ has been sanctioned at Tuticorin in Tamil Nadu. Besides, the existing EPZs in Mumbai, Vizag, Kandla and Kochi are also being converted into SEZs.

7.1.35 For involving State Governments in the export effort, a new scheme - Assistance to States for Infrastructure Development for Export and Allied Activities (ASIDE) - has been evolved for granting assistance to the States for development of export-

related infrastructure on the basis of their export performance. The difference in the proposed scheme and the existing infrastructure-oriented schemes (e.g. CIBS, EPIP, EPZ, Export Development Fund-North East Region (EDF-NER)) is that these schemes do not involve State Governments in decision-making. The proposed scheme is area-specific and not product-specific. States would use the money for complementary export-related infrastructure, such as roads connecting the production centres with ports, research and development (R&D) in State-specific products, development of cold chains for agro exports, development of minor ports, creation of new export promotion industrial parks, human resource development and developing marketing infrastructure.

7.1.36 Many export incentives are not compliant with the WTO framework and are being phased out. Thus the instruments which were available to neutralise the negative impacts of various handicaps in the form of higher capital costs, higher tariffs, transactions costs and unrebated duties will no longer be available. Aggressive efforts and systematic export marketing schemes like the Market Access Initiative (MAI), Agri Economic Zone (AEZs), SEZs have, therefore, been worked out. The MAI has been devised to put in place an instrument which is not only WTO compatible but would also mitigate the negative effects of various handicaps faced by the exporters vis-à-vis their counterparts in the competing countries. The strategy would aim at achieving a double-digit growth rate in our exports (in dollar terms) on a sustained basis.

7.1.37 In October 2001, the Government increased the duty drawback rate for 300 product groups covering the textiles, leather and engineering goods sectors and removed the Duty Entitlement Pass Book (DEPB) value cap on 4,000 items, which will also benefit the chemicals and plastic goods' industries. The step was undertaken as a one-time measure for promoting exports and the policy will be reviewed. A Directorate General of Anti-Dumping and Allied Duties was constituted in 1998 to investigate complaints of dumping and recommend the amount of anti-dumping duties. A Task Force

was set up to prepare a common nomenclature at 8-digit level for trade data on Customs and Excise. The collection, compilation, and dissemination of trade statistics is now taking place with reduced time lag. Electronic filing and on-line processing of license applications, on-line payment of duty drawback, and abolition of special import license (SIL), removal of quantitative restrictions etc. have been effected.

7.1.38 Besides, the continuation of Growth Centre and Transport Subsidy scheme, a major policy initiative by the Department of Industrial Policy and Promotion was the Northeast Industrial Policy (NEIP). A new industrial policy was announced for the development of industrial infrastructure in the northeastern region. The Transport Subsidy Scheme was extended for a period of another seven years, up to 31 March 2007.

7.1.39 In the textile sector, several long-term and short-term measures were taken to minimise the adverse effects of the external conditions on exports. These included concessions under the quota policy to reduce transaction costs for exports, resolving of the issue of DEPB rates for blended textiles and wool tops, revision in Duty-drawback rates, etc. Two new Plan schemes for promoting textile exports were also formulated – Apparel Parks for exports for giving a thrust to setting up of apparel units of international standards and Textile Centre Infrastructure Development Scheme for providing financial assistance for infrastructural facilities at established textile growth centres.

7.1.40 The Technology Upgradation Fund Scheme (TUFS) was introduced to modernise the textile sector. All the sub-sectors of the textiles like spinning, weaving, knitting, processing, garment making, cotton ginning and pressing and jute sector are covered under the scheme. The Technology Mission on Cotton (TMC) was established to improve the productivity and quality of cotton so as to increase the income of farmers and making quality cotton available to the textiles industry at competitive prices. The ginning and pressing units, which operate with obsolete technology, poor quality of cotton and increased wastage are proposed to be modernised either by capital subsidy under TMC

Scheme or by 5 per cent interest subsidy under the TUFS. The implementation of the National Textiles Policy (NTxP), 2000 was also announced during the Plan period. It recommended, among other things, duty relief, concessions and special measure for programmes aimed at accelerating modernisation and growth of textile industries. It lays special emphasis on modernisation of the weaving sector by launching a programme for the induction of 50,000 shuttle-less looms and 250,000 semi-automatic and automatic looms in the decentralised powerloom sector.

7.1.41 The Competition Bill, 2001 seeks to ensure fair competition in India by prohibiting trade practices which cause appreciable adverse effect on competition in markets within India and, for this purpose, provides for the establishment of a quasi-judicial body to be called the Competition Commission of India which shall also undertake competition advocacy for creating awareness and imparting training on competition issues.

REVIEW OF NINTH PLAN POLICY REFORMS

7.1.42 While formulating the Ninth Plan, several areas were identified for urgent Government action to realise a target of 8.2 per cent annual growth rate of industry. These were: disinvestment; closure of non-viable sick PSUs; removal of regional imbalances in industrial development; review and revamping of the BIFR mechanism; policy and procedural reforms in the States; feedstock and pricing policy for fertilisers; review of the sugar policy, pharmaceutical pricing policy and small-scale industry (SSI) reservation (particularly for critical export-oriented industries such as toys, garments and leather goods) and review and modifications of food laws; and policy and fiscal measures for developing the packaging industry for increasing export of processed foods.

Foreign Direct Investment

7.1.43 Liberalised trade and an open door foreign investment policy ensure efficient allocation of resources. India is an eminently attractive destination for FDI in view of the stability of its democratic polity, rule of law, steadily growing economy, low inflation rate, sizeable domestic

market, reservoir of skilled English speaking manpower, well-developed social and economic infrastructure, diversified industrial base and evolved financial/capital market. According to the Global Competitiveness Report, (World Economic Forum) India's current competitiveness ranking has moved up 6 notches from 42nd position in 1999 to 36th position in 2001. The Report highlights licensing of technology, availability of suppliers the median corporate tax rates, export promotion and quality of business environment as some of India's positive features. The share of emerging markets in inward FDI has declined from 28 per cent in 1998 to the present 26.5 per cent, even though global FDI levels have increased by 25 per cent in 1999 to reach \$ 1 trillion in 2000. India's share in total FDI flow to development countries has been reported by the UN to be 1 per cent. While China gets FDI of roughly \$ 40 billion a year, the flow to India remains \$ 2 billion. FDI is driven more by economic environment comprising cost conditions, wage levels and industrial capability, market size and infrastructure of export processing zones, than by direct incentives or performance obligations.

7.1.44 Although a number of steps have been taken to ensure a liberal FDI policy, there is scope for substantial improvement in terms of bringing FDI under the automatic route and expediting approvals.

Disinvestment of Central Public Enterprises

7.1.45 In 1998-99, the Government decided to bring down its shareholding in PSUs to 26 per cent (thus facilitating ownership changes, as was recommended by the Disinvestment Commission) in a majority of cases. The Government classified the PSUs as strategic and non-strategic and decided to retain majority holding in strategic PSUs. It was also decided that the interests of the workers would be protected in all cases.

7.1.46 During the Ninth Plan, there had been steady progress in the disinvestment of non-core PSUs. However, this has been linked with an assurance of job security for the employees or providing opportunities for retraining and redeployment. The Disinvestment Commission set up in 1996 had earlier examined each of 58 PSUs referred to it and advised the Government on the

extent of disinvestment feasible as well as the mode of disinvestment and the steps to be initiated. The Disinvestment Commission had made recommendations under five broad categories. These were: (a) strategic sale involving change in ownership/management in 29 PSUs and trade sale of eight; (b) offer of sale of shares involving no change in ownership/management in five PSUs; (c) deferment of disinvestments in eight PSUs and no disinvestments in one; (d) closure/sale of assets in four PSUs; and (e) employee buy-out/strategic sale in two. After the reconstitution of Disinvestment Commission in July 2001, it has been decided that all 'non-strategic' PSUs, including subsidiaries (but excluding Indian Oil Corporation (IOC), Oil and Natural Gas Commission (ONGC) and Gas Authority of India Ltd or GAIL) will be referred to the Commission for independent advice.

7.1.47 Since 2000-01, the Government pursued the policy of reducing its stake to below 26 per cent in some non-strategic PSUs. There was increasing emphasis on strategic sales of and the entire proceeds from disinvestment/privatisation was intended to be deployed in social sector, restructuring of PSUs and retirement of public debt. The salient features of the disinvestment policy in 2000-01 are: to restructure and revive potentially viable PSUs; to close down those which cannot be revived; bringing down Government equity in all non-strategic PSUs to 26 per cent or below, if necessary; to fully protect the interests of workers; to put in place mechanisms to raise resources from the market against the security of PSU assets for providing an adequate safety net to workers and employees; to establish a systematic policy approach to disinvestment and privatisation and to give a fresh impetus to this programme by setting up a new Department of Disinvestment.

7.1.48 Accordingly the Government has decided to disinvest a substantial part of its equity in enterprises such as Indian Airlines, Air India, India Tourism Development Corporation (ITDC), Indian Petrochemicals Ltd. (IPCL), Videsh Sanchar Nigam Ltd. (VSNL), CMC, Bharat Aluminium Company Ltd (BALCO), Hindustan Zinc Ltd and Maruti Udyog Ltd. Where necessary, strategic partners would be selected through a transparent process.

7.1.49 The successfully privatised/disinvested PSUs are: Lagan Jute Machinery Company Limited (LJMC), Modern Food Industries Limited (MFIL), BALCO, ; CMC, Hindustan Teleprinters Ltd. (HTL); IBP Ltd., VSNL, nine hotels of ITDC, three hotels of the Hotel Corporation of India (HCI), Paradeep Phosphates Limited, Jessop and Co. Ltd. (subject to BIFR approval) and Hindustan Zinc Ltd.

7.1.50 Forty-seven PSUs (including a few subsidiaries) have been taken up for the disinvestment between 1990-91 and 2001-02. The proceeds realised amount to Rs. 26,738 crore against the target of Rs. 66,000 crore.

7.1.51 Out of these 47, strategic sales were done in the case of only 12 companies. The total face value of equity sold so far through strategic sale is Rs. 744.34 crore and the realisation of the order of Rs. 7,165 crore. The yearly benefit that accrues to the public from these sales exceeds Rs. 824 crore. Considering the total equity in Central PSUs or CPSUs (held by the Central Government and the holding companies) as on 31 March 2000 is of the order of Rs. 78,484 crore, equity sold through strategic sale so far is less than 1 per cent. If Rs. 7,165 crore could be realised by just selling 1 per cent of the total equity, the potential realisation by selling the total equity in all non-strategic CPSUs can be estimated at several lakh crores of rupees.

7.1.52 The emphasis on strategic sale, from 1999-2000 onwards has started yielding excellent results. The Price/Earning ratios obtained between 1991 - and 1999, from sale of shares of highly profitable CPSUs ranged between 4.4 and 6.0 whereas the P/E ratios obtained through strategic sales have been much higher, reaching up to 63 in case of the IBP disinvestment.

Closure of Non-revivable Sick Public Enterprises

7.1.53 At present the process of rehabilitation/winding up of an PSEs is through the mechanism of BIFR under SICA. BIFR examines various possibilities and approves revival plan for the sick PSUs or recommend closure. The Companies (Amendment)

Bill, 2001, which will seek the establishment of the NCLT to address of sickness and bankruptcy has been introduced in Parliament. The abolition of SICA bill was introduced in Lok Sabha in August, 2001. As these Bills get enacted the process of industrial restructuring should become easier and faster.

Removal of Regional Imbalances in Industrial Development

7.1.54 The Growth Centres Scheme and Transport Subsidy Scheme were initiated as Centrally sponsored schemes to promote industrialisation of backward areas and promote industries in hilly, remote and inaccessible regions. The funding pattern of Growth Centres envisaged an equity contribution of Rs. 10 crore by the Centre, Rs. 5 crore by the concerned State, Rs. 4 crore (including Rs. 2 crore as equity) from financial institutions, Rs. 1 crore from nationalised banks and Rs. 10 crore as market borrowings. This adds up to Rs. 30 crore per Growth Centre. Of the 71 identified Growth Centres, 68 have been approved and of these 38 are functional and plot allotment has commenced in 56. Two Growth Centres have been sanctioned for the Jammu and Kashmir and three in the newly created States of Uttaranchal, Jharkhand and Chattisgarh. The respective State Governments have been asked to expedite progress on the remaining 16 Growth Centres. The non-performing Growth Centres are in Orissa, Bihar, Andhra Pradesh and Pondicherry.

7.1.55 The implementation of the scheme has been rather unsatisfactory. Too many Growth Centres have been taken up at the same time, resulting in thin spread of resources. Besides, it has not been possible to mobilise market borrowings as envisaged in the original scheme. More importantly, industrially advanced States have been able to mobilise financial and managerial resources and make good progress, whereas there has been not much progress in industrially backward States/most backward regions. Thus, instead of reducing regional imbalances in industrial development, the scheme has only aggravated them.

7.1.56 Further, because of funds constraints, State Governments did not release funds to the implementing agencies. After some mid-course

corrections, there has been an improvement in the implementation of the scheme during the past two years. In order to overcome the difficulties faced in the implementation of the scheme, it is proposed to modify the Growth Centres Scheme by bringing changes and allowing split location up to a maximum of three locations for hilly States and two for the other States. There is a proposal to transfer the scheme to the States along with funds.

The number of functional Growth Centres, during the last two years has increased from 26 to 38 and the amount of Central assistance has increased from Rs. 291 crore to Rs. 371 crore. The contribution of the State Government and their implementing agencies increased from Rs. 405 crore to Rs. 689 crore in the same period. The number of industrial units has also increased from 656 to 833, attracting capital investment of Rs. 8,531 crore and creating direct employment for 28,233 persons, as on 31 March 2002.

7.1.57 The Transport Subsidy Scheme was introduced in July 1971 to promote industries in hilly, remote and inaccessible areas of Jammu and Kashmir, Himachal Pradesh, Sikkim, Andaman and Nicobar Islands and Lakshadweep, the Darjeeling district of West Bengal, eight hill districts of Uttar Pradesh and the northeastern States. Under the scheme, subsidy at rates ranging from 50 per cent to 90 per cent on the transport cost incurred on movement of raw materials and finished goods from/to designated rail heads/ports is provided to all industrial units except plantations, refineries and power generation units. The scheme works on reimbursement basis i.e. subsidy to eligible units is first disbursed by the States/ Union territories concerned and the disbursement is claimed from the Centre.

7.1.58 The scheme has been extended up to 31 March 2007 for the northeastern States and Sikkim. It was valid up to 31 March 2000 for other States. A proposal to transfer the Transport Subsidy Scheme to States along with funds is under consideration of the Government.

7.1.59 Total disbursement under the scheme from 1 April 1976 to 31 March 2002 is Rs. 706.77 crore. The major beneficiaries have been Himachal

Pradesh (Rs. 209 crore), Assam (Rs. 200.34 crore up to 31 March 2001), Jammu and Kashmir (Rs. 29.34 crore) and the hill districts of Uttar Pradesh (Rs. 15.83 crore) besides the northeastern region including Assam which received Rs. 403.36 crore.

7.1.60 The National Productivity Council (NPC) was asked to examine the impact of the scheme on the industrialisation process in the beneficiary States, including nature and pattern of industrialisation, size of unit, employment generation and ancillarisation. The study covered Assam, Himachal Pradesh, the hills districts of Uttar Pradesh, Jammu and Kashmir, Meghalaya, Mizoram, Nagaland for the 1989-90 to 1997-98 period. The NPC study concluded that though there has been industrial growth, it has been uneven. In Himachal Pradesh, the number of factories grew at an annual rate of 10.5 per cent, while Assam had a moderate growth of 1.59 per cent in number of factories, output (2.21 per cent) and employment (3.05 per cent). The employment generated by beneficiary units in these remote, hilly and inaccessible areas is approximately for 25,600 people. There has been expansion and diversification in the units though ancillary units did not develop significantly. There have been indirect benefits also like infrastructure development and generation of income for the State Governments through other levies. The study also indicated the areas which require strengthening, in order to improve implementation and reduce delays.

Review and Revamping of BIFR Mechanism

7.1.61 The present legal framework - the SICA under which sick companies are referred to BIFR was originally designed to provide sick companies with assistance to allow them to restructure and to be rehabilitated, thus forestalling closure and loss of employment. It has proved to be almost completely ineffective. It has provided unscrupulous managements with an extended period during which all recovery action is stayed and the time gained in the process is often used to siphon funds out of sick companies making them un-revivable. This ensures that companies that run into difficulties are invariably driven into terminal sickness. At times, promoters may even perceive a benefit in pushing a company into sickness. Unfortunately, the Indian

financial and legal system lacks an effective system for enforcing recovery of debts through speedy bankruptcy procedures with mechanism that would allow inefficient firms failing to service loans to be speedily liquidated or taken over by a new management. In order to solve the problem, the Companies (Amendment) Bill 2001 was introduced in Parliament in August 2001 along with the Abolition of Sick Industrial Companies (Amendment) Bill, 2001.

Policy and Procedural Reforms in States

7.1.62 The process of liberalisation in the industrial sector has advanced considerably at the Centre. Industrial licensing has been eliminated for all but six industries and the number of industries reserved for the public sector has been reduced to three. The remaining controls at the Central Government level need to be reviewed for further liberalisation. Indian industry still suffers from a plethora of controls and regulations relating to matters in the purview of State and these controls cumulatively impose a heavy burden of delay and even harassment of entrepreneurs. A through revamping of these controls and procedures at the States Government level would help create a climate conducive to Indian industry to flourish.

Feedstock and Pricing Policy for Fertilisers

7.1.63 With the introduction of Retention Price cum Subsidy scheme (RPS), the country achieved self-sufficiency by the end of Ninth Plan to the extent of nearly 100 percent of urea and 85 percent in case of DAP. This price arrangement however has encouraged the urea manufacturers to focus more on claiming costs rather than controlling costs by enhancing production efficiency. The urea pricing policy parameter for VII and VIII pricing periods have been recommended by the Group of Ministers (GOM) headed by Deputy Chairman, Planning Commission. Corresponding retention prices have been notified for most of the units. The Expenditure Reforms Commission (ERC) recommendation on rationalisation of fertiliser subsidy by introducing group based urea pricing is under examination along with other alternatives on a new urea pricing policy. In response to the import parity pricing of feedstock, a new pricing mechanism for hydrocarbons was implemented and oil companies started following

this from 9 July 2001. The NPK ratio which had got distorted to 10.0:2.9:1 during 1996-97 has since improved to 6.9:2.9:1 in 1999-2000. It needs to be kept in mind that bio-fertilisers, micronutrients and organic compost should remain an integral part of balanced fertiliser application and integrated nutrient management. Use of these supplements needs to be promoted by research, better marketing and competitive pricing.

Sugar Policy

7.1.64 The Government has taken a number of important policy decisions as part of the reform process in the sugar sector. The sugar industry was subjected to compulsory licensing at the commencement of the Ninth Plan and was delicensed in September 1998. Some of these decisions are:

- Reduction of levy obligation of domestic sugar producers from 40 per cent to 30 per cent with effect from 1 April 2000, from 30 per cent to 15 per cent from 1 February 2001 and from 15 per cent to 10 per cent from 1 March 2002.
- Restructuring Sugar Development Fund Rules, 1982 for providing loans at concessional rates for the rehabilitation of potentially viable sick sugar mills.
- The Government has also approved a proposal for legislation to amend the Sugar Development Fund (SDF) Act, 1982 for loans for bagasse-based co-generation power projects, by-product utilisation and defraying expenditure on internal transport and freight charges on export shipments of sugar. This was being done to improve the viability of the sugar factories as also to augment the power generation in the country.
- Relaxation in controls on the sale of non-levy free sale sugar and substituting the monthly regulatory release by quarterly regulatory release and allowing the sugar factories to sell up to 10 per cent of the quarterly quota as additional quota. This has become effective from January 2002.
- Withdrawal of stockholding limits on wholesale dealers of sugar was done with effect from 7 July 2000.

- Turnover limits on wholesale dealers were abolished with effect from 20 August 2001.
- A notification under the Forward Contracts (Regulation) Act, 1952, allowing futures/forward trading in sugar was issued on 14 May 2001.

Pharmaceutical Pricing Policy

7.1.65 The Pharmaceutical Policy, 2002, aims to ensure abundant and good quality essential pharmaceuticals at reasonable prices, strengthen indigenous capability for cost effective quality production, reduce trade barriers and encourage R&D. Items appearing in the list of essential drugs issued by the Ministry of Health and Family Welfare and other items considered important on account of their use in various health programmes, in emergency care etc. have been kept under the Drug Price Control Order (DPCO) and will form the total basket from which selection of bulk drugs will be made for price control. However, items like sera and vaccines and blood products have been excluded from DPCO. As per the new criteria, molecules with a turnover of less than Rs. 10 crore for the fiscal ended March 2001 will not fall under DPCO, but a drug having a turnover between Rs. 10-25 crore and a single formulator having a market share of over 90 per cent will be covered by the price control order. Further, a drug with a turnover of over Rs. 25 crore and a single formulator and having a market share of over 50 per cent will be under price control. New drugs coming out of research from within the country would be off price control for the life of the patent. It has been decided to permit up to 100 per cent foreign equity under the automatic route so as to promote FDI. India, as a signatory to WTO, is committed to the introduction of a product patent regime in 2005. This will be a major change that will impact the Indian pharmaceutical industry. There may be a need for a review of the newly announced Pharmaceutical Policy 2002 to deal with the changed scenario.

Review and Modification of Food Laws and Drug and Cosmetics Act

7.1.66 During the Ninth Plan, many provisions of the food laws and their implementation strategy have created hurdles in the way of growth and

development. The Prevention of Food Adulteration Act, (1954) and Rules (1955) has been a source of considerable harassment. The standards are unrealistic and there is more emphasis on policing than on prevention of adulteration. It has been recommended that the various food laws would need to be reviewed and suitably modified at an early date. However, there has been no appreciable progress in the modification of food laws. The Drugs and Cosmetics Act, 1940 was reviewed so as to incorporate the provisions of World Health Organisation-Good Manufacturing Practices (WHO-GMP).

Policy And Fiscal Measures For The Packaging Industry

7.1.67 The packaging industry for processed foods, it has been observed, is yet to develop and there is a wide gap between the indigenous and contemporary packaging practices of food products. The cost of packaging is also very high. The Ninth Plan has recommended that appropriate policy and fiscal measures be taken to encourage scientific development of packaging industry. However, there appears to be little progress towards this.

PERFORMANCE OF THE INDUSTRIAL SECTOR

7.1.68 The post-liberalisation period is characterised by three distinct phases of industrial activity. The first is the period after the announcement of liberalisation of industrial and trade policy in July 1991 till the start of rapid growth in 1993-94. The second phase recorded a high growth rate during 1993-94 to 1995-96. The third phase is one when industrial activity slowed down since 1996-97.

Growth Of Industry

7.1.69 The Ninth Plan proposed a target growth rate of 8.2 per cent (value added) for the industry sector. As against this, the actual growth rate (value added actual at factor cost) was 4.5 per cent. The actual growth rates of various sub-sectors vis-à-vis targets at the start of the Ninth Plan as well as revised targets after the Mid-Term

Appraisal are indicated in Table 7.1.5. The year-wise growth rates are shown in the Graph 7.1.6.

7.1.70 During the Ninth Plan period, a Compound Annual Growth Rate (CAGR) of 5 per cent in

industrial production was recorded compared to 7.3 per cent during the Eighth Plan (Table-7.1.7). The CAGR in manufacturing, mining and electricity generation during Ninth Plan were 5.3 per cent, 2.5 per cent and 5.5 per cent respectively.

Table 7.1.5 : Value added growth rate in sub sectors of Industry in the Ninth Plan

	Share of sub sectors in 1999-2000(provisional) at 1993-94 prices	Growth rate (value added) -target	Revised targets after Mid Term Appraisal (5 years)	Growth rate actual (value added)
Manufacturing	16.75	8.2	7.1	3.7
Electricity, Gas and Water	2.49	9.3	8.4	6.5
Mining	2.34	7.2	5.1	3.9
Construction	5.12	4.9	6.8	6.8

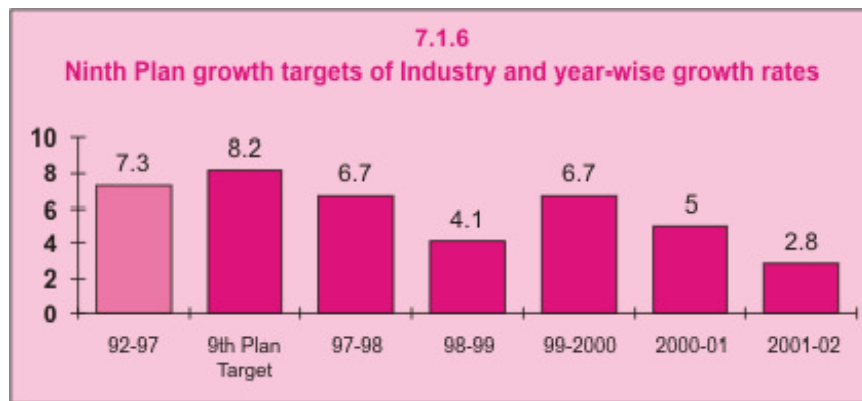


Table 7.1.7 : Annual growth rates of industrial production in major sectors of industry

(Base: 1993-94 = 100) (per cent)

Period	Mining	Manufacturing	Electricity	General
(Weight)	(10.4)	(79.4)	(10.2)	(100.0)
	(11.5)*	(77.1)*	(11.4)*	(100.0)*
1992-93	0.5	2.2	5.0	2.3
1993-94	3.5	6.1	7.4	6.0
1994-95	9.8	9.1	8.5	9.1
1995-96	9.7	14.1	8.1	13.0
1996-97	-1.9	7.3	4.0	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-2000	1.0	7.1	7.3	6.7
2000-01	3.7	5.3	4.0	5.0
2001-02	1.8	2.9	3.1	2.8
Compound Annual Growth Rate (CAGR) 1997-2002	2.5	5.3	5.5	5.0

Growth rates from 1994-95 onwards are based on IIP; Base : 1993-94=100 and those for earlier years are based on IIP; Base : 1980-81=100.

*Relates to weights for IIP Base:1980-81=100

7.1.71 Table 7.1.8 shows the annual average rate of growth recorded in industry groups on use-based classification.

7.1.72 Industrial production, measured by the index of industrial production (IIP), registered a growth rate of 6.7 per cent in 1997-98. This higher growth rate compared to previous year was on account of improved performance of the mining and electricity sectors. In 1998-99, the industrial growth rate was merely 4.1 per cent because of poor performance by the mining and manufacturing sectors. Use-based growth rate indicates that growth in basic goods, intermediate goods and consumer goods in 1998-99 declined to 1.6 per cent and 6.1 per cent and 2.2 per cent respectively. Industrial production had shown a distinct improvement (6.7 per cent growth) in 1999-2000. The improvement was particularly noticeable in manufacturing and electricity generation.

7.1.73 The IIP registered a significantly lower growth rate of 5 per cent in 2000-01 compared to a growth rate of 6.7 per cent in 1999-2000. Growth rates also fell in both the manufacturing and electricity sectors from 7.1 per cent and 7.3 per cent in 1999-2000 to 5.3 per cent and 4 per cent respectively in 2000-01. However, the mining sector recorded a higher growth rate of 3.7 per cent in 2000-01 compared to 1 per cent in 1999-2000. Trends in 2001-02 in overall industrial growth and by sectors suggest an all round slowdown in industrial activity. A growth rate of 2.9 per cent in the manufacturing sector in 2001-02 was recorded. Similarly, the electricity generation growth rate of 3.1 per cent was also significantly lower than 4 per cent growth recorded during the last year. The mining sector growth of 1.8 per cent was also significantly lower than the 3.7 per cent recorded during the last year.

Table 7.1.8
Growth Rates Of Industrial Production By Use-based Classification

(Base : 1993-94=100) (per cent)

Sectors	(Weight)	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
Basic Goods	35.5	10.8	3.0	6.9	1.6	5.5	3.9	2.8
Capital Goods	9.3	5.3	11.5	5.8	12.6	6.9	1.8	-3.9
Intermediate Goods	26.5	19.4	8.1	8.0	6.1	8.8	4.7	1.6
Consumer Goods	28.7	12.8	6.2	5.5	2.2	5.7	8.0	6.0
of which (Consumer Durables)	(5.4)	(25.8)	(4.6)	(7.8)	(5.6)	(14.1)	(14.5)	11.5
(Consumer Non-Durables)	(23.3)	(9.8)	(6.6)	(4.8)	(1.2)	(3.2)	(5.8)	4.0
IIP (Index of Industrial Production)	100.0	13.0	6.1	6.7	4.1	6.7	5.0	2.8

Note : The indices are based on revised item wise weights.

Table 7.1.9
Trends in The Performance of Industrial Sub-Sectors
Annual Growth Rate (Per Cent)

Industry Code	Industry Name	Weight in IIP	1997-98	1998-99	1999-2000	2000-01	2001-02	CAGR 1997-2002	Average growth VIII Plan
20-21	Food Products	9.08	-0.40	0.70	4.20	10.12	-1.68	2.49	3
22	Beverages & Tobacco	2.38	19.40	12.90	7.60	4.32	12.18	11.17	11
23	Cotton Textiles	5.52	2.40	-7.70	6.70	2.91	-2.20	0.29	4
24	Wool, Silk & Man-made Fibre Textiles (Except Cotton)	2.26	18.50	2.80	11.90	5.81	4.40	8.53	0
25	Jute Textiles	0.59	16.90	-7.30	-0.90	0.76	-5.86	0.37	0
26	Textiles Products	2.54	8.50	-3.50	2.00	4.04	2.40	2.60	0
27	Wood & Wood Products	2.70	-2.60	-5.80	-16.20	2.86	-11.03	-6.79	4
28	Paper & Paper Products	2.65	6.90	16.00	6.30	-9.14	2.99	4.29	9
29	Leather & Fur Products	1.14	2.20	8.10	13.80	10.70	5.93	8.07	5
30	Chem. & Chem. Products	14.00	14.40	6.60	10.00	7.29	4.76	8.56	7
31	Rubber, Plastic, Petroleum	5.73	5.20	11.30	-1.10	11.81	11.08	7.55	3
32	Non-metallic Mineral Products	4.39	13.40	8.30	24.40	-1.18	1.37	8.89	6
33	Basic Metals & Alloys	7.45	2.60	-2.50	5.00	1.84	4.01	2.16	10
34	Metal Products & Parts	2.81	7.90	17.00	-1.20	15.02	-9.59	5.34	5
35-36	Machinery & equipment	9.57	5.80	1.50	17.70	7.29	1.02	6.51	6-8
37	Transport equipment	3.98	2.50	20.10	5.70	-1.96	6.83	6.40	13
38	Other Manufacturing Industries	2.56	-1.30	1.00	-16.00	11.65	8.86	0.35	1

Source : Central Statistical Organisation.

Note : The indices from April 1998 onwards are based on revised weights.

7.1.74 Table 7.1.9 shows the annual average rate of growth recorded in industry groups at the two digit level during the Eighth Plan and Ninth Plan periods.

7.1.75 The group-wise industrial growth rate (Table 7.1.9) indicate that five out of 17 industry groups, accounting for 24.17 per cent share in IIP, recorded a CAGR of more than 8 per cent during 1997-2002. Three groups, accounting for 19.28 per cent share in IIP, recorded 6 to 8 per cent CAGR during 1997-2002. Ten industry groups, accounting for 35.9 per cent share in IIP, recorded less than 6 per cent growth rate.

7.1.76 Basic metal and alloys, cotton textiles, wood and wood products, paper and paper products and transport equipment experienced lower growth

rates in Ninth Plan compared to Eighth Plan period. Sectors like non-metallic mineral products, man-made fibre textile (except cotton), leather products, rubber, plastics and petroleum products, chemical and chemical products achieved higher growth rates in the Ninth Plan compared to Eighth Plan period.

Internal and External Factors for the Slowdown

7.1.77 The industrial slowdown is widespread, covering all broad sectors e.g. manufacturing, electricity and mining and all end use based groups such as capital goods, intermediate goods and consumer goods (both durable and non-durables). The slowdown in domestic and global demand appeared to be a major factor constraining industrial growth. Another major reason has been the decline in investment, noticeably by private sector.

7.1.78 The industrial deceleration was due to a number of structural and cyclical factors such as normal business and investment cycles, a lack of both domestic and external demand, continuing high real interest rates, infrastructure bottlenecks in power and transport, lack of reforms in land and labour markets, inherent adjustment lags resulting from industrial restructuring through merger and acquisitions, and delays in establishing appropriate institutional and regulatory frameworks in some key sectors.

7.1.79 The difficulties caused by internal constraints were exacerbated by the slow growth in the world economy, which contributed to a substantial slowdown in manufactured exports. Further, the 11 September 2001 terrorist attacks and related events slowed down the recovery through lack of external demand and adverse impact on air transport, communications and tourism.

Gross Capital Formation and Sanctions by All Financial Institutions

7.1.80 The CAGR of gross capital formation (GCF) at constant prices (1993-94 prices) during the first four years of the Ninth Plan was 7.92 per cent compared to 7.38 per cent during 1993-97. The CAGR of GCF for the public sector at constant prices during the first four years of the Ninth Plan increased to 6.22 per cent compared to 1.04 per cent during 1994-97. In the private corporate sector, the CAGR of GCF during the first four years of the Ninth Plan has been negative at (-) 1.24 per cent compared to impressive 18.91 per cent during 1993-97.

7.1.81 The fall in interest rates has been lower than fall in inflation in recent years. As a result, real interest rates continue to remain high. Compared with a real prime lending rate of 2.4 per cent in 1994-95, it was around 7.3 per cent in 2001. The CAGR of sanctions by All Financial Institutions (AFIs) during the first four years of the Ninth Plan was 21.21 per cent compared to 19.53 per cent in the Eighth Plan. The CAGR of disbursement in the corresponding periods were 14.30 per cent and 21.28 per cent respectively.

Investment Intentions and Foreign Direct Investment

7.1.82 A total of 14,969 Industrial Entrepreneurs Memoranda (IEM) and 911 Letter of Intents (LOI) were filed between 1997 and October 2001. Investment intentions in terms of number under IEM reduced from a cumulative level of 25,307 during the Eighth Plan period to 14,969 during the Ninth Plan. These 14,969 IEMs correspond to investment of Rs. 3,91,292 crore and employment generation of 26.42 lakh. The reported implementation of IEM (out of 14,969) is however, only 1,931 numbers involving investment of Rs. 79,905 crore indicating implementation of only 12.9 per cent in terms of number and 20 per cent in terms of investment. The 911 LOIs proposed an investment of Rs. 15,906 crore and employment of 1.84 lakh.

7.1.83 Table 7.1.10 shows the foreign collaboration approvals and foreign direct investment inflow (FDI/NRI) received during the Eighth and the Ninth Plan periods. The total number of foreign collaborations approved between 1997 and 2001 were 8,290 proposing FDI (including

Table 7.1.10
Foreign Collaboration Approvals and
Foreign Direct Investment Inflow (FDI/NRI) received

1	Foreign Collaborations Nos. (FC)- Approved	Proposed Investment (Rs. crore) - Approved	Inflow (Rs. Crore)	% (percentage) inflow	Foreign Collaborations (Technical) Nos. (FT) - Approved	Total Approved Foreign Collaborations (FC & FT)
	2	3	4	5 = 4*100/3	6	7 = 2+6
1992 to 1996	5,453	89,153	22,960	25.75	4,037	9,490
1997 to 2001	8,290	1,77,972	85,240	47.90	2,459	10,749

ADRs /GDRs/FCCBs) of Rs. 1,77,972 crore. The actual inflow of FDI (including ADRs/GDRs/FCCBs) during the period was Rs. 85,240 crore as against approval for Rs.1,77,972 crore representing an overall inflow of 47.9 per cent. A major change in quantum of foreign technology transfer proposals (i.e. not involving FDI) during the Ninth Plan compared to Eighth Plan is observed. Between 1997 and 2001, only 2,459 technology transfer proposals were approved compared to 4,037 numbers from 1992 to 1996. This may be partly because of lack of willingness to transfer technology without ownership control and costly technology imports may also not be offering the benefits which were available in restrictive environment.

Export

7.1.84 The CAGR of exports during the first four years of the Ninth Plan was 7.42 per cent compared to 13.38 per cent during the Eighth Plan. The share of manufactured goods in overall exports was 78 per cent during the Ninth Plan vis-à-vis 75 per cent during the Eighth Plan. Engineering goods constitute 19 per cent within the manufactured goods. The growth of manufactured goods however, has been slower in the Ninth Plan compared to the Eighth Plan. A medium term export strategy, unveiled in January 2002 to provide a quantum jump to exports in the next five years, provides a mix of macro policies and sector-specific policies indicating attainable goals. The CAGR of imports during first four years of the Ninth Plan was 6.6 per cent compared to 15.05 per cent during the Eighth Plan. The import of capital goods, which was 16.66 per cent in 1997-98, declined to a level of 15.9 per cent

in 2000-01. The CAGR of capital goods import during the first four years of the Ninth Plan period was (-) 3 per cent compared to 18.58 per cent during the Eighth Plan. A positive development during 2001-02 has been the reversal of the trend in import of capital goods which have increased by 6.6 per cent during April-October 2001. The share of import related to export items has been steady in the range of 15-16 per cent over the Ninth Plan period.

Employment Situation In The Manufacturing Sector

7.1.85 Table 7.1.11 shows the employment situation in organised manufacturing in the private and public sectors. The organised manufacturing sector employs approximately 23-24 per cent of total manpower. The role of the public sector as a provider of employment has sharply reduced during the Ninth Plan period. At the same time, there was no appreciable growth in employment in the private sector manufacturing. In terms of total numbers, the employment has been stagnant in manufacturing sector from 1996 to 2000.

SECTORAL PROFILE OF THE TENTH PLAN

Iron and Steel Sector

7.1.86 The PSUs of the Ministry of Steel are: Steel Authority of India Ltd. (SAIL), Rashtriya Ispat Nigam Ltd. (RINL), Sponge Iron India Ltd. (SIIL), Hindustan Steelworks Construction Ltd. (HSCL), MECON Ltd., Bharat Refractory Ltd. (BRL), MSTC Ltd., and Ferro Scrap Nigam Ltd. (FSNL).

Table 7.1.11
Employment situation in Organized manufacturing

(in lakh)

	Manuf. (Private sector)	Manuf. (Public Sector)	Total Employment in manufacturing	Employment (in public Sector)	Employment (in private Sector)	Total Employment in organised Sector	% (percentage) Employment in organised manufacturing
1991	44.81	18.52	63.33	190.57	76.77	267.34	23.69
1996	50.49	17.38	67.87	194.29	85.12	279.41	24.29
2000	50.85	15.31	66.16	193.14	86.46	279.60	23.66

Source : Economic Survey, 2001-02 Ministry of Finance

7.1.87 Some of the PSUs have had the advantage of capital restructuring in the Ninth Plan. The profit margins of the private and public sector steel-making units were hit by the general economic slowdown resulting in depressed domestic demand and stagnant market conditions, protectionist measures in the developed countries, liberalisation of trade, removal of entry barriers, reduction in Customs duty on imports of steel items etc. While RINL and SAIL have shown a relatively better performance, SAIL continues to make losses. Therefore, priority needs to be given to strategies which would ensure long-term as well as short-term profitability of the PSUs. The removal of entry barriers has attracted relatively large private investment in the private sector. This could be attributed to liberalisation and policy reforms. There was a sudden spurt in investment during the first half of the Ninth Plan. However, due to recession during the latter half of the 1990s, the investment already made as well as committed is not yielding the desired results.

7.1.88 The strategies relied upon during the Ninth Plan included cost reduction, rightsizing of manpower, stabilisation of production, sale of idle assets, sale of non-core assets, identification and closure of uneconomic units, focus on core competence, reduction in input-cost, ensuring maximisation of output per unit, improvement in operational efficiency, enhancement in productivity per man hour and achieving the optimum product mix.

7.1.89 Research and Development (R&D) in the iron and steel sector is carried out mainly by the steel plants, national research laboratories and academic institutions. Around Rs. 80 crore is spent annually on R&D, which is only about 0.2 per cent of the total turnover of the steel Industry in the country as against approximately 3 per cent in advanced countries. To encourage R&D activity in the country, the Government has decided to spend up to Rs. 150 crore per year from the Steel Development Fund (SDF) on R&D.

7.1.90 As the Indian economy is going through a recession, its adverse impact would be felt on the iron and steel sector. The growth of domestic demand for finished steel during the Tenth Plan

could be at the modest rate of about 6.25 per cent. The apparent consumption of finished steel during 2001-02 was estimated to be around 27 million metric tonnes (mmt). This is expected to rise to 38 mmt by the terminal year of the Tenth Plan (2006-07). While imports would be confined to two million tonnes (mt), the scope for exports depends upon the competitiveness of Indian steel in the international market. The threat of dumping of steel in the domestic market could continue because of falling prices in the international market.

7.1.91 Due to general slowdown in the major steel consuming sectors and restrictions imposed by major steel importing countries, there is excess capacity in the domestic steel manufacturing sector. Therefore, no additional capacity is likely to be created in the Tenth Plan, particularly in the hot rolled products.

Capital goods and Engineering Industry

7.1.92 The engineering industry comprises of industries manufacturing engineering goods such as metal products, office machinery, electronic goods etc., in addition to capital goods manufacturing industry. The capital goods industry as covered in the IIP comprises 53 industry sectors. The main sectors are machine-tools, industrial machinery, electrical machinery, shipbuilding, diesel engines and commercial vehicles etc.

7.1.93 None of the industry sectors under capital goods attract any industrial licensing provisions and 100 per cent FDI is allowed under the automatic route.

7.1.94 During the first four years of Ninth Plan, the capital goods sector registered a CAGR of 6.71 per cent. The sector grew at an impressive growth rate of 12.6 per cent in 1998-99. However, with the slackening of demand in different sectors of economy, the growth rate reduced to merely 1.8 per cent in 2000-01. The sector registered a negative growth rate of (-) 3.9 per cent during 2001-02.

7.1.95 With the abolition of quantitative restrictions on import of capital goods since 1991, and emphasis on modernisation in different

manufacturing sectors, the share of imported capital goods in gross fixed assets (GFA) increased from 12.2 per cent in 1993-94 and touched a peak of 20.8 per cent in 1995-96. This trend has, however, reversed since 1996-97. The share of imported capital goods in GFA decreased to 17.6 per cent in 1999-2000 within the overall manufacturing sector. The propensity to import in certain segment of industries like textiles, electrical machinery, automobile, auto-ancillary and leather products, however, have been very high. The share of imported capital goods in these segment of industries varies in the range of 20-50 per cent.

7.1.96 The intensity of uses of imported equipment is on the lower side in chemicals manufacturing barring a few sectors like alkalies, plastic products and fertilisers. Indian industrial machinery manufacturers have the capability to manufacture a variety of unit equipments of stringent specifications required for the chemical industry. Similarly, ferrous and non-ferrous metal manufacturing industries largely depend on indigenous equipment except for some tailor-made equipment.

7.1.97 Industry sector-wise FDI inflow (excluding inflows under non-resident Indian (NRI) direct investment and inflows due to acquisition of shares under Section 5 of the Foreign Exchange Management Act (FEMA), 1999 indicate that inflows to engineering sector between 1997-98 and 2000-01 has been to the tune of \$ 1,607 million representing 19.02 per cent of FDI inflows. The FDI inflows in the electronics and electrical equipment sector during first four years of the Ninth Plan has been \$ 1,258 million representing 14.89 per cent of total inflows. However, the increase in GFA in the capital goods sector has not kept pace with the manufacturing sector.

7.1.98 The industry has undergone restructuring by phasing out certain lines of production and closure of some unviable units. The machine tools sector has focused on certain specific areas and there is increasing trend of segmentation in it.

7.1.99 Barring a few exceptions, PSUs manufacturing capital goods have been facing serious competitive pressure and many of them

were referred to the BIFR. The process of disinvestment in many of these PSUs is under way. Bharat Heavy Electricals Ltd. (BHEL) has however, operated profitably despite stiff competition in the power equipment manufacturing sector. They have initiated to package their equipments with limited financial participation also in line with global trends. The share of Hindustan Machine Tools (HMT) in the machine tools sector reduced to 35 per cent in 2000-01. The company is on the revival path and is in the process of being disinvested after financial restructuring in 1997. The three issues concerning the capital goods industry are: (i) high cost structure of industry because of low level of production, lack of specialisation etc., something the industry would need to address; (ii) need to encourage modernisation and R&D to withstand competition; and (iii) unfavourable duty structure particularly zero customs duty on import of items for certain sectors.

Ship-building and Ship-repair Sector

7.1.100 There are 28 shipyards in the country, 19 of them in the private sector. Four public sector shipyards two under the Ministry of Shipping and two under the Ministry of Defence are capable of building large ocean-going vessels. The annual turnover of the shipbuilding and ship repair industry is approximately Rs. 2,000 crore and it employs around 31,000 persons.

7.1.101 The two public sector shipyards under the Ministry of Shipping – Hindustan Shipyard Ltd. (HSL) and Cochin Shipyard Ltd. (CSL) – constitute 25 per cent of the industry turnover, i.e. an annual turnover of approximately Rs. 450 crore. The employee strength in CSL, HSL and Hooghly Dock and Port Engineers Ltd. (HDPE) is approximately 7,800. The three shipyards under the Ministry of Defence – Mazgaon Dock Ltd. (MDL), Garden Reach Shipbuilders & Engineers Ltd (GRSE) and Goa Shipyard Ltd.(GSL) – build a variety of ships and vessels primarily for Indian Navy and Coast Guard.

7.1.102 The assessed production capacity of four large PSUs constitute 95 per cent of the industry turnover. The present annual shipbuilding capacity in India is 0.15 million compensated gross tonnage

(CGT), vis-à-vis 20 million CGT globally. As such, the Indian shipbuilding capacity is less than one per cent of the global capacity. The global shipping and shipbuilding industry have advanced considerably in the last 10 years, while the Indian industry has been stagnant. The trend is towards high capacity containerships, cargo ships, tankers so as to achieve competitiveness in tariff. These trends have necessitated modernisation in ports as well as shipbuilding/repairing facilities. Despite providing a competitive policy environment in India (i.e. status of 100 per cent export-oriented units (EOU) to the ship repair industry), the industry could not grow to the expected levels. The main constraints seem to be lack of infrastructural and managerial capacity.

7.1.103 The overall performance of the shipbuilding and ship repair industry during the Ninth Plan has improved. As a matter of policy, emphasis was given to ship-repair activity by the yards to improve their financial performance. CSL has been a profit-making yard during the Ninth Plan period. The Hindustan Shipyard Ltd., however, could not improve the performance even after financial restructuring. The Committee of Secretaries has recommended the closure of the HDPE. Indian shipyards however, find it difficult to cope with competition from abroad, the main reasons being lack of design-base, very high cost of production and long delivery periods. Further, the shipbuilding industry is cyclical in nature and, therefore, the ship builders usually undertake ship repair activities during the downward trend in shipbuilding.

7.1.104 The main policy issues concerning the shipbuilding and ship repair sector are continuation of the Shipbuilding Subsidy Scheme and budgetary support for the R&D Scheme. The Shipbuilding Subsidy Scheme is meant for PSUs manufacturing ocean-going vessels but is not directly linked to any specific objectives to be attained by the shipyards. The desirability of continuation of this Subsidy Scheme would need to be looked into.

7.1.105 Classification societies are involved from the initial stage of ship design and shipbuilding as a third party certification agency. With the changing technological environment, increasing application of information technology and changes in safety

norms, it is imperative for shipyards to keep pace with such developments to meet emerging classification standards. The National Ship Design and Research Centre (NSDRC), Vishakapatnam, which was set up as a registered society became fully operational in May 1993. NSDRC is presently involved in a diversified range of activities in the shipbuilding and marine industry. In the above context, the society may primarily focus on the shipbuilding sector. The R&D Scheme in the shipbuilding sector may cover projects for industry-wide improvement in knowledge base, standardisation and skill development.

7.1.106 During the Tenth Plan, emphasis would be given on productivity improvement in the shipbuilding sector and to have a more balanced approach to the development of shipbuilding capabilities in addition to business focus in ship repair capabilities. There is a case for the privatisation/disinvestment of public sector shipyards to achieve these objectives.

7.1.107 To ensure long-term strategic/critical needs in shipping, investment in facilities creation in shipbuilding/ship repairs sector is desirable as the present capacities are at very low level. The working group on Shipbuilding and Ship-repair Sector for the Tenth Plan has envisaged an investment of Rs. 2,200 crore (excluding investment in defence PSUs).

Automobile Sector

7.1.108 International majors in the automobile sector, who started operations in India immediately after liberalisation, consolidated their operations during the Plan period. The industry witnessed strengthening of segmentations and a very large number of new models were introduced. The established manufacturers phased out some old models and introduced new models. The sector witnessed changes in terms of design and state-of-the-art technology, giving confidence to manufacturers to face international competition on the home turf as well as to make their presence felt internationally. Competition in the market as well as increasing regulations relating to emissions and safety norms have led to improvement in standards in this sector

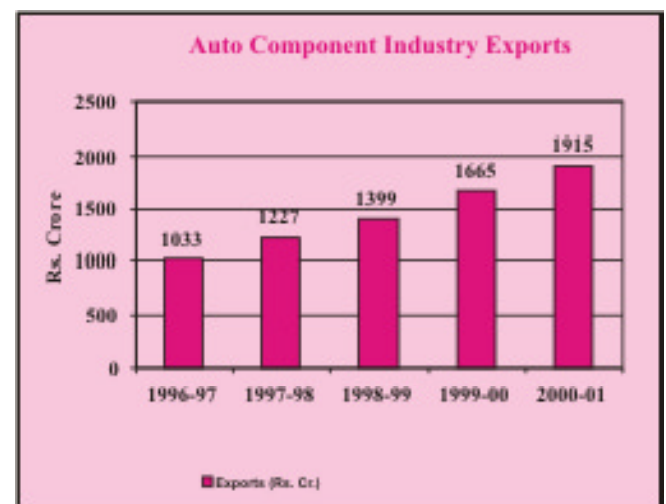
7.1.109 The automobile industry which consists primarily of cars, multi-utility vehicles, medium and heavy commercial vehicles (HCVs), light commercial vehicles (LCVs), two-wheelers and three-wheelers registered an impressive growth rate. The auto industry has achieved a CAGR of 22 per cent between 1992 and 1997 (or 13-14 per cent in real terms). Its contribution in industrial output increased from 4.3 per cent in 1992-93 to 5.4 per cent in 1996-97. In the same period, the auto component industry registered a CAGR of 28 per cent. With this, the contribution of the automobile industry to GDP has risen from 2.7 per cent in 1992-93 to 4.5 per cent by 1996-97.

7.1.110 However, with the worldwide economic slowdown, the auto industry's growth pattern has shown a downward trend in the last two years. The capacity utilisation in commercial vehicles, cars and multi-utility vehicles and two and three-wheelers has been 37 per cent, 55 per cent and 70 per cent respectively. Annual production of cars and multi-utility vehicles peaked at 700,000 in 1999-2000.

7.1.111 International trade in the automobile sector increased by 154 per cent between 1990 and 1995, though the share of Indian industry in global trade fell from 0.2 per cent in 1995 to 0.1 per cent in 1998 and the export volumes were almost stagnant. In absolute terms, however, Indian industry increased its export from \$ 344 million in 1991 to \$ 874 million in 1995. The growth of international trade in this sector has witnessed a decline since 1997-98. Table 7.1.12 indicates

export performance segment-wise during the first four years of the Ninth Plan.

7.1.112 The domestic auto component industry has also made rapid strides and its turnover has almost doubled in last five years. The industry is now quite advanced technologically due to its alignment with major vehicle manufacturers in the country and abroad and has a high export potential. During the late 1990s, exports of auto components grew at a CAGR of about 20 per cent. Currently, exports account for 10 per cent of the total production of auto-components. During 2000-01, the export of auto component was of the order of Rs. 1,915 crore.



7.1.113 A sector-specific Automobile Policy aiming to promote integrated, phased and self-sustained growth of auto industry has been announced by the Government.

Table 7.1.12
Export of Vehicles

(in Numbers)

	1996-97	1997-98	1998-99	1999-2000	2000-01
Cars	37,161	29,705	25,468	23,271	22,913
M.U.V.s	2,484	3,288	2,654	5,148	4,122
Medium & HCVs.	6,606	5,872	4,544	5,089	5,517
LCVs	7,230	8,212	5,564	4,823	8,262
Two Wheelers	1,24,728	1,25,504	1,00,002	83,237	111,138
Three Wheelers	21,973	18,595	21,138	17,725	16,263
Total	2,00,182	1,91,176	1,59,370	1,39,293	1,68,215

7.1.114 The role of auto component manufacturers who have simultaneously upgraded their facilities to meet the requirements would be changing significantly as the industry structure shifts from component level to sub-assembly level. This sector is developing independently as well as it is getting integrated into supply chain of some international vehicle manufacturers. However, the overall development would be largely linked to the fortunes of domestic vehicle manufacturers.

7.1.115 India's exports are still dominated by raw materials and low technology items. Automobile sector exports is one worthwhile area representing medium technology products.

7.1.116 Considering the prevailing technology and competitiveness of the sector, it would be desirable if a focused strategy promoting exports is formulated on a priority basis. The estimated incremental investment requirement in the auto sector and auto component sector during 2002-07 would be approximately Rs. 1,539 crore and Rs. 6,592 crore respectively on the basis of a GDP growth of 6.5 per cent. If GDP grows at 8 per cent, the investment requirement in auto sector and auto component sector during 2002-07 would be Rs. 1,654 crore and Rs. 10,136 crore respectively.

7.1.117 To keep pace on the regulation front in the automobile sector, the Government has to simultaneously modernise the existing regulatory systems at the State level as well as amend the Motor Vehicles Act to introduce new provisions to deal with the dynamic conditions. The road transport authorities would also require skill upgradation to understand and implement the new regulations.

7.1.118 The upgradation of existing testing facilities may be taken up on a priority basis. The Department of Heavy Industry may explore the possibility of increasing funding by the industry and if that does not materialise, the Government may consider restricting its role to funding only and let the management of these facilities be the responsibility of the industry. The creation of new facilities in phases with suitable scope, financial and management structure may be finalised in consultation with stakeholders.

7.1.119 Complex regulations for safety and environmental norms have been applicable in advanced countries since the 1980s. Automotive Research Association of India (ARAI) is working to introduce safety and environmental norms at par with norms in European countries. With liberalisation and the entry of international players, it becomes all the more essential that our national regulations should be updated in line with the latest developments in technology. Out of the total of 114 ECE regulations, about 35 Indian standards have been either partially or fully aligned, 36 are in the process of alignment and about 43 standards are yet to be taken up.

7.1.120 A projection of Rs. 350 crore of Plan resources was made for setting up two new facilities and upgradation of existing testing facilities during the Tenth Plan. The Working Group on the Automobile Sector also suggested the setting up of new facilities with participation from industry.

Fertilisers

7.1.121 Fertiliser is a critical input for maintaining or increasing agricultural production and its importance rests with the importance of agriculture in the Indian economy. Of the four major nutrients Nitrogen (N), Phosphorous (P), Potash (K) and Sulphur (S) are lost through crops. Indian industry caters to the requirement of the three: N, P and S. There is no conversion activity involved in case of K except trading or mixing in the final stage of fertiliser production. About 58 percent of the domestic urea capacity is based on Natural gas as feed stock whereas naphtha accounts for 29 percent and Fuel Oil (FO)/Low Sulphur Heavy Stock (LSHS), 13 percent. On the pricing for the fertiliser units, only urea is, at the moment, under retention pricing scheme whereas phosphatic and potassic fertilizers are covered under a concession scheme. Government notifies the maximum retail price (MRP) of urea under the concession scheme, the indicative MRP for decontrolled fertilisers, namely Diammonium Phosphate (DAP), Muriate of Potash (MOP), and complexes. The MRP of single super phosphate (SSP) is left to be notified by the states.

7.1.122 The development of the Indian fertiliser industry, even while remaining under the regime of

industrial licensing till 1991, has been phenomenal and largely due to the favourable price environment in which industry was able to meet its increasing cost of production with reasonable assured return on investment through a controlled price mechanism. The farm gate price of fertilisers was kept low through fertiliser control order and industry was insulated from the external competition. A balance was struck between the interest of the industry and that of the farmers by the Central budget absorbing the subsidy burden.

7.1.123 The move by the government to decontrol phosphatic and potassic fertiliser in 1992 did not succeed as it was a partial decontrol and resulted in over-dose of controlled nitrogen nutrient (low priced) against lower dose of market priced (high) phosphatic and potassic nutrients. The long term adverse effect on the soil made it essential to provide incentive to the farmers by way of subsidy on P & K again. So it is imperative that suitable instruments are devised to encourage the desired application ratio of N, P and K into the soil.

7.1.124 R&D effort in the sector remains poor, being less than 0.2 percent of the turnover. The main consulting organisation of the sector, the public sector Project & Development India Limited (PDIL), also a PSU is facing difficulty in maintaining profits. It is not able to maintain its R&D activities without grant from the government. The company is also not able to earn profit on its activity of catalyst production, though possibility of its profitability exists.

7.1.125 It would not be rational for fertiliser nutrients to be subjected to taxation by various State Governments when Centre is providing subsidy to it. It amounts to transfer of centre's resources to States through this channel and goes against the very purpose of keeping the fertiliser prices minimum to boost its consumption. So efforts should be directed to ensure that the States desist from taxing chemical fertilisers.

7.1.126 While the industry has its main interest in increasing sales of chemical fertilisers and maximizing profits, nevertheless it holds a certain responsibility towards educating the farmers on integrated plant nutrient management system which

is very essential to avoid deterioration of soil health beyond recovery. Industry should also work out ways to provide farmers with better products that increase their use efficiency like slow release fertilisers. A decontrol of prices would accelerate such efforts.

7.1.127 There is need to increase production and marketing of quality bio-fertilisers to farmers as a cost effective way to reduce the requirement of costly chemical fertilisers. The Department has achieved some measure of success through making public sector units to undertake the task. Some incentive may be required to involve private sector units in the mission.

Drugs and Pharmaceuticals

7.1.128 The Indian drugs and pharmaceuticals industry ranks fourth in world wide accounting for 8 per cent of world production by volume and 1.5 per cent by value. From Rs. 730 crore in 1990-91, the production of bulk drugs touched Rs. 4,533 crore in 2000-01. The production of dosage forms rose from Rs. 3,840 crore in 1990-91 to over Rs. 15,000 crore in 2000-01. This contribution is from the 250-odd large-scale units and about 8,000 small-scale units.

7.1.129 The Indian pharmaceutical industry has been able to achieve global recognition as a low cost producer. Pharma exports touched Rs. 8,730 crore in 2000-01, according to the Directorate General of Commercial Intelligence and Statistics (DGCIS). India ranks 17th in terms of export value of bulk actives and doses drugs. It exports drugs to nearly 200 countries including the highly regulated markets of Europe, United States, Japan and Australia. However, there has been an increase in the imports of bulk drug indicating a weakness in this area. The export-import policy and fiscal policy cannot protect domestic industry because import controls relaxation is inevitable under WTO rules. Losing ground on the bulk drug may also lead to problem for formulators.

7.1.130 One of the problems of the industry is the high rate of obsolescence due to rapid technological developments resulting in the invention/discovery of new organic molecules in the field of synthetic

drugs. The technological advancement also helped in identifying the deficiencies/side effects of the earlier drugs. With the quick phasing out of drugs and introduction of product patenting, the industry is on the verge of losing all its advantages. The challenge for the industry today is a change in its attitude towards innovative R&D. However, past experience reveals that joint projects/collaborations between the private sector and government organisations/laboratories did not yield encouraging results, perhaps due to lack of interest from either side.

7.1.131 International trade in drugs and pharmaceuticals will require stringent control on quality and external markets may not be satisfied with the quality required by the Drugs Control Organisation (DCO). There are several standards which exporting companies have to comply with like Food and Drug Administration (United States), Medicinal Control Agency (United Kingdom), Medicinal Control Council (South Africa), TGA (Australia). Indian products will at least have to conform to a minimum of WHO certification on good manufacturing practices. There is also a need to reduce the duplication of testing for new drugs as being made through Common Technological Document of the International Committee on Harmonisation (ICH) of technical requirements for Registration of Pharmaceuticals for Human Use.

7.1.132 India is one of the signatories to the WHO Certification Scheme on the quality of pharmaceutical products and good manufacturing practices (GMP). The provisions about the compliance with GMP are stipulated in Schedule M of the Drugs and Pharmaceuticals Rules, 1945. The Central Drug Standards Control Organisation (CDSCO) guarantees various activities through their zonal offices and monitors drug quality through nearly 35,000 samples per year. While these are covered under Schedule M of the Rules, domestic companies have to upgrade manufacturing facilities to match the WHO requirements. An order has been issued that upgradation should be completed by December 2003. While the large and medium scale undertakings have the resources to do this, nearly 20,000 small-scale formulators may not have the required capability. It may, therefore, be necessary to provide them with soft loans or some grant.

7.1.133 Apart from the point of view of exports, the question of quality is no less important for domestic consumption. The provisions of the Acts and Rules are implemented jointly by the Centre and the States. However, it has been found that drugs which are not permitted in one State get approved in another State. While steps have been taken for upgrading Schedule M requirements at par with international standards, standards vary from State to State, putting companies upgrading the schedule at a disadvantage as far as cost of manufacturing of drugs is concerned. This calls for a centralised recommendation, a task that can be undertaken by the CDSCO, as a central drug regulatory authority.

7.1.134 It has been found that there is a wide gap between regulation and implementation regarding the quality of drugs. There is a need to strengthen the State licensing authority through setting up an intelligence cell for campaigning against spurious drugs. The establishment of an independent regulatory authority that would deal with major issues like drug pricing, quality control and licensing of drugs could be explored.

7.1.135 India's excellent expertise in developing new and innovative processes for known molecules needs to be exploited in a greater measure. In view of the high obsolescence of drugs, priority needs to be given for the initiation of new drug development for diseases of relevance to the Indian population. Also, it is high time that Indian companies venture into the global market, taking the advantage of low cost R&D and production by introducing globally competitive products based on new molecules, new delivery systems, etc. Investment in R&D by industry as a whole in India has been low, only around 0.6 per cent of the turnover. This is because of the low levels of profitability and comparatively small size of the companies. Investment in R&D by the companies, therefore, needs to be encouraged. Certain incentives for conducting R&D activities and operation of R&D fund under drug development promotion would be in order. The 1999-2000 budget speech of the Finance Minister had an announcement of a corpus of Rs. 150 crore for the Pharmaceutical Research and Development Support Fund.

7.1.136 Prices of essential drugs have been controlled since a large segment of the population is poor and health coverage by the State is inadequate. In view of this, regulation of drug prices needs to continue for some more years. This has to be weighed against the long-term perspective for the pharmaceutical industry. One alternative would be to encourage an increase in health insurance coverage. Simultaneously, the number of drugs under price control needs to be reviewed periodically and some removed from the list.

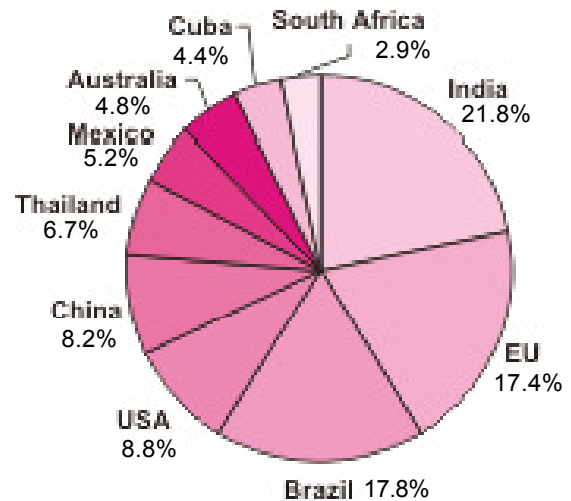
7.1.137 Public sector pharmaceutical units have provided considerable support in the growth of the industry by putting up modern plants for the manufacture of bulk drugs at a reasonable cost. However, all the units have become sick, partly due to the government policy of allowing small formulators to take on a large part of production, late revision of prices, and partly due to the infrastructure and managerial problems. Some of the units were earlier in the private sector and were taken over by the Government after they became sick. The revival package in case of Indian Drugs and Pharmaceuticals Ltd. has failed twice and this indicates that such packages are not based on correct assumptions. The drug sector is not considered a strategic sector because of ample competition. Still, in the absence of any direct price control, PSUs can serve as an indirect way of price stabilisation when prices are fully decontrolled.

Sugar

7.1.138 Sugar industry is the second largest agro-based industry in the country. About 45 million sugarcane farmers, their dependents and a large agricultural labour force, constituting 7.5 per cent of the rural population, are involved in sugarcane cultivation, harvesting and ancillary activities. Besides, about 0.5 million skilled and semi-skilled workers, mostly from the rural areas, are engaged in the sugar industry. The sugar industry in India has been a focal point for socio-economic development in the rural areas by mobilising rural resources, generating employment and higher income, transport and communication facilities.

7.1.139 India has emerged as the largest sugar producing country in the world, with a 15 per cent

Ten Major Sugar Producers in the World



share of the world's sugar production. However, the share in international trade of sugar is only 0.05 per cent. The sugar production in 2000-2001 was 18.34 mmt as against a target of 18.0 mmt. However, there is likely to be a marginal shortfall of production during 2001-02 as against the Plan target. India has broken the conventional sugar cycle characterised by two years of high production followed by two years of low production.

7.1.140 The area under sugarcane crop in India was 1.71 million hectares (m. ha) in 1950-51 and has increased to 4.32 m. ha in the 2000-01 season. Production of sugarcane increased from 57.05 mmt in 1950-51 to 299.20 mmt in 2000-01. The yield of sugarcane rose from 33,422 kg per hectare in 1950-51 to 69,550 kg in 2000-01.

7.1.141 As on 30 September 2001, there were 506 sugar mills in the country, of which 70 were not in operation. The capacity in terms of annual sugar production of all the 506 mills was 16.82 mmt against the target of 19.8 mmt for 2001-02 (the installed capacity of the 70 non-operational sugar mills until 30 September 2001 was 1.107 mmt). Seventy sick public and private sector mills had been referred to the BIFR.

7.1.142 The average annual installed capacity of sugar factory in the country is 2,355 tonnes crushed per day (TCD), as compared to 10,307 TCD in Thailand, 9,216 TCD in Australia, 9,168 TCD in Brazil and 6,877 TCD in South Africa. Considering

the need for achieving economies of scale and reduction in the cost of production, there is a need for consolidation of capacity and vertical expansion of capacity.

7.1.143 Sugar production in India has been generally higher than the rate of growth of sugar consumption. Consequently, there are huge inventories. The projection for internal consumption of sugar during the Tenth Plan period (taking the base internal consumption figure of 15.5 mmt for the 1999-2000 sugar season) has been calculated at 21.3 mmt in 2006-07. This assumes a 6.5 per cent GDP growth and a compound growth rate of 4.9 per cent. The internal consumption has been projected at 23.8 mmt in 2006-07, when an 8 per cent GDP and compound growth rate of 6.14 per cent is assumed. The carry forward of stocks is estimated at 2.65 mmt in 2006-07. The likely scenario of sugar production is projected as 21.3 mmt during 2006-07 and it is estimated that 1.5 mmt of sugar could be exported every year during the Tenth Plan period.

7.1.144 Emphasis needs to be placed on improvement in sugarcane productivity that varies from 134 tonne/hectare in the sub-tropical region to 188 tonne/hectare in the tropical region, rather than merely on increasing the area under sugarcane cultivation. The sugar industry should take necessary steps to strengthen itself by focusing on modernisation, technology upgradation, improvement of sugar quality, economies of scale and by-product utilisation. R&D activities need to be strengthened in the areas of clarification of cane use, quick estimation of cane quality, production of edible grade invert sugar syrup, and developing biogas gasification technology etc. The manpower employed varies from one man/day to ten man/day for per tonne of sugar produced. Rationalisation of manpower should be done to reduce production costs. A study also needs to be undertaken to find out the reasons for a large number of sugar factories not going in for modernisation-cum-expansion of capacity.

7.1.145 Adequate funds are available in the Sugar Development Fund (SDF) to give loans to sugar factories at concessional rates of interest for undertaking modernisation-cum-expansion of

capacity and for rehabilitation of plant and machinery including refining for producing refined sugar for the international market. In spite of this, a large number of sugar factories are operating at sub-optimal and unviable capacities. The main reasons of sickness in the sugar industry appear to be the practice of State Advised Prices (SAPs) for sugarcane, low realisation from the sale of molasses, fluctuations in sugar production, non-availability of adequate cane and the uneconomic size of the mills and their outdated machinery and mismanagement. Adequate relief and concessions would be required from State Governments, banks and financial institutions for the revival of potentially viable sick mills. Assuming that the average cost of upgradation and optimisation is about Rs. 20 crore to Rs. 25 crore, the total estimated investment will be approximately Rs. 1,300 crore, of which Rs. 650 crore could be from the SDF.

7.1.146 To improve the overall viability of the sugar industry, suitable value addition to its by-products will be necessary. Out of the three main by-products of the sugar industry, the utilisation of bagasse and molasses need immediate attention in terms of value-addition. Bagasse-based cogeneration require relatively low capital investment, shorter gestation period, and relatively lower cost of generation as compared to conventional power projects. Some State Governments have already framed policies to encourage bagasse-based power generation.

7.1.147 Molasses is obtained in the process of sugar manufacture involving repeated crystallisation and centrifugation. Between 4.2 per cent and 4.5 per cent molasses is produced from cane and it is presently being used for the manufacture of alcohol and a host of alcohol-based downstream chemicals. Anhydrous alcohol/ethanol, being an environment friendly auto fuel, can be blended with gasoline and used as an auto fuel.

7.1.148 The utilisation of molasses for the production of ethanol would not only give value-addition to the by-product of the sugar industry, but it may also ensure better price stability and price realisation of molasses for sugar mills. This will improve the viability of the sugar mills, which, in turn, will benefit the sugarcane grower, and

the economy, particularly the rural economy. However, considering the environmental-friendly characteristics of ethanol-blended gasoline as an auto fuel, the pricing of ethanol needs to be viewed not only in terms of financial cost-benefit analysis but also of economic cost-benefit analysis.

Leather and Leather Goods

7.1.149 India ranks first among major livestock holding countries, with 19 per cent of bovine, 20 per cent of goat and 4 per cent of sheep/lamb population and accounts for about 10 per cent of global supplies of raw skins and hides. The annual availability of 230 million pieces of hides and skins is the main strength of India's leather industry, a large part of which is in the unorganised sector. About 60-65 per cent of total production of leather and leather products and substantial portion of exports is accounted for by artisans, micro-enterprises and small-scale industries. The sector is highly export-sensitive and faces threats from ecological ban criteria in the main markets.

7.1.150 The leather industry has been identified as one of the thrust areas for exports and the export performance of the leather sector has improved considerably. Exports by the leather sector increased from Rs. 3,036 crore in 1991-92 to Rs. 6,968 crore in 1999-2000 and further to Rs. 9,004 crore in 2000-01.

7.1.151 An analysis of the trends of export realisation between 1984 and 2001 indicates annual growth rates of 6.5 per cent for finished leather, 5.9 per cent for footwear upper

components, 11.6 per cent for closed footwear, 15 per cent for leather garments and 19 per cent for leather goods. Growth rates in the case of finished leather and footwear and components are not significantly high.

7.1.152 The export of the leather goods sector registered an increase of over 25 per cent per annum during the 1997-2000 period. Global share in leather goods has registered a general increase to 7.7 per cent. India is one of the top three players in global trade in leather goods.

7.1.153 Eleven items in the leather sector have been de-reserved. These include semi-finished leather, leather shoes and shoe components. No industrial licence will be required for setting up units to manufacture these items. For leather handicrafts and garments, the entitlement for duty free import of trimmings, embellishments and other items has been increased from 2 to 3 per cent of FOB value of exports.

7.1.154 Some of the major initiatives during the Ninth Plan period were: changes in SSI investment limits, delicensing of integrated leather processing units without export obligations, export obligations being reduced from 75 per cent to 50 per cent for the reserved sector, export of raw hides/skins, wet blue, crust and other intermediates at 60 per cent duty, and, removal of QRs in the leather sector. The promotional measures and schemes were: National Leather Development Programme (NLDP) Leather Technology Mission deliveries, Tannery Modernisation Scheme, Indian Leather Development Programme, Market Development Assistance Scheme and establishing eco-testing labs etc.

7.1.155 A Plan scheme the Indian Leather Development Programme (ILDLP) was launched during the Ninth Plan for integrated development of the Indian leather industry at a total outlay of Rs. 14.50 crore. This scheme provided the much-needed financial assistance to the tanneries for their technological upgradation and better capacity utilisation and to undertake adequate pollution control measures. After the successful completion of Phase I of the United Nations Development

Export of Leather Goods in 2001-02 (\$ Million)	
• Finished Leather	457.37
• Leather Footwear	394.19
• Footwear Components	233.34
• Leather Garments	378.62
• Leather Goods	406.52
• Saddlery and Harness	35.50
• Non-Leather Footwear	26.09
• Total	1,931.63

Programme (UNDP)-assisted NLDP, Phase II of the programme SIDE-NLDP has been initiated with focus on poverty alleviation and sustained livelihood and building linkages between the organised and unorganised sectors. Under this scheme, Decentralised Common Facility Centres (DCFC) and Design Studios for Leather Goods and Footwear have been set up in Kanpur, Delhi, Kolkata, Hyderabad and Bhopal.

7.1.156 Many segments of the Indian leather industry have remained reserved for the SSI sector. There is need to review policies limiting the investments in a sector relating to a globally traded commodity like leather. The leather footwear and product sector offers vast potential for employment, social empowerment and gender equity. An employment-driven policy framework for large additional investments could be a possible policy direction. Labour policies need to be changed. An enabling trade and commerce policy to permit warehousing and reshipment support for attracting raw hides and skins into India and an environment policy for near-zero environmental risk would be necessary.

7.1.157 Strengthening, augmentation, modernisation and expansion through investment grants and credits as well as credit-backed investment support for SSI units would be required. Majority of the units under the SSI sector in the Indian leather industry need access to technologies, design support and skill upgradation of manpower base. Footwear, non-leather component, non-leather footwear, leather garment and leather goods sector need appropriate schemes for both modernisation and expansion. There is a need to expand the capacity of the footwear industry in the organised sector if India has to capture 14 per cent share of global trade. This means that the footwear component sector needs to be expanded by at least ten times and it calls for a planned expansion of the sector. SSI units are not often able to access technology advancements. The SSI sector of the Indian leather industry would need at least an investment of Rs. 500 crore for modernisation during the Tenth Plan period.

7.1.158 A special drive and mechanism would be needed to attract FDI and encourage joint ventures.

Such investments would be ideal for the tanning, footwear components, non-leather materials and footwear.

7.1.159 The Tenth Plan has identified 11 top priorities for the sector. These are:

- i) Employment-oriented policy promotion.
- ii) Readjustments to the de-reservation process.
- iii) Readjustments to the removal of QRs.
- iv) Promotional measures for compliance to WTO regimes.
- v) Modernisation of all sub segments.
- vi) A human resource development mission.
- vii) An environmental mission.
- viii) R&D back up and support.
- ix) FDI and large private investments.
- x) Readjustments to the WTO framework, and
- xi) Strategies for aggressive marketing.

Investments required for achieving these plans have been estimated at Rs 16,000 crore of which Rs. 9,000 crore may need to be invested during the Tenth Plan period.

Textiles and Jute

7.1.160 The textile industry is one of the largest and the most important sectors in the economy in terms of output, employment generation and foreign exchange earnings. The Indian textile industry contributes about 14 per cent to the national industrial production and about 35 per cent to the total national export earnings. The spinning sector has performed well but the weaving and processing sector has not performed satisfactorily because of lack of modernisation. This has affected the export of processed fabrics and other value-added items such as made-ups and garments.

7.1.161 Cloth production increased from 31,958 million sq. metres in 1995-96 to 40,256 million sq. metres in 2000-01 at an annual average growth rate of 4.72 per cent as against the target of 44,000 million sq. metres in the terminal year of the Ninth Plan. There is likely to be a shortfall in cloth

production vis-à-vis the Ninth Plan target. The share of cloth production of the mill sector has decreased from 6 per cent to 4 per cent over the same period the share of powerloom production has increased from 54 per cent to 59 per cent. The spinning spindle capacity has increased from 31.75 million in 1995-96 to 37.91 million in 2000-01. The production of spun yarn has increased from 2,485 million kg during 1995-96 to 3,160 million kg in 2000-01 at an average annual growth rate of 4.92 per cent. The production of man-made filament yarn has increased from 493 million kg in 1995-96 to 920 million kg in 2000-01. The decentralised hosiery sector has shown a significantly higher annual growth rate of 6 per cent during the last five years. The textile exports including jute, coir and handicrafts increased from \$ 8.53 billion during 1995-96 to \$ 12.10 billion during 2000-01 as against the target of \$ 20.17 billion in the terminal year of the Ninth Plan.

7.1.162 The production of textile machinery manufacturing industries, which comprise 600 units employing 30,000 workers, decreased from Rs. 1,500 crore to Rs.1,309 crore from 1995-96 to 2000-01 against the target of Rs. 5,400 crore in the terminal year of the Ninth Plan. The machinery manufacturing industries are exporting 15 per cent of the annual production to over 50 countries.

7.1.163 At present, the National Textile Corporation (NTC) has 119 mills controlled by nine subsidiary corporations of the holding company. Eight out of the nine have been referred to the BIFR. NTC has identified 53 viable mills and 66 unviable mills. The Government proposes to modernise the viable mills and close/privatise the unviable mills. The Draft Rehabilitation Scheme (DRS) proposing revival of 44 viable and closure of 60 unviable mills was approved by the Group of Ministers on an Action Plan for NTC. British India Corporation (BIC) has two woollen mills and two cotton subsidiary companies with 3,799 employees. It has been making continuous losses due to obsolete machinery, excess manpower, shortage of working capital, etc. Winding up of the two cotton subsidiaries of BIC has been ordered. The Government has offered VRS to all the employees in these mills. The

rehabilitation plan for BIC woollen mills is under consideration of BIFR.

7.1.164 R&D activities in the textile sector has been carried out by eight Textile Research Associations (TRAs), Central Sericulture Training and Research Institute (CSTRI) of the Central Silk Board and testing laboratories under Textile Committee. The TRAs provide consultancy services to the textile industry including their member mills, HRD training programmes, testing and certification activities in the area of process control, energy conservation, balancing equipments for process optimisation, productivity improvement and reduction in wastage or rejection, etc. on need basis. Out of the 74 publicly funded testing laboratories, 17 are under the Textile Committee and the rest are under TRAs and powerloom service centres and a few other institutions. The establishment of ISO 9000 Quality Management System was formulated to encourage the small and medium enterprises. Implementation of ISO 14000 Environmental Management System in the textile industry, especially in the processing units, is a social responsibility proposed to be introduced during Tenth Plan.

7.1.165 The Technology Upgradation Fund Scheme (TUFS) was introduced to modernise the textile sector, which is critical for facing competition from other textile producing countries like China, Taiwan, South Korea, Japan, etc. All the textile sub-sectors such as spinning, weaving, knitting, processing, garment making, cotton ginning and pressing and jute sector are covered under the scheme. Since inception of the scheme in April 1999 till 31 January 2002, a total of 1,465 applications with investment proposals of Rs.13,747 crore have been filed for loans amounting to Rs. 7,910 crore. Out of this, Rs. 5,057 crore has been sanctioned to 1,232 proposals and Rs. 3,282 crore has been disbursed to 968 applicants.

7.1.166 The Technology Mission on Cotton (TMC) Scheme strives to improve cotton productivity and quality. In order to reduce contamination of cotton, modern infrastructure is provided in the market yards and the programme on modernisation of ginning and pressing units has been taken up either by capital subsidy under TMC Scheme or a 5 per cent interest subsidy under the TUFS. It is proposed

to modernise/develop about 200 market yards under the Mini Mission-III and 350 ginning and pressing factories under the Mini Mission-IV in the Tenth Plan. Fifty-one market yards and 150 cotton ginning and pressing factories were modernised during the Ninth Plan.

7.1.167 The production of raw jute and mesta during the terminal year of the Ninth Plan has been estimated at 95-100 lakh bales of 180 kg each as against the target of 108 lakh bales. The production target of jute and mesta is placed at 110 lakh bales for the terminal year of the Tenth Plan, while the proposed target for jute goods is 19.50 lakh mt against 14.35 lakh mt achieved during 2000-01.

7.1.168 The UNDP-assisted National Jute Development Programme concluded on 31 March 1999. The second phase of the UNDP programme under the Country Cooperation Framework-I (CCF-I) known as the Fibres and Handicrafts Programme (FHAP) envisaging a total contribution of \$ 7 million by UNDP and Rs. 20 crore by the Government of India has since been launched. The FHAP has five sub programmes, one each in the areas of carpet, cane and bamboo, non-mulberry silks, wool and jute. The activities to be taken up under these sub programmes focus on creating a demand pull and on increasing value addition by emphasising product development, product diversification, marketing and introduction of new technologies. These include promotion of fibre cultivation, support to non-government organisations (NGOs), implementation of strategic marketing plans, human resource development, commercialisation of R&D efforts, indigenisation of machine manufacture, quality assurance and biotechnology interventions, etc.

7.1.169 As the textile industry has a very large potential for increasing employment opportunities in the country, the present labour laws need to be reviewed in the context of re-training and re-deployment of workers. Export led growth in textiles in a global market scenario is possible only with large investments in the key areas of industry, particularly in weaving, knitting, processing and apparel. The technology in these critical sub-sectors of the textile industry needs immediate upgradation to international levels.

7.1.170 To enable the textiles and apparel industry to build world class manufacturing capacities to attain and sustain a pre-eminent global position and to withstand competition, a holistic, need-based and balanced approach is proposed to be adopted while formulating schemes and programmes for different segments of the industry. This approach will be particularly important for the segments, which did not get adequate attention in the past but are critical to the growth of the textile industry. This would involve creation of a fair and competitive environment and a rational fiscal policy regime to enable the industry to successfully compete on cost and quality parameters in the international market.

7.1.171 The production targets envisaged in the terminal year of the Tenth Plan are 45,500 million sq. meters of cloth, 4,150 million kg of spun yarn and 1,450 million kg of man-made filament yarn. The per capita availability of cloth would be 28.00 sq. metres by 2006-07 as compared to 23.19 sq. metres in 2000-01 showing a growth of 3.19 per cent. The export target for textiles and apparel is placed at \$ 32 billion by 2006-07 and \$ 50 billion by 2010. The employment in the textile industry is expected to increase from 34.42 million persons to 40.15 million persons by the terminal year of the Tenth Plan. The employment in the allied industry is also expected to increase from 47.53 million persons to 50.75 million persons during the same period.

Cement

7.1.172 The cement industry in India is, by and large, self-sufficient both in raw material availability and process technology as well as indigenous sources of plant and machinery. It is comparable to the best in the world in respect of quality standards, fuel and power consumption and environmental norms. It has a high capacity utilisation and contributes to 6 per cent of the world production. The industry employs 1,35,000 people, while creating a substantially higher proportion of indirect employment through machinery manufacture, materials and services. The cement industry has recorded a CAGR of 8.4 per cent over the last two decades and contributes 5 per cent of the Central Government's excise revenues. Total decontrol and the subsequent general liberalisation regime saw

Overview

- A one million tonne production employs 20,000 persons
- The sector contributes 5 per cent Central Excise
- The sector has a 1.6 per cent weight in IIP
- One per cent increase in GDP leads to a 1.2 per cent increase in cement production

the capacity of the industry rise to the current level of 140 mmt. The industry comprises 120 large plants with an installed capacity of 129.43 mmt and about 365 mini plants (rotary and vertical shaft kiln or VSK) with an installed capacity of 11.10 mmt. Earlier, the public sector used to consume over 50 per cent of the total cement sold in India, but in the last decade, its share has come down to 35 per cent. Rural areas consume less than 23 per cent of the total cement produced.

7.1.173 The weighted average thermal energy consumption in dry process plants in India has reduced from 780 Kcal/kg clinker in 1995-96 to 750 Kcal/kg clinker in 2000-01. Similarly, the weighted average electrical energy consumption in dry process plants showed a reduction from 104 to 91 kWh/t cement during the same period. It is expected that the average thermal and electrical energy consumption will further come down by 2006-07 due to improvement in energy efficiency in the existing plants and new capacity addition with energy efficient technologies.

7.1.174 The Task Force for the Ninth Plan had projected a capacity of 135 mmt for the terminal year of the Plan (2001-02). The industry has reached a capacity of 140.53 mmt. Cement production also grew consistently during the Plan period at CAGR of 6.25 per cent. Capacity utilisation for large plants has been around 80 per cent and with the privatisation of more public sector units, the capacity utilisation is likely to go up further. The consumption is estimated to touch 100 mmt by the end of the Ninth Plan with a growth of 6.03 per cent. The per capita consumption is lower than the world average and offers scope for development and growth. Cement demand is expected to grow at 10 per cent per annum.

7.1.175 The Indian cement industry has the potential to double its exports of cement and clinker and thus be a major player in the South-East Asian market. In fact, cement has been identified by the Government as an extreme focus item. Though the Ninth Plan had set a target of 8 mmt of exports, exports are expected to be of the order of 5.15 mmt by the end of Plan period.

Reasons for low exports

- High input costs, domestic taxes, high energy charges, poor export infrastructure
- Tax as percentage of production cost is 60 per cent in India, 17 per cent in China, 0 per cent in Malaysia
- Hike in limestone royalty

7.1.176 The critical requirements for the cement industry are coal, power and infrastructure. Of a total consumption of 15.73 mmt of coal in 2000-01, 4.40 mmt was imported. Coal will continue to be the dominant fuel for cement industry. However, petroleum coke, lignite and waste derived fuels will also have a marginal presence. In fact, increased use of pet coke and lignite is likely in the future. Currently, over 40 per cent of cement production is from captive power plants using diesel, furnace oil and coal. The grid power supply system needs urgent overhaul for increased efficiency. Till grid power is available in adequate quantity/quality and at proper price, generation of captive power and its trading needs to be permitted without any restrictions.

7.1.177 In view of the location-specific characteristics of cement plants involving movement over long distances of raw materials and finished products, railway is the ideal mode of transportation. However, only 38 per cent movement through rail could be achieved. Inland water transport is an energy efficient and cheap mode of transport, particularly for those plants located near the coastal regions.

7.1.178 Ninety per cent of cement production in the developed world is moved in the bulk form. In the case of India, this is less than 2 per cent. It is necessary to provide an impetus to bulk cement

through incentives so that demand is created in the market. There is also need for setting up bulk terminals. The growth of bulk cement is dependent upon the development and growth of Ready Mix Concrete (RMC). The RMC industry's growth could not be maintained at the desired pace and has even started to decline. Many RMC units have closed down.

7.1.179 The mini cement plants set up in the country are based either on rotary kiln technology or on VSK technology. Many small VSK plants have also come up mainly in the SSI sector. Presently, only about 132 mini cement plants out of a total of 365 units, with a capacity of about 11 mmt, are reported to be in operation, producing about 4 mmt of cement. Limitations of capacity fixed for mini cement plants at the conceptual stage and financial assistance limits specially the term loans for projects execution, rising cost of fuel and its non-availability in case of VSK cement plants and absence of railway linkage, are issues of major concern. High ash content and poor quality of coal, poor quality of electrical power, lower realisation due to consumer preference for branded cement, shortage of term loans for modernisation and expansion etc. are some of the main impediments resulting in the poor performance and growth of this sector.

7.1.180 The cement demand, based on a scenario of 6.5 per cent GDP growth during the Plan, works out to 142.6 mmt (including 6 mmt of exports) which requires a production capacity of 168 mmt. During Tenth Plan, it is assumed that the demand may go up to 160.56 mmt at the targeted GDP growth of 8 per cent for the economy. This requires a production capacity of 202.64 mmt at the present trend of capacity utilisation.

7.1.181 The additional capacity during the Tenth Plan would be of the order of 62 mmt including 5 mmt from mini cement plants. Around 10 mmt capacity may come from greenfield cement plants at a capital investment of Rs. 3,500 crore. Around 35 mmt may come through modernisation and expansion at a capital investment of Rs. 7,000 crore. Another, 17 mmt capacity is likely to be created due to technology upgradation/ debottlenecking/ addition of fly ash and slag. In

order to cope with the total enhanced capacity of 62 mmt, power infrastructure of 1,125 megawatt (Mw) will have to be created by Indian cement industry. The capital investment for new captive power generation will be of the order of Rs. 4,600 crore. The capital investment for setting up coal washeries of 3 mmt capacity would be around Rs. 300 crore. The additional 5 mmt cement capacity from mini cement plants would require an investment of Rs. 1,000 crore. Further, the investment for developing supporting infrastructure in the railways would be around Rs. 1,200 crore. Thus, the total investment to be made by the Indian cement industry during the Tenth Plan is likely to be Rs. 17,600 crore.

Paper and Newsprint

7.1.182 The Indian paper industry has a total turnover of more than Rs 10,000 crore and provides direct employment to 200,000 people and indirectly to another 100,000 persons. Industry contributes Rs. 700 crore annually to the exchequer by way of excise duty.

7.1.183 Despite low per capita (4 kg) consumption of paper and paper boards, the industry has made a steady progress in the last five decades. At present there are 515 registered pulp and paper mills with the total installed capacity of about 5.1 mmt and production of about 3.2 mmt. The country is approaching self-sufficiency in the manufacture of most varieties of paper and paperboards. Plants with around one mt of capacity are closed primarily because of managerial, production, technical marketing and financial problems. The industry continues to operate with obsolete technology and the required modernisation has not taken place primarily because of resource constraints. Further, clandestine imports and dumping of paper and paper products from other countries has affected the health of the paper industry.

7.1.184 At present, about 60.8 per cent of the total production is based on non-wood raw material and 39.2 per cent on wood. The capacity utilisation of the industry is low at 60 per cent as about 194 paper mills particularly small mills are sick/or lying closed. The total production of paper during 2001-02 is expected to be 3.2 mmt.

7.1.185 The performance of the industry has suffered due to inadequate availability and high cost of inputs and power. Several policy measures were initiated in recent years to remove bottlenecks in the availability of raw materials and for infrastructure development. Duty on pulp and waste paper, wood logs/chips was reduced. Several fiscal incentives have also been provided, particularly to those mills which are using non-conventional raw materials.

7.1.186 Import of paper and paper products have been growing over the years. The imports during 2000-01 were to the tune of 0.152 mmt and are estimated to be 0.165 mmt in 2001-02. About 0.14 mmt of paper was exported in 2000-01, mainly to the neighbouring countries.

7.1.187 There are, at present, 64 newsprint mills (four in the Central public sector, two in the State public sector and 58 in the private sector) with an annual installed capacity of about 1.204 mmt. The capacity utilisation of the newsprint industry is low at 55 per cent. The total newsprint produced during 2001-02 is estimated at 0.65 mmt as against a production of 0.63 mmt in 1999-2000.

7.1.188 The domestic demand for newsprint is met partly from indigenous production and partly by import. Free imports and low customs duty have made the newsprint market competitive. There are no price or quantitative controls. Various policy measures have been taken to improve production and availability of newsprint. The industry has been delicensed. Excise duty on newsprint has been removed.

7.1.189 The public sector Hindustan Paper Corporation Ltd. (HPC), has two paper manufacturing units - Nagaon Paper Mills (NPM) and Cachar Paper Mills (CPM) in Assam. It also has three subsidiaries, -- Hindustan Newsprint Ltd. (HNL) in Kerala, Nagaland Pulp and Paper Company Ltd. (NPPC) in Nagaland and Mandya National Paper Mills Ltd. (MNPM) in Karnataka.

7.1.190 Of the three subsidiaries, HNL is a profit making concern. There have been efforts to revive the poor performing NPPC through financial restructuring. The company was referred to BIFR and declared sick in August 1998. BIFR directed

the operating agency (i.e. Industrial Development Bank of India) to explore the possibilities of changing the management by way of joint venture/amalgamation/merger/sale, etc. A final decision is yet to be taken. MNPM has been closed with effect from 20 October 2000. The total liability of HPC (including those of MNPM and NPPC) as on 31 March 2000 to the Government of India in terms of loan and interest works out to Rs. 926.11 crore.

7.1.191 The performance of NEPA Ltd. has not been satisfactory. Cabinet had, in principle, approved private sector participation in the company and approved financial restructuring before inviting bids for strategic sale. Financial restructuring of the company was done in March 2000. The accumulated losses of the company have risen to Rs. 124.30 crore, while the paid up capital as on 31 March 2000 is Rs. 105.39 crore. The company is still before the BIFR because of further cash losses.

7.1.192 In spite of periodic recession, the Indian paper industry is expected to continue to grow in the next 10 years, and capacity expansion will have to take place in existing mills and also in greenfield projects. The Indian paper industry would need to grow at the rate of 5 per cent per annum in the next decade and installed capacity is expected to be around 7.5 mt by 2010.

7.1.193 Raw materials availability on a sustained basis will be a major constraint and both the Government and industry will have to evolve a long-term strategy regarding this. The elements of the strategy would include: wasteland utilisation, R&D efforts on effective utilisation of indigenously recovered waste paper, increased use of non-wood fibres and use of non-chlorine bleaching technologies.

7.1.194 In the next five to six years, stringent environmental regulations will virtually force the Indian paper industry to develop techniques for conservation of resources and reduction of pollutants and also new treatment systems for end-of-the-pipe treatment and management of effluent problems. Discharge of persistent organic pollutants such as organic halides and their control and management will be one of the major challenges before the Indian paper industry.

Pesticides

7.1.195 Pesticides, a product of the chemical industry, finds an important role both in agriculture and public health service. In agriculture, it is required to prevent crop losses and for public health, it is used to control pathogens responsible for epidemics.

7.1.196 The per capita consumption of pesticides in India is low in comparison to other countries. It is only 0.45 kg per ha as compared to 13.35 kg per ha in Italy, 9.18 kg per ha in Japan, 6.56 kg per ha in South Korea and 0.58 kg per ha in the United States. However, India ranks 12th in agro-pesticides globally and second in Asia alone. The industry was growing steadily till reports of the adverse effect of a few pesticides resulted in an increased thrust on bio-pesticides. Still the demand of various types of pesticides in the country is of the order of 43,380 mt (technical grade).

7.1.197 The large domestic demand and market protection led to the setting up of plants in the country to reduce import dependence and spurred growth of the industry. The economic liberalisation initiated in 1991 helped accelerate the growth of the sector. The three main economic measures which aided the industry are: removal of compulsory licensing, removal of the mandate requiring reservation of 50 per cent of technical grade produced for use in formulation by the small-sector and progressive reduction in import tariffs from 165 per cent to a uniform duty of 35 per cent in 2000-01. It is now able to meet 95 per cent of the country's demand. With a capacity of over 128,900 mt, it is now the largest manufacturer among South Asian and African countries with a turnover of Rs 3,200 crore. It also caters to export market to a small extent.

7.1.198 Insecticides account for 76 percent of the total domestic market. The main reasons for significantly lower usage of herbicides and fungicides in India are manual weeding and the fact that the tropical climate is more conducive for the growth of insects as compared to herbs/fungi. However, growth in these two categories is at a much faster rate than in the insecticides category. The agro-climatic factor mostly

regulates the performance of the industry. The leading crop, cotton, accounts for around 45 percent of the domestic agrochemical market.

7.1.199 The industry is divided into 67 large units (ten of them multinational companies) in the organised sector which takes care of all the requirement of the technical grade and over 400 SSI units, which are engaged exclusively in formulations. The only PSU in the sector is Hindustan Insecticide Limited (HIL), with three units. The financial health of the company is not bright and it started incurring losses since 1997-98 and performance has been deteriorating since then.

7.1.200 The critical success factor for the Indian agrochemical industry is low cost of production. The pesticide sector like drug is set for major change. Many pesticides would be banned or would be replaced by better and cheaper alternatives. But to remain in the position large investment in Research & Development is needed. Institute of Pesticide Formulation technology (IPFT), set up by the GOI with the assistance of UNDP/UNIDO in May, 1991, is actively engaged in the areas of development of new, safer and environment-friendly pesticides and formulations. It would be desirable that the Institute gains confidence of the industry by developing commercially viable new generation pesticide/ formulations and process technology.

7.1.201 The problems being experienced by the pesticide industry are sale of spurious pesticides, registration for export of pesticides and inadequate testing facilities at the Regional/State Testing Laboratories. The State Directorates of Agriculture have the administrative machinery to check the quality of pesticides at the manufacturing stage as also pesticides stored at the premises of stockists. However, despite such checks, spurious pesticides are reportedly sold in the market. In a number of cases of testing of pesticide samples, the results of the Regional/State Testing Laboratories are at variance with those of the Central Insecticides Laboratory. This could be due to either non-availability of high-tech instruments or untrained/inexperienced staff. This issue needs to be addressed.

7.1.202 The production and import of pesticides requires compulsory registration under the Insecticides Act 1968. The registration requires submission of authentic data on chemistry, bio-efficacy and residues, toxicity and packaging and labeling with details on pesticide presence in water, soil, crop and the environment. The Act has been amended providing for stringent punishment to offenders and also removing certain difficulties associated with its administration and implementation.

7.1.203 The enforcement of various provisions of the Act mainly rests with the State Governments and this requires licensing officers, appellate authority, insecticide inspectors and insecticide analysis (45 pesticides testing laboratories have been installed). A lot is desired in the implementation of various provisions of the Act. To curb marketing of spurious and duplicate pesticidal products, States have been advised to constitute inter-state committees and conduct periodic checks.

7.1.204 In the next decade, manufacturing standards are likely to be implemented more rigorously thereby ensuring that only plants with recognised good manufacturing practices would exist. There is a need to train extension workers and staff in the proper application of pesticides.

7.1.205 In view of the ecological considerations and global concern about harmful impact of pesticides on the environment, the Government adopted Integrated Pest Management (IPM) as the cardinal principle and the main plank of plant protection strategy in the overall crop production programmes. The Government is a signatory to Agenda 21 of United Nations Conference on Environment and Development (UNCED), 1992 which has approved and accepted IPM to reduce the use of pesticides in agriculture. The Government has taken a number of positive measures for the promotion of IPM among the extension functionaries and farmers. Biological control is an important component of the IPM programme. However a more definite action plan is to be drawn and implemented to achieve the goal.

7.1.206 Realising the importance of neem as a source of pesticides, the Government is promoting an UNDP-assisted project by way of technical

support for development and cleaner production of neem products as environment-friendly pesticides. Neem-coated urea serves both as a slow release product as well as a pesticide. Due attention is required in promoting the product through PSUs in fertiliser sector. Besides neem several other plants/herbs are traditionally being used as source of pesticide. The practical viability of these sources needs to be explored in view of the growing demand for the eco-friendly biopesticides.

Chemicals

7.1.207 The chemical Industry is perhaps the most diversified of all industrial sectors, covering more than 70,000 commercial products. The Indian chemical industry ranks 12th by volume in the world production of chemicals. The export of chemicals in 2000 was \$ 2.8 billion, which accounts for almost 14 per cent of the exports from the manufacturing sector and about 11.15 per cent of the country's total exports. Its contribution to the national revenue by way of custom and excise duties is about 20 per cent. More than 60 per cent of the production of the sector comes from SMEs.

7.1.208 The industry faces many challenges in the liberalised environment. Drastic reduction in import duties from more than 150 per cent to the present level of 30 per cent has made the market extremely competitive. Setting up of massive capacities by multinational companies in Singapore, Malaysia, South Korea, Taiwan and Japan have only made the competition more cut throat. Added to that is the demand to improve quality and develop marketing strategies and skills. Adverse economies of scale of domestic companies vis-à-vis the multinational companies further add to the disadvantages.

7.1.209 The units in the SME category, suffers from higher cost of production as the scale of operation is very small. Lack of coordinated research and development in these industries led to inconsistent product quality. In addition there are problems of adequate finance. The Indian plants are not internationally competitive due to lack of modernization and sub-optimal scale of operation.

7.1.210 As the Indian economy was a highly protected one, no large-scale R&D was undertaken. The industry would, therefore, have to invest huge

amounts of money in R&D to catch up with the international chemical industry. Fortunately, India has developed scientific institutes and hence there is no dearth of trained scientific human resources. The industry should equip itself to exploit the newly emerging speciality chemicals that will gradually replace the existing chemicals that are hazardous and inefficient. In coming years these chemicals will find an application in most of the daily use products and compositions. At present, most of the speciality chemicals are being patented by developed countries.

7.1.211 With the growing concern relating to environment, global players are closing operations. This has given developing countries like India the opportunity to emerge as prominent players in the global chemical market.

7.1.212 Availability of basic inputs (raw material), fuels and power at internationally competitive prices, implementation of VAT, bringing down the cost of funds for capital investment/working capital to the international levels, implementation of labour reforms and substantial development in infrastructure particularly roads, ports and power supply are some of the measures which would go a long way in making the Indian chemical industry globally competitive.

7.1.213 The realisation of income from operations in the case of the public sector Hindustan Organic Chemicals Limited (HOCL) was affected by recession in the world market. Disinvestment of HOCL is at an advanced stage.

7.1.214 The Chemical Weapons Convention (CWC) is a universal non-discriminatory multilateral disarmament treaty which bans the development, production, acquisition, transfer, use and stockpile of all chemical weapons. India signed the Convention on 14 January 1993. The convention is being implemented by the Organisation for the Prohibition of Chemical Weapons (OPCW) established in The Hague. The Institute for Pesticide Formulation Technology (IPFT), under the Department of Chemicals and Petrochemicals, has been participating in the proficiency tests conducted by the OPCW worldwide to assess the capabilities of laboratories. Laboratories are accredited if they

succeed in these tests. To be able to discharge the obligations under the Convention, each country is required to have a domestic legislation, which makes the filing of correct information about various activities in schedule chemicals mandatory. The CWC Act has been notified on 28 August 2000.

7.1.215 The dyestuff sector is one of the most important segments of the chemical industry in India, having forward and backward linkages with a variety of industries like textiles, leather, paper, printing ink and food technology. The Indian dyestuff industry has both small and big players. Fiscal concessions granted to the small-scale sector in the mid-eighties led to establishment of large number of units in the SSI sector. Today, nearly 95 per cent of the total 1,000 chemical units are located in the unorganised sector. However, organised players constitute about 65 per cent of total dyestuff production in the country. Currently, the industry is in the midst of major restructuring and consolidation. With the shift in emphasis on product innovation, brand building and environmental friendliness this industry is increasingly moving towards greater customer orientation. Even though India enjoys an abundant supply of basic raw materials, it will have to build up on technical services and marketing capabilities to face global competition and increase its share of exports, though the dyes and dye intermediate sector already enjoys a positive trade balance with exports far in excess of imports.

Petrochemicals

7.1.216 The country has made rapid strides in terms of production and consumption of petrochemicals. To remain competitive, in the wake of lowering of tariff barriers, the industry is adopting state-of-the-art technologies and is producing quality petrochemical products of international standards. This sector's yearly output is approximately Rs 1,20,000 crore, which is 15 per cent of the manufacturing sector's output. Its export of about Rs 16,000 crore is 16 per cent of the manufactured products' exports and it contributes about 20 per cent of the national revenue.

7.1.217 The domestic petrochemical industry has been growing at the rate of 14-15 per cent per annum which is almost in line with the anticipated growth rate of the Ninth Plan. Creation of additional

capacities to the tune of 3.61 mmt in respect of major petrochemical has reduced import dependency of petrochemicals considerably. Capacity utilisation of the major petrochemical plants at the commencement of the Ninth Plan was 73.3 per cent which was based on their capacity and production at the end of 1996-97. It is anticipated to go up to 93.43 per cent by the end of terminal year of the Plan.

7.1.218 Petrochemical projects commissioned during the Ninth Plan are: the gas-based cracker complex of GAIL at Auraiya (Uttar Pradesh) with an ethylene capacity of 0.3 mmt per annum (mmta) at a cost of Rs 2,500 crore; expansion of Indian Petrochemical Ltd.'s (IPCL) existing gas-based cracker capacity from 0.3 to 0.4 mmta and HDPE/LLDPE swing plant capacity from 0.16 to 0.22 mmta; naphtha-based cracker complex of Haldia Petrochemicals Limited (West Bengal) with an ethylene capacity of 0.42 mmta and other downstream polymer products; IPCL's second phase of Gandhar (Gujarat) complex with an ethylene capacity of 0.3 mmta and mono ethylene glycol of 0.10 mmta; and Reliance Group's 1.4 mmta p-xylene and 0.6 mmta polypropylene plant at their Jamnagar refinery complex. Due to uncertainty on price situation impacting profitability and return on investment, fresh investment to the extent required to meet the domestic demand did not materialise.

7.1.219 The Assam Gas Cracker Complex Limited (AGCL) is proposed to be set up as a joint venture of the Assam Industrial Development Corporation with Reliance Industries Limited (RIL). This project was mooted as a part of economic development plan under the Assam Accord. The progress of the project is highly unsatisfactory.

7.1.220 The per capita consumption of plastics in India in 1995-96 was around 2 kg, which is way below the world average of 17 kg. The outlook for the domestic plastic industry is quite bright. Given a good GDP growth and increasing purchasing power of middle-income groups, the demand for plastic goods will grow at a very good rate. Despite intermittent periods of sluggishness, the overall trend remains very positive. With future consumption of polymers expected to grow by 15 per cent and that of fibres and intermediates by 7-8 per cent, the petrochemicals sector offers immense

opportunity for domestic as well as foreign players. The estimated demand growth is 12-13 per cent for the Tenth Plan for polymers and over 6 per cent for synthetic fibres for the Tenth Plan period.

7.1.221 The basic objective of the Central Institute of Plastic Engineering and Technology (CIPET) is to train people in various disciplines of plastics, plastic processing, etc. for the plastic industry. Modernisation of CIPET facilities through World Bank assistance has been implemented.

7.1.222 IPCL has been disinvested and liquidation of the Petrofils Cooperatives Limited is under progress.

Atomic Energy

7.1.223 Activities of the Department of Atomic Energy (DAE) under the Industry and Minerals sector primarily include manufacture of nuclear and structural materials and control systems to build and operate the nuclear power plants and management of the back end of the fuel cycle. The programme profile ensures that there is a sustained and timely supply of nuclear fuel and other materials for the operating nuclear power plants and the plants that are being built. This sector is also engaged in the production of equipment for radiation and isotope products and services going to some important sectors of our economy, like agriculture, food, and health, etc.

7.1.224 The PSUs under DAE are Uranium Corporation of India (UCIL), Indian Rare Earths (IRE) and Electronics Corporation of India Ltd. (ECIL), which meet the requirements of uranium concentrates, zirconium sponge and instruments and controls respectively.

7.1.225 The present nuclear power generation capacity in the country is 2,720 megawatt (Mw). The DAE plans to raise the capacity to 7,180 Mw by 2009-10.

7.1.226 A majority of the programmes implemented in the Ninth Plan have achieved the goals set by the DAE. The activities covered included: exploration for uranium, rare metal and rare earth and beach sand mineral resources; mining and processing of uranium ores and mineral sands;

fabrication of nuclear fuel and production of heavy water for nuclear power reactors; reprocessing of the spent fuel and waste management; and production of control and instrumentation equipment for nuclear power plants. Reprocessing of spent fuel and irradiated thorium as well as waste management of the nuclear fuel cycle constituted the front end of the nuclear power programme. Radioisotopes produced in the research reactors, Dhruva and CIRUS at Trombay after formulating into radio-pharmaceuticals, radio-labelled compounds and radiation sources are supplied to various users for application in industry, agriculture, research and health care.

7.1.227 The present heavy water capacity is enough to take care of the country's power need during the Tenth Plan. Need for capacity addition will arise during the Eleventh Plan. During the Tenth Plan, the expenditure will be mainly towards energy saving retrofits and renewal and replacements and augmentation of plant capacities.

7.1.228 Increased fuel requirement will require new additions during the Tenth Plan. The heavy water moderated reactors (in operation or to be installed), would need addition in capacity for Zirconium Fuel Tubes through three related projects namely New Zirconium Oxide Plant, Zirconium Plant and Zirconium Fuel Tube Plant.

7.1.229 To tide over the problem of limited availability of natural uranium reserves in the country, development of Fast Breeder Technology with MOX fuel and advanced heavy water reactors on U-233 has been taken up in earnest. It would require new fuel fabrication facilities at existing site of Nuclear Fuel Complex (NFC) as well as new locations under two separate line of activities.

7.1.230 The major investment in Tenth Plan will be for the MOX Fuel Pin Fabrication Plant at Kalpakkam, Fast Breeder Reactor Reprocessing Plant and Fabrication of prototype fast breeder reactor (PFBR) Core assemblies.

7.1.231 In addition to above, DAE pursues the programmes based on application of radiation technology in the field of health care, food preservation and industrial sectors and has set up facilities under Board of Radiation and Isotope Technology (BRIT) and Centre for Advanced Technology (CAT). Some new projects have been added under these units apart from continuing projects.

Tenth Plan Schemes and Outlay

7.1.232 The approved Tenth Plan outlay for departments/ministries covered under industry sector is given in Table 7.1.13 :

Table 7.1.13
Tenth Plan Outlay

Sl. No.	Name of the Ministry/Deptt.	Outlay	BS	IEBR
A.	Industry			
1	Steel	11,044.00	65.00	10,979.00
2	Fertilisers	5,900.00	1,050.00	4,850.00
3	Petroleum and Natural Gas (I&M)	7,614.81	0.00	7,614.81
4	Chem.and Petro-Chem.	3,044.00	300.00	2,744.00
5	Ind. Policy and Promotion *	2,000.00	2,000.00	0.00
6	Heavy Industry	2,063.00	700.00	1,363.00
7	Commerce	4,562.00	4547.00	15.00
8 &	Public Enterprises	50.00	50.00	0.00
9	Textiles (I&M)	1,980.00	1,900.00	80.00
10 #	Consumer Affairs	55.00	55.00	0.00
11&	Company Affairs	50.00	50.00	0.00
12	Food and Public Distribution (I&M)	10.20	10.20	0.00

.....Contd. Table 7.1.13

Sl. No.	Name of the Ministry/Deptt.	Outlay	BS	IEBR
13	Surface Transport (Shipbuilding and Ship repair Sector)	1,047.86	242.86	805.00
14	Atomic Energy	3,350.00	2,270.00	1,080.00
15	Bio technology	30.00	30.00	0.00
16	DSIR	25.00	25.00	0.00
17	Ocean Development	100.00	100.00	0.00
18 \$	Supply			

* NRF Expenditure up to 2001-02 was included

- @ Outlays of National Test House are not included (NTH was transferred from D/o Supply on 17.8.2001 to D/o Consumer Affairs)
- \$ Deptt of Supply merged in Deptt of Commerce in 2001-02, the expenditure pertain to DGS&D and NTH
- # The expenditure of NTH is not included as it was transferred in 2001-02 after allocation under D/ Supply
- & No Outlays in Ninth Plan

Schematic distribution of outlay Department-wise is at Annexure 7.1.1.

THE PATH AHEAD

7.1.233 Each element of the Tenth Plan strategy has been translated into a set of actionable points.

7.1.234 Important new policy packages and programme initiatives being launched in the Tenth Plan are described in chapters on specific sectors.

7.1.235 The success of the Plan is predicated upon global economic recovery, access to developed

markets, a level playing field, enforcement of rules of fair play, additional financial resources and latest technologies for developing countries. Equally critical is the enabling policy environment.

Simplification of Procedures

7.1.236 Investment decisions are today hampered by a plethora of laws, rules and regulations at the Central, State and local levels. On the basis of a study conducted by the Administrative Staff College of India (ASCI), the procedures governing the setting up of industries are being simplified.

Actionable Points	
Element of Strategy	Proposed Actionable Point
Conducive policy environment	<ul style="list-style-type: none"> • Labour, fiscal reforms and streamlining of procedures • Legal and procedural reforms • Bankruptcy and foreclosure laws
World-class infrastructure	<ul style="list-style-type: none"> • Clusters, Andhra model, Apparel Parks, Agri Zones
Augment resource base	<ul style="list-style-type: none"> • Stronger capital and institutional finance markets/ institutions • Attract higher level of FDI
Optimise resource allocation	<ul style="list-style-type: none"> • Pricing policy
<ul style="list-style-type: none"> • Increased flows into high growth areas • Release of unproductive resources 	<ul style="list-style-type: none"> • Leverage resources through effective public-private partnerships • Expeditious closure of non-revivable PSUs • Expeditious divestment of non-strategic PSUs • Improving productivity and efficiency of transitional PSUs.
Efficiency enhancing policies	<ul style="list-style-type: none"> • Innovate • Technology upgradation • Modernisation • R&D
Export thrust	<ul style="list-style-type: none"> • Skill upgradation • Assist States for updating export infrastructure • Special Economic Zones ,Maharashtra model • Standardisation, accreditation and certification • Market Access Initiatives • Making products/processes/practices eco-friendly
Level playing field	<ul style="list-style-type: none"> • Rationalisation of taxes and duties • Cost of finance and credit availability • Intellectual property rights regime • World class infrastructure • Modernising patent offices

Rationalisation of Indirect Taxes

7.1.237 A multiple-level duty structure with varying rates of levies has a cascading effect on industry. It also leads to sub-sectoral discrepancies. Exploiting the resultant loopholes is a full-time activity, sapping the energy of industry which should, instead, be concentrating on the enhancement of customer value. The Tenth Plan envisages significant progress in this direction by evolving an growth-oriented fiscal system for integrated development of industry by lending predictability and uniformity to the duty structure.

Intellectual Property Rights

7.1.238 India became a signatory to the Trade-Related Intellectual Property Rights (TRIPS) agreement. It is now mandatory for India to move towards a product patent regime by 2005 in addition to process patents. A substantial flow of FDI can be achieved if India is known as a country that protects intellectual property rights.

Standards, Accreditation and Certification

7.1.239 Enterprises in developing countries are increasingly excluded from the new production and

Standards Setting

The Codex Alimentarius, which is a collection of international food standards adopted by the Codex Alimentarius Commission, includes standards for all the principal foods: processed, semi-processed or raw. To date, the Codex Alimentarius includes 4,821 standards. The main purpose of the standards is to protect the health of consumers and to ensure fair practices in food trade. Standards are specified in the areas of Food Standards for Commodities, Codes of Hygienic or Technological Practice, Pesticides, Limits for Pesticide Residues, Guidelines for Contaminants, Food Additives and Veterinary Drugs.

The pros and cons of our adopting these standards need to be analysed and debated. India seems to be losing out due to these non-tariff barriers although it possesses immense comparative advantage in food processing. This is also true of the drugs and pharmaceuticals sector and automobile industry. Rigorously researched preparation in this field can also help us in WTO regime.

trade patterns. This is linked to many structural impediments and supply-side obstacles.

7.1.240 Even where productive capacity is established, there are problems with accessing external markets, as products have to comply with myriad technical standards, health and safety requirements set by the importing markets. The Technical Barriers to Trade (TBT) Agreement seeks to ensure that technical regulations and standards do not create unnecessary barriers to trade, but this requires countries to fully participate in the standard-setting processes, while having a full-fledged infrastructure and systems for certification, accreditation, metrology, and technical support and information services for industry.

7.1.241 Agreements reached by a member-country with another country or countries on issues related to technical regulations, standards or conformity assessment procedures also have considerable effect on trade. Recently, Japan has entered into

such agreements with the European Union and the United States in a number of products. These agreements are permitted under the WTO and facilitate considerable reduction in technical barriers to trade.

7.1.242 In order to be consumer-driven, Indian Industry needs to be alert to emerging tastes and preferences in the target markets. Concern for quality, health and safety (apart from changing fashion) is important. The application of eco-labelling and other environment quality requirements in textiles and clothing could affect the textile industry in many developing countries. For example, following the ban on azo dyes in Germany in 1996, textile manufacturers in Thailand switched to substitutes which involved additional costs estimated at 5 to 20 per cent. Textile manufacturers in some other countries in the Asia-Pacific region, like India, encountered difficulties in obtaining substitutes. Small and medium enterprises (SMEs) were slower to adjust to eco-labelling demands and found the costs of adjustment difficult to absorb. Several of these enterprises preferred to divert sales to the domestic market or other overseas markets which have no eco-labelling requirements.

7.1.243 In order to pre-empt such situations, a special area of focus needs to be quality control. Infrastructure in the nature of certification, accredited by acceptable professional agencies needs to be put in place. This may require institutional tie-ups and transfer of knowledge, skills and techniques. It is only on the basis of our ability to align our standards of quality, health and safety with emerging international requirements that we can expect to be integrated with the world economy. The issue of harmonisation of standards deserves much greater attention on a multi-disciplinary platform comprising economists, health experts, toxicologists and technologists. The tendency is to keep it in the domain of technologists.

Disinvestment

7.1.244 In the Tenth Plan, the Government would phase itself out as a producer of non-strategic goods and services. The closure of non-viable PSUs and expeditious disinvestment of others will release

unproductive assets and direct them into more efficient sectors with higher priority where they are likely to leverage economic growth.

7.1.245 In view of the severe constraint of Plan resources, voluntary separation schemes (VSS) and voluntary retirement schemes (VRS) are planned to be financed through commercial borrowing by the PSU in the hope that they will be able to service the loans when their finances improve. PSUs in the tourism sector have set aside the proceeds of disinvestment for VSS/VRS corresponding to the requirement of the PSU being disinvested. In the textiles sector, innovative ways have been found to deal with the vexed issue of closure of the National Textiles Corporation (NTC) mills located in the heart of Mumbai. An acceptable formula has been arrived at for apportionment of the immense wealth lying locked up in sick textile mills in consultation with the Maharashtra government and the local body.

Mechanism being contemplated in Companies Act, 1956 as alternative to the abolition of Sick Industrial Companies Act (SICA), 1986 and the Board for Industrial and Financial Restructuring (BIFR)

mechanism would considerably smoothen the process of disinvestment. Other measures are also being contemplated to deal with the issue of taking the public sector out of the jurisdiction of the BIFR until a more permanent solution is evolved. There are 250 Central PSUs, excluding six insurance companies and two financial institutions. With an investment close to Rs. 2,75,000 crore, the issue of managing those PSUs where disinvestment will take considerable time becomes important. It is proposed to bring these PSUs under a new management culture. Important elements of the new culture are modified memorandum of understanding (MoUs), global benchmarking, accountability and autonomy, induction of professional inputs, automatic listing/delisting as navaratnas and preparation of a blueprint for survival on a case-to-case basis. The investment in State-level PSUs is also immense. According to the Ministry of Disinvestment, the estimated investment in 835 State-level PSUs is of the order of Rs. 200,000 crore. The Tenth Plan envisages transfer of those PSUs which are non-strategic and can be revived to a more efficient management paradigm.

Table 7.1.14
Disinvestment Transactions Completed Up To February 2002

Year	No. of companies in which equity sold	Target receipt for the year (Rs. crore)	Actual receipts (Rs. crore)
1991-92	47	2,500	3,038
1992-93	35	2,500	1,913
1993-94	–	3,500	Nil
1994-95	13	4,000	4,843
1995-96	5	7,000	362
1996-97	1	5,000	380
1997-98	1	4,800	902
1998-99	5	5,000	5,371
1999-00	2	10,000	1,829
2000-01	4	10,000	1,870.53
2001-02	10	12,000	5,632#

Expected to be realised

Table 7.1.15
State Level Public Enterprises (SLPEs)

State	Approx. No. of SLPEs	Estimated total investment in SLPEs	Net accumulated loss (Rs. crore)	Approx. no. of loss-making SLPEs	Approximate no. of non-working SLPEs
All India of which	835	1,67,718	20,691	337	166
Uttar Pradesh	45	24,753	3,110	N/A	N/A
Gujarat	54	23,438	965	N/A	N/A
Karnataka	76	19,295	811	37	13
Maharashtra	65	19,186	N/A	43	17
West Bengal	82	18,241	5,068	59	6
Punjab	53	12,425	847	25	23
Kerala	109	9,805	1,280	52	13
Orissa	68	9,796	1,180	18	34
Madhya Pradesh	26	7,923	N/A	8	15
Tamil Nadu	59	6,192	N/A	N/A	12
Goa	12	4,869	730	N/A	N/A
Assam	42	3,649	2,792	28	10
Himachal Pradesh	21	3,143	369	12	2

N/A : Not Available

Source : State Governments, Institute of Public Enterprises, Hyderabad and other sources

Infrastructure

7.1.246 An efficient physical infrastructure is a pre-requisite for industrial development. The Tenth Plan proposes new initiatives to effect a substantial improvement in this area. Maharashtra and Andhra Pradesh have developed innovative models of raising resources

through public-private partnerships (See Boxes). A special feature of these initiatives is the formation of special purpose vehicles (SPVs) with a major role for industry so as to ensure that the infrastructure development is user-driven. This encouragement would also ensure the sustainability of assets created, something that was lacking in the previous Plans.

Maharashtra SEZ Policy

- A single empowered officer under supervision and control of designated Development Commissioner for all no objection certificates (NOCs) for the State Pollution Control Board (SPCB).
- The DC also has the powers of Labour Commissioner
- Exemption to SEZ developers from all State taxes and duties and stamp duty.
- All SEZ units declared as public utility service under the Industrial Disputes Act
- SEZ shall ensure the provision of adequate water and power supply
- SEZ to function as self-governing autonomous municipal body.

Andhra Pradesh Infrastructure Development Enabling Act, 2001

- Enable the performance of quasi-judicial functions
- Clearances provided within prescribed time limits and non-statutory State level clearances given automatically.
- Provides incentive to private sector participation in designing, financing, construction, O&M of bankable infrastructure projects in the State.
- Comprehensive legislation for reducing administrative and procedural delays.
- Detailed project delivery process and procedures for reconciliation of disputes.
- Acquire land required for the project.

Foreign Direct Investment

7.1.247 In view of its non-debt creating and non-volatile nature with returns dependent on the performance of the projects financed with it, FDI is preferred over other forms of external finance. FDI also facilitates international trade and transfer of knowledge, skills and technology. This catalytic role in itself can be very valuable in the Indian context. FDI has constituted between 1 per cent and 4 per cent of gross fixed capital formation during the 1993-97 period. Capital formation has been, by and large, restricted to telecom and financial services. Compared to other countries, particularly China, India's performance in attracting FDI has been dismal. Steering Group headed by Mr. N.K. Singh, Member, Planning Commission, has studied this matter and given a comprehensive set of recommendations. It is expected that the flow of FDI

will improve significantly as soon as these recommendations are implemented.

Sectoral share of FDI (%) during August 1991 to December 2001	
Telecommunication	20.16
Fuels (power and oil refinery)	28.07
of which power	13.80
Computer Software	6.37
Service Sector	6.14
of which financial services	4.18
Metallurgical Industries	5.61
of which ferrous	2.7
Food Processing Industries	3.33
100 % =Rs. 2,73,577 crore	

Source : SIA

Table 7.1.16
Foreign Investment-Industry-wise Inflows
(As a percent of total)

Sector	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
Total Inflows (in \$ million)	280	403	872	1,419	2,058	2,956	2,000	1,581	1,910
Chemical & Allied Products	17	18	16	9	15	9	19	8	7
Engineering	25	8	15	18	35	20	21	21	14
Financial Services	1	10	11	19	11	5	9	1	2
Electronics and Electrical	12	14	6	9	7	22	11	11	11
Computers	3	2	1	4	3	5	5	6	16

Source : RBI

Table 7.1.17
FDI as % share of total of Developing Countries

	1989-94 (annual average)	1995	1996	1997	1998	1999	2000	2001
Developing Countries (in billion \$)	59.6	113.3	152.5	187.4	188.4	222	240.2	225.0
China	23.5	31.6	26.4	23.6	23.2	18.2	17	20.8
Brazil	2.5	4.9	6.9	10.0	15.1	14.1	13.9	8.9
South Korea	1.5	1.6	1.5	1.5	2.9	4.8	4.2	-
Malaysia	6.2	5.1	4.8	3.5	1.4	1.6	2.3	-
India	0.7	1.9	1.7	1.9	1.4	1.0	1.0	1.7

7.1.248 The objective of 8 per cent GDP growth rate with the given incremental capital output ratio (ICOR) and the projected level of domestic savings seems to suggest that there is likelihood of a savings to current account deficit of the order of 2.2 per cent. This gap can be filled in by FDI. With the new initiatives in the areas of infrastructure investment and SEZs, it should be possible to raise the level of FDI inflow from the present level of about \$ 4 billion to \$ 8 billion a year during the Tenth Plan.

Indicative Sectoral Annual FDI Targets	
Sector	FDI target (\$ billion)
1 Telecom	1.2
2 Power	1.0
3 Financial Services	0.8
4 LNG and Oil Exploration	0.6
5 Software and IT enabled services	0.5
6 Food and Beverages	0.4
7 Transportation	0.4
8 Textiles	0.3
9 Ports	0.3
10 Chemicals and Petrochemicals	0.2
11 Hotels and Tourism	0.2
12 Others	0.6
Total	6.5

7.1.249 As anti-dumping appears to be becoming a primary instrument of trade restriction, many SMEs in developing countries are unable to defend their interests. This is because of the complexities of the system and the cost of compliance in investigation proceedings. For example, for exporters to Canada and the United States, it is not unusual to incur costs well in excess of \$ 500,000. As a result, small exporting firms in developing countries are hardly able to take advantage of the procedural and substantive rights theoretically available to them.

New Programme Initiatives

7.1.250 The following new initiatives are being taken up in the Tenth Plan:

- Apparel Parks for Exports
- Textile centres infrastructure development scheme (TCIDS)
- Technology Upgradation Fund Scheme (TUFS) in Textile sector
- Assistance to States for development of export infrastructure and allied activities
- Market Access Initiative
- Research and development in the automotive industry
- Industrial Cluster Development Scheme
- Pharmaceutical Research and Development - Support Fund
- Agri Export Zones
- Leather Industry Development Programme

The details of these initiatives are given in Annexure 7.1.2.

VILLAGE, SMALL AND FOOD PROCESSING INDUSTRIES

7.1.251 This sector includes sub-sectors like small-scale industries (SSI), handlooms, handicrafts, powerlooms, sericulture, khadi, wool, coir industry etc. Over the years, this sector has emerged as a dynamic and vibrant sector of the economy.

7.1.252 The VSI sector not only provides employment to large number of people both in the urban and rural areas, but also contributes significantly towards exports. Since it has the maximum local inputs in exports, it has a higher value realisation from exports.

7.1.253 During the Ninth Plan, various initiatives were taken to strengthen the SSI units through technology upgradation, modernisation, enabling and encouraging them to enhance quality, introduction of modern management practices, providing marketing and other key inputs, increase availability of credit/loans from financial institutions and banks against materials supplied, etc. In addition, SSI units were made aware about the implications of the WTO regime, removal of QRs,

reducing the list of items reserved for the sector, etc.

7.1.254 Two new schemes - the Credit Guarantee Fund and the Credit Linked Capital Subsidy scheme – were introduced. Adequate availability of modern infrastructure facilities was sought to be ensured by setting up Integrated Infrastructure Development Centres (IIDCs).

7.1.255 In the handlooms sector, greater emphasis was laid on increasing market-oriented production and value addition through design inputs and availability of hank yarn at mill-gate prices. Powerlooms were included under the TUF and setting up of Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) centres, etc. In the handicrafts sector, promotional schemes focussed on training and skill upgradation, design and technology improvement, supply of quality tools, strengthening of organisational support by setting up institutions like Institute of Carpet Technology, Bamboo Craft Development Institute, etc. was taken up. New schemes like the Deen Dayal Hath Kargha Protsahan Yojana (DDHPY) and Ambedkar Hastashilpa Yojana were introduced for both handlooms and handicrafts.

7.1.256 In the sericulture sub-sector, promotional schemes laid stress upon improving silkworm rearing practices, enhanced use of insecticides, introduction of new hybrid mulberry and multivoltine silkworm races, improvements in silk reeling quality and capacities by setting up modern reeling machines and replacement of traditional matka and charkha reeling. The focus in the unorganised wool sector was on improving productivity of wool per sheep, better husbandry practices, improvement of wool quality by setting up mini scouring plants, quality and testing facilities, improvements in weaving and designs, diversification to new products by mixing new fibres, angora and Pashmina wool, etc.

7.1.257 Food processing industries were encouraged by reducing excise duty on processed food products and making new packaging materials available, increasing the shelf life of processed food products through R&D, setting up of quality testing and certification laboratories, providing

infrastructure facilities by setting up food parks, providing financial assistance for modernisation/expansion/technology upgradation, etc. A new beginning has been made to adopt Codex Alimentarius Standards, and Hazard Analysis Critical Control Point (HACCP) quality assurance systems, total quality management, ISO-9000 series standards, etc.

7.1.258 The policy measures taken up during the Ninth Plan period would need to be further strengthened as the VSI and food processing industry sectors are more vulnerable to the pressures of competition arising from economic liberalisation, reduction in QRs and WTO-related measures. New policy measure would be required in the Tenth Plan to provide a level playing field at par with the organised sector.

SMALL SCALE INDUSTRIES

7.1.259 Worldwide, SMEs are being recognised for their contribution to employment, innovation and economic dynamism. In the Indian context, SSI units are helping generate new jobs, supplying a wide range of products, contributing to exports, helping in more equitable distribution of national income and emerging as outsourcing destinations. The Government has been encouraging and supporting SSIs through policies for infrastructural support, technology upgradation, preferential access to credit, reservation of products for exclusive manufacture in the SSI sector, preferential purchase policy etc.

7.1.260 By the end of March 2002, there were over 3.4 million small scale industrial units in the country accounting for more than 40 per cent of the gross value of output in the manufacturing sector and about 35 per cent of the total exports of the country. They provided employment to over 19.2 million persons, which is second only to agriculture. During the Ninth Plan period, SSIs created over 3.2 million jobs. Presently, there is no in-built component keeping record of functional registered SSI units. SSI units often shut down due to unforeseen circumstances. The figures provided by District Industries Centres (DICs) may not include closed SSI units. Hence there is an urgent need to introduce a system of de-listing closed registered SSI units.

7.1.261 A Study Group on the Development of Small Enterprises was set up under the chairmanship of Dr. S.P. Gupta, Member, Planning Commission, to look into the problems of the SSI sector. The Study Group submitted an Interim Report in July 2000. After inter-ministerial consultations on the Interim Report, the Prime Minister announced a number of new policy initiatives on 30 August 2000. These announcements were followed by other announcements by the Ministry of Small-Scale Industry and Agro and Rural Industries (SSI&ARI). The final report of the Study Group was submitted in March 2001 and the recommendations are being considered.

Package Announced By The Prime Minister For The SSI Sector

- Enhancement of excise duty exemption limit for SSI units from Rs. 50 lakh to Rs.100 lakh.
- Increase in composite loan limit to Rs.25 lakh.
- Coverage of loans up to Rs.25 lakh under the Credit Guarantee Fund scheme.
- Increase in project cost limit under the National Equity Fund scheme to Rs. 50 lakh.
- Credit linked capital subsidy at 12 per cent of the cost of technological upgradation of SSI units for modernisation of SSI units.
- The service and business related small scale units with a maximum investment limit of Rs.10 lakh would also be covered under priority lending
- Enhancement of investment limit to Rs.500 lakh for hi-tech and export oriented sectors.
- Technology Bank would be set up for SSI sector by strengthening the existing Technology Bureau for Small Enterprises (TBSE) of SIDBI.
- One time capital grant of 50 per cent to SSI associations for setting up international-level testing laboratories for SSI units.
- Preference to be given to tiny units while organising buyer-seller meets, vendor development programmes and exhibitions.
- Conduct of Third Census on SSI.
- Integrated Infrastructure Development Centres (IIDC) scheme extended to all areas.

7.1.262 Indicative physical targets and achievements in respect of production, employment and exports are given in Annexure 7.1.3 and Annexure 7.1.4. Plan outlays and expenditure for the Ninth Plan period, 2001-02 (Anticipated/Actual), Tenth Plan approved outlays and 2002-03 (BE) are given in Annexure 7.1.5.

7.1.263 Separate Ministries for Small Scale Industries and Agro and Rural Industries were created by bifurcating the Ministry of SSI&ARI. This would help in giving boost to rural industrialisation and development of agro-based tiny units. The scheme of Prime Minister's Rozgar Yojana (PMRY) would now be looked after by the Ministry of Agro and Rural Industries.

RESERVATION

7.1.264 Reservation of items for exclusive production in the SSI sector was introduced in the 1970s to ensure bulk production of consumer products and enhanced employment generation. Presently, there are 749 items reserved for the SSI sector. It has been found that though the SSI sector is manufacturing around 8,000 items, the reserved list items constitute around 15 per cent of the total SSI production. Taking into account the WTO regime and economic liberalisation, the Study Group recommended continuation of reservation and de-reservation only in a phased manner so that the SSI units engaged in the production of reserved items are not affected. It would be prudent to consult the stakeholders while de-reserving items.

SMALL INDUSTRIES DEVELOPMENT ORGANISATION

7.1.265 The Small Industries Development Organisation (SIDO), under the Ministry of Small Scale Industries, is the nodal agency for assisting SSIs through technology, marketing, infrastructure and training support. It works with the Reserve Bank of India (RBI), Small Industries Development Bank of India (SIDBI) and commercial banks in making credit available to SSI units.

7.1.266 SIDO has set up a number of Tool Rooms to provide assistance for technological upgradation, technical consultancy and common service facilities

for design and production of quality toolings. Presently 10 Tool Rooms are functioning at Kolkata, Ludhiana, Jalandhar, Nagaur, Hyderabad, Bhubaneshwar, Jamshedpur, Ahmedabad, Indore and Aurangabad. A new Tool Room and Training Centre has been set up at Guwahati. Mini Tool Rooms would be set up in various States to help in creating localised training and production facilities.

7.1.267 The Technology Upgradation and Management Programme (UPTECH) was launched in 1998 to take care of the modernisation and technological needs of the SSI clusters. Six clusters have been identified and diagnostic studies for these have been taken up. A major cluster development programme would be taken up during the Tenth Plan period through the UPTECH Scheme. There are about 350 important SSI clusters in the country identified by the Office of the Development Commissioner (SSI) and a few new clusters would be taken up for development each year.

INTEGRATED INFRASTRUCTURE DEVELOPMENT CENTRES

7.1.268 The IIDC Scheme aims at augmenting the infrastructural facilities in rural and backward areas to promote industrial development. This scheme has been revamped in the Ninth Plan by removing certain restrictive provisions and by providing liberal finance to the northeastern region, including Sikkim, and Jammu and Kashmir. So far, 58 IIDCs have been approved and Central grant of Rs. 38.83 crore has been released up to February 2001. An additional 50 centres are proposed to be taken up during the Tenth Plan period.

PRIME MINISTER'S ROZGAR YOJANA (PMRY)

7.1.269 The PMRY, now under the Ministry of Agro and Rural Industries, makes institutional finance available to educated unemployed youths for setting up of business/industrial ventures. A number of modifications have been made during the Ninth Plan period to make it more attractive, e.g. increase in the age limit to 45 years for ex-servicemen, women and disabled; reduction of minimum educational qualification; enhancing the income limits and project size; enhancing credit/loan portion for beneficiaries in the northeast etc.

7.1.270 Since the inception of PMRY in 1993-94, against the target of 1.8 million beneficiaries (1993-94 to December 2001), 1.868 million beneficiaries were sanctioned loans and Rs. 8,402 crore was disbursed to 1.433 million beneficiaries. For the Tenth Plan period, the target of number of beneficiaries to be covered annually is proposed to be increased from 0.22 million per year to 0.26 million per year, so as to cover the backlog. Average lending by banks to PMRY beneficiaries was Rs. 53,632 per project/venture. It has been observed that the number of beneficiaries to whom loans were disbursed was around 34 per cent of the number of applicants. This is a huge gap and requires corrective measures. Beneficiaries need to prepare economically viable project reports. The national average rate of repayment of loans of around 35-40 per cent is also a cause of worry. This needs to be improved.

OTHER SCHEMES

7.1.271 The Ministry of SSI is also implementing other schemes like international cooperation, surveys, studies and policy research, Trade Related Entrepreneurship Assistance and Development for Women (TREAD); National Entrepreneurship Development Board (NEDB); and Micro Finance Programme. The Ministry provides financial assistance to SSI entrepreneurs for participation in overseas fairs to enable them to source technology and access export markets. The Ministry has entrusted a number of studies and surveys to various research, academic and training institutions on topics relevant to policy making. A package of assistance of loans from financial institutions such as SIDBI and Government grants is provided under TREAD to NGOs and groups of women to take up income generating industry/service related activity. The NEDB has been set up to consolidate and coordinate the syllabus for training and other activities of various institutes like the National Institute of Entrepreneurship and Small Business Development (NIESBUD), National Institute of Small Industry Extension Training (NISJET), Entrepreneurship Development Institute (EDI) etc. Under the micro finance programme, NGOs are provided financial assistance to enhance their capabilities to provide help to self-help groups to take up income generating activities.

7.1.272 Indicative physical targets and achievements in respect of production, employment and exports are given in Annexure III. Plan outlays and expenditure for the Ninth Plan period, 2001-02 (Anticipated/Actual), Tenth Plan approved outlays and 2002-03 (BE) are given in Annexure 7.1.5. The sector is targeted to grow at 12 per cent per annum during the Tenth Plan. To make this possible, it is necessary that the concerns of the sector receive due attention of policy makers.

7.1.273 Under the zero-based budgeting exercise carried out by the Planning Commission, 89 schemes being implemented by the Ministry of SSI&ARI in the Ninth Plan were brought down to 22 and 13 respectively for the Ministry of SSI and Ministry of A&RI. A large number of old schemes have been eliminated and remaining schemes have now become more focused, avoiding thin spread of outlays/expenditure. SIDO was implementing 64 schemes in the Ninth Plan, which were reduced to 13 by weeding out, merging and regrouping.

NATIONAL SMALL INDUSTRIES CORPORATION LIMITED

7.1.274 The National Small Industries Corporation (NSIC) Ltd. was established in 1955 to promote, aid and foster the growth of small industries. The Corporation provides machinery on hire purchase, equipment on lease, raw material assistance, marketing inputs for domestic and exports, single point registration, technical and managerial assistance, etc. The NSIC is also helping SSI units in marketing, enterprise building, training to promote viable small industries all over the country, particularly in backward areas and in selected lines of production identified as priority areas for exports.

7.1.275 The NSIC is operating schemes like (i) Raw Materials Assistance Programme (ii) Integrated Marketing Support Programme (iii) Marketing to Government and Tender Marketing (iv) export and exhibitions (v) setting up of software technology parks and (vi) consortia formation.

7.1.276 Under the Raw Materials Assistance Programme, the Corporation purchases raw materials, components, sub-assemblies for and on behalf of SSI units and allows them to take delivery

in small lots, as per their requirement and paying capacity so as to clear the entire stock within 100 days from the date of storage. The Integrated Marketing Support Programme has been envisaged to meet financing requirements of SSI units arising due to deferred payment being made for sale of goods.

7.1.277 The NSIC has established five technical service centres at Okhla in Delhi, Rajkot, Howrah, Chennai and Hyderabad to provide technical and consultancy services to SSI units. During the Ninth Plan, against the target of Rs. 6,015 crore the Corporation's turnover was Rs. 4,074.90 crore. It registered profits up to 1999-2000. In 2000-01, the Corporation made an additional ad-hoc provision of Rs. 41.11 crore over and above the normal provision for bad and doubtful debts, which resulted in a loss for the year. The main reasons for this loss were additional provision to bring the Corporation's finances in line with the intrinsic values of its investment, accumulated defaults of SSI units towards hire purchase financing, leasing of machinery, etc.

7.1.278 The Corporation is in the process of business restructuring and has adopted new strategies like sectoral approach, identifying the growing sectors/industries, promotions of technology led interventions, networking with national and international industry associations and multilateral agencies to rejuvenate the Corporation with a focus on improving profitability. It is making all efforts to salvage the maximum it can from defaulting SSI units through legal and other recourse. Stress would need to be laid upon increasing the internal and extra budgetary resources (IEBR) of the Corporation so as to enhance the Plan outlays and extend the Corporation's coverage to more SSI units through the services/schemes under implementation in the Tenth Plan period.

7.1.279 The Corporation is organising Tech Marts in collaboration with the Asia and Pacific Centre for Transfer of Technology. The NSIC is also helping SSI units in technology transfer from abroad through the Technology Transfer Centre. An Internet portal (Technology Showcase) has been set up for sourcing technologies from international partner institutions.

COIR INDUSTRY

7.1.280 Coir industry ranks foremost among the traditional cottage industries. It is a labour intensive and export oriented industry. Coir Board is vested with the responsibilities of promoting growth and development of coir industry, promotion of exports and expansion of the domestic market through building brand equity. The emphasis will be on greater participation of private sector and State Governments. The Board implements a number of developmental programmes aimed at higher utilisation of coconut husk for industrial use particularly in the non traditional areas providing scope for augmenting rural employment. The strategy is to focus on research and development for restructuring the production base with adoption of appropriate technology, reduction of drudgery, transfer of technology through skill development training, cluster approach in development, environment protection and welfare of all those who are engaged in this industry.

7.1.281 As part of modernisation of spinning sector, setting up of Integrated Coir Development Projects (ICDPs) has been taken up. In Kerala, 125 spinning units and 46 defibring units are being set up. A sum of Rs. 5.35 crore has been released to the State Governments towards 20% central share. So far 81 spinning units and 34 defibring units have been commissioned. The ICDP for Tamil Nadu has been sanctioned at an estimated cost of Rs. 14.91 crore with Central share of Rs. 2.91 crore. A total amount of Rs. 0.84 crore has been released so far. A similar project at an estimated cost of Rs. 4.65 crore has been sanctioned for Karnataka. The scheme envisages setting up of 8 new primary cooperative societies, modernisation and expansion of 27 existing coir cooperatives and setting up of Common Facility Centres for yarn dyeing. An amount of Rs. 0.53 crore has been released to Govt. of Karnataka towards central share. The ICDP for west Bengal has been sanctioned at an estimated cost Rs. 0.13 crore for setting up of motorised spinning units with 50 motorised ratts.

7.1.282 Based on a study by the National Council for Applied Economic Research (NCAER), the minimum export price on coir and coir products has been phased out. This step has made the exports of coir products cost competitive and easier. Coir exports have shown consistent growth after removal of minimum export prices.

7.1.283 The Coir Board is implementing a scheme of Technology Transfer, Modernisation and Capacity Building in Indian Coir Sector with funding support

from UNDP to the tune of \$ 8,46,000. Six coir clusters in Tamil Nadu, Andhra Pradesh, Karnataka and Kerala have been identified. The rebate scheme has been abolished and the Market Development Assistance (MDA) scheme has been introduced to assist the coir cooperative societies.

7.1.284 Hindustan Coir is a model powerloom factory established by the Coir Board in 1969 with a view to demonstrate the production of coir matting on powerlooms to motivate other entrepreneurs to start such units. The factory produced 0.279 million sq. meters of powerlooms matting during 2000-01, valued at Rs. 2.47 crore.. The factory has obtained ISO 9002 certification by BVQ1 in 1997 and is the first powerloom factory in the coir industry to get this certification.

7.1.285 Important achievements in R&D are: development of Coirret (a bacterial consortia) to reduce the period of retting and processing, conversion of coir pith into organic manure by using Pith Plus (a fungal spawn), development of motorised spinning ratt, development of semi-automatic loom to increase productivity and reduction of drudgery in weaving, setting up of ASTM laboratory for testing coir geo-textiles, etc.

Tenth Plan Initiatives

- 12 per cent growth in coir and coir products and exports during Tenth Plan
- Rapid growth of coir industry in non-traditional States and higher utilisation of raw materials
- To concentrate upon R&D and market development activities

7.1.286 Under the zero-base-budgeting exercise the number of schemes under the coir sub-sector have been reduced from 10 in the Ninth Plan to seven in the Tenth Plan. This exercise has made the schemes more concerted and avoided thin spread of Plan outlays.

TEXTILE (VSI) SECTOR

Handlooms

7.1.287 Handlooms are a part of India's rich heritage and exemplify the country's diversity and the artistry of the weavers. It plays a very important role in the economy. This sector is estimated to

provide direct and indirect employment to about 2.52 million weaver households and about 12.4 million weavers and others engaged in weaving and allied activities in 2001-02. Due to effective State intervention through financial assistance and implementation of various developmental and welfare schemes, this sector has been able to withstand competition from the powerloom and mill sectors. The sector contributes nearly 19 per cent of the total cloth produced in the country and also contributes substantially to the country's export earnings. Performance of the sub-sector is indicated in Annexure 7.1.3.

Tenth Plan Initiatives

- Ensure better access to inputs like yarn, dyes and chemicals, design and credit
- Creation of a brand identity and positioning in international market

7.1.288 The handlooms sector is facing a number of problems like obsolete technology and traditional production techniques, high price of hank yarn, inadequate availability of inputs like standardised dyes and chemicals in small packs, lack of new designs, inadequate training for upgradation of skills etc. and inadequate marketing intelligence and feedback. Besides, it suffers from disadvantages like unorganised structure, weak financial base of the weavers and bureaucratisation/politicisation of cooperatives.

7.1.289 The schemes/programmes for handlooms are weaver oriented. Concerted efforts are being made through the schemes to enhance the productivity, income and socio-economic status of weavers by upgrading their skills and providing essential inputs. Major schemes under implementation are: Deen Dayal Hathkargha Protsahan Yojana, National Centres for Textile Design, Enforcement of Handloom Reservation Act, Mill Gate Price Scheme, Handloom Export Promotion, Workshed-cum-Housing Scheme, welfare schemes, marketing support and training and development.

7.1.290 The handloom sector is largely dependent on the organised mill sector for supply

of its principal raw material, namely, hank yarn. The Central Government has been making efforts to ensure regular supply of yarn to the handloom sector at reasonable prices through the Hank Yarn Obligation Scheme and supply of yarn at Mill Gate Price through the National Handloom Development Corporation (NHDC). The NHDC had supplied 16.79 million kg of yarn during 2000-01 to the handloom agencies. During 2001-02, the NHDC supplied 17.581 million kg of hank yarn up to February 2002.

7.1.291 As part of marketing support, financial support is provided to handloom organisations to participate in exhibitions/melas at Surajkund, Shilpgram-Udaipur, Craft Bazar - Madepura, Hyderabad, Taj Mahotsav and Dilli Haat. Financial assistance is also provided to State Handloom Corporations, Apex Federations, etc. to organise district-level fairs, festivals and setting up of Urban Haats in different parts of the country. So far 11 Urban Haats have been sanctioned.

7.1.292 A group insurance scheme, health package scheme, thrift fund scheme and workshed-cum-housing scheme etc. are being implemented as welfare measures and to provide better working conditions to handloom weavers.

7.1.293 The DDHPY was initiated in 2000 as a comprehensive scheme for the development of the handlooms sector. Under the scheme, financial assistance is provided to handloom organisations for components like basic inputs, infrastructure support, design input, publicity, marketing incentive, transport subsidy and strengthening of handloom organisations. Grant is provided in the ratio of 50:50 between Central and State Governments. In the case of Sikkim, Jammu and Kashmir and the northeastern States, the sharing ratio is 90:10. For implementing agencies where all the beneficiary members are scheduled castes/scheduled tribes/women/minorities, the grant portion would be shared in the ratio of 75:25. The assistance for marketing would be in the ratio of 50:50 between the Central and State Governments in respect of all the states. During 2000-01, Rs. 16.96 crore were released to 12 States and in 2001-02 up to December 2001 Rs. 26.04 crore were released.

7.1.294 Under the zero-base-budgeting exercise, the number of schemes under handlooms sub-sector has been reduced from 19 in the Ninth Plan to eight in the Tenth Plan. This exercise has made the schemes more focussed.

POWERLOOMS

7.1.295 The decentralised powerloom sector contributes in a major way in meeting the clothing needs of the country. The powerloom industry produces a wide variety of cloth, both grey as well as processed, with intricate designs. It contributes around 68 per cent of total cloth production of the country, excluding the cloth produced by non-SSI, weaving and hosiery/knitting units. This sector also contributes significantly to the export earnings by exporting made ups, ready made garments manufactured from the powerloom cloth.

7.1.296 The estimated number of powerlooms in the decentralised sector has increased from 0.639 million in 1986 to 1.662 million as on 31 December 2001. There are 13 Powerloom Service Centres (PSCs) functioning under the Textile Commissioner and 29 PSCs under the different Textile Research Associations (TRAs). Two PSCs have been set up by the Governments of Andhra Pradesh and Madhya Pradesh at Hyderabad and Jabalpur respectively. These PSCs have been established to provide inputs like technical consultancy, training, designs, technology information, etc, to the powerlooms. Existing laboratories set up at these PSCs to provide testing facilities to powerlooms are being upgraded and 14 such laboratories have been upgraded. This programme would be continued during the Tenth Plan period also.

7.1.297 There is a need to modernise and strengthen the existing PSCs by installing shuttleless looms, Cop-changing/shuttle changing looms, Drop box looms, Dobby, Jacquard terry fabric weaving looms, prin winding machines, sectional warping machines, yarn and fabric testing equipment, chemical testing equipment etc. Twenty-one PSCs have been modernised during the Ninth Plan period and this programme would be continued during the Tenth Plan to cover the remaining PSCs. Seventeen CAD centres have been set up. Uplinking and downlinking of two CAD centres at Panipat in

Haryana by the North India Textile Research Association (NITRA) and at Solapur in Maharashtra by the Bombay Textile Research Association (BTRA) along with the National Design Centre, New Delhi, has been completed.

7.1.298 There is an urgent need to modernise the powerloom industry so as to enable it to face the competition which would come with the phasing out of the Multi Fibre Agreement (MFA) by December 2004. Indian powerlooms would have to face tough competition from neighbouring countries like China, Bangladesh, Sri Lanka and also South Korea etc. The TUF scheme is being extended to cover powerlooms. However, powerloom units are not coming forward to take advantage of this scheme in a large way. Also, the financial institutions would have to provide adequate working capital after the unit has completed its modernisation. Normally, financial institutions are reluctant to provide adequate working capital and hence the scheme is not picking up. There is need for setting up modern cloth processing facilities in powerlooms and to provide new varieties of cloth like anti-crease, anti-wrinkle cloth etc. The Credit Linked Capital Subsidy Scheme for the modernisation of the SSI sector would now also be available to the powerloom sector.

Tenth Plan Initiatives

- Technology upgradation of powerlooms
- Modernisation of powerloom service centres and testing facilities
- Welfare of powerloom workers

7.1.299 Under the zero-based budgeting exercise, the number of schemes under the powerlooms sub-sector have been reduced from eight in the Ninth Plan to three in the Tenth Plan.

WOOL AND WOOLLEN DEVELOPMENT (UNORGANISED SECTOR)

7.1.300 The woollen industry in India is mainly located in Himachal Pradesh, Punjab, Haryana, Rajasthan, Uttar Pradesh, Maharashtra and Gujarat. Forty per cent of the woollen units are located in Punjab, 27 per cent in Haryana, 10 per cent in

Rajasthan while the remaining 23 per cent are situated in other states. The organised sector, unorganised sector and the rural sector operate in a complementary manner towards meeting the requirements of different sections of the domestic market as well as exports. The organised sector comprises composite mills, combing units, worsted and non-worsted spinning units and machine made carpet manufacturing units are covered while the unorganised sector contains hosiery and knitting, powerlooms, hand knotted carpet units and independent dyeing/processing houses.

7.1.301 The Central Wool Development Board (CWDB), Jodhpur, was set up in 1989 to harmonise various diversified interests of different sectors of the wool industry for the integrated development of the industry. The CWDB promotes growth and development of wool and woollen products through various activities like market intelligence, marketing of wool and woolens, standardisation of wool and woollen products, quality control, dissemination of information, product diversification, advising government on policy matters, coordination etc.

7.1.302 For the development of angora wool a Rs. 8.43 crore UNDP-aided project under UNDP-CCF1 is being implemented. Rural unemployed youths and farmers of the hill areas of Uttar Pradesh, Himachal Pradesh, Darjeeling, Sikkim, etc, are being encouraged to take up production and processing of Angora wool. The project aims at encouraging rabbit farming in remote hilly areas to increase the production of Angora wool to result in saving of foreign exchange and generation of new employment. The Board has provided funds to implementing agencies of Himachal Pradesh, Uttar Pradesh and Sikkim for setting up of germplasm centres under the UNDP programme. The Board has benefited 450 families during the Ninth Plan period.

7.1.303 Under the Integrated Sheep and Wool Development Project, the focus has been on breed improvement, health coverage, product development, marketing assistance, training to sheep breeders in sheep, sheep husbandry and productivity, etc. The Board has covered 3.875 million sheep under this programme during the Ninth Plan period.

7.1.304 The CWDB has set up wool testing centres at Bikaner, and Beawar in Rajasthan for providing testing facilities to wool growers, merchants and the industry. The Board has also set up mini wool scouring plants in Jammu and Kashmir, Gujarat, Himachal Pradesh, Maharashtra and Karnataka to provide scouring facilities to small and cottage industries engaged in the wool sector. The Board has set up a weaving and designing centre at Kullu, besides training centres, industrial service centres, wool testing facilities, etc. at other locations.

7.1.305 The Board is implementing a machine shearing-cum-training project to encourage the use of shearing machines and demonstrate machine shearing to enable sheep rearers to take up as an economically viable activity. The Board has set up 10 market intelligence centres in the main wool markets. Information is collected with respect to prevailing market rates of wool and yarn, latest trends and transactions of wool and woollen products on a weekly basis and disseminated to wool growers, wool merchants and wool users.

7.1.306 The Board has sponsored 174 farmers/resource persons for imparting training in sheep management/machine shearing/angora rabbit rearing. To promote wool and woolens and to provide better marketing facilities to weavers, the Board is implementing a Woollen Expo Scheme and has organised 20 Expos. The Board has also provided training to 255 weavers under the Weaving and Designing Training Programme during the Ninth Plan. The Board is also printing a magazine WOOL WAYS for informing those in the trade about technological advancements, market intelligence, etc.

Tenth Plan Initiatives

- Augmentation of availability of carpet grade wool, Angora and Pashmina and Technology Upgradation
- Integrated development and growth of wool and woollen in a Mission Mode

7.1.307 Under the zero-based budgeting exercise, the number of schemes under wool development have been reduced from 14 in the Ninth Plan to six in the Tenth Plan.

SERICULTURE

7.1.308 India is the only country producing all four varieties of silk -- mulberry, Eri, Tasar and Muga and it is the second largest producer of silk in the world after China. Sericulture is a labour-intensive, agro-based industry providing employment to about 6.25 million persons. The Central Silk Board (CSB) looks after the development and growth of sericulture, providing extension and R&D inputs to the sericulture industry. The Board covers areas like research and technology development, seed maintenance and production and development of sericulture and silk industry.

7.1.309 Research institutes established under the CSB are functioning at Mysore (Karnataka), Berhampore (West Bengal) and Pampore (Jammu and Kashmir), all dealing with mulberry sericulture. The institute at Ranchi (Jharkhand) deals with Tasar, whereas the institute at Jorhat (Assam) is looking after R&D related to Muga. Post-cocoon R&D activities are carried out by the Central Silk Technological Research Institute (CSTRI), Bangalore. The Silkworm Seed Technology Laboratory (SSTL), Bangalore (Karnataka), is engaged in seed maintenance and production. The Central Sericulture Germplasm Resource Centre (CSGRC) at Hosur (Tamil Nadu) is engaged in sericulture germplasm related R&D and the Seri Biotech Research Laboratory (SBRL), Bangalore, undertakes R&D in areas related to development of new silkworm races.

7.1.310 During the Ninth Plan period, the target of production of 20,600 mt of raw silk could not be achieved as the anticipated production was expected to be 17,980 mt by 2001-02. The main reasons for the shortfall were lower demand for multivoltine silk and switching over to imported Chinese silk, particularly for weft as well as warp purpose by handlooms and powerlooms. In view of the lower production cost of raw silk in China and the growing international demand for silk, India should take new initiatives in the Tenth Plan. These should relate to: (i) achieving international standards in all varieties of silk; (ii) improving R&D and effective transfer of technology; (iii) focus upon increasing bivoltine silk production and non-mulberry varieties of silk; and (iv) encouraging cluster development

for reeling and weaving and strengthening linkages between sericulture and textile industry. The Tenth Plan strategies for sericulture have been formulated taking into account the above aspects.

7.1.311 The CSB provides quality silkworm seeds through the National Silkworm Seed Project (NSSP). During the Tenth Plan, the requirement of silkworm seeds would be higher than the present capacity of CSB and State Government silkworm seed production centres. There is need to strengthen basic seed multiplication and training centres, P2 seed farms, grainages under CSB and State Governments. Private entrepreneurs would be encouraged to take up seed cocoon and disease free layings (DFLs) production. The seed production activity need to be made self sufficient without any subsidy.

7.1.312 The CSB had formulated 36 catalytic development schemes for implementation in the Ninth Plan to motivate States to increase productivity and quality and provide marketing support. These schemes have been reviewed under zero-base budgeting and 11 schemes have been weeded out. The remaining 25 schemes have been reorganised into 12 schemes. These schemes are aimed at increasing quality raw silk production, promotion of drip irrigation, enterprise development, creation of improved mulberry variety banks, etc.

7.1.313 Under the bivoltine sericulture development project taken up with the assistance from Japan International Cooperation Agency (JICA), a number of improved bivoltine breeds were evolved of which bivoltine hybrids (CSR (2 - 4 - 5), CSR (12 - 6), CSR (18 - 19), CSR (16 -1) and CSR (3 - 6)) were authorised for commercial use. These races yielded high quality silk of 2/3A grade during experimentation.

7.1.314 The CSB signed an MoU with the National Research Development Corporation (NRDC) for assisting in commercialisation of the evolved technologies. Presently the CSB has offered around 29 technologies to NRDC for patenting and commercialisation. These include the silkworm bed disinfectants like Reshamkeet Oushadh, Vijetha, Resham Jyothi and Uzitrap which are found to be effective in controlling various mulberry silkworm

diseases and have been put to large scale commercial exploitation.

7.1.315 The UNDP has started a sub-programme on development of non-mulberry silk (Tasar, Muga and Eri) in Andhra Pradesh, West Bengal, Assam, Bihar, Orissa, Meghalaya and Nagaland under the Fibres and Handicrafts Programme (FHAP) of CCF-1 in collaboration with the Government of India at a total cost of Rs. 11.99 crore. Of this, the Government of India's share is Rs. 3.98 crore. This programme covers increase of quality egg production and supply, training and skill upgradation, technological support in pre-cocoon and post-cocoon processes, including reeling, spinning, etc. The programme is expected to be completed by 2002-03.

7.1.316 The sericulture project of the Madhya Pradesh Government is being implemented in collaboration with the JBIC at an estimated cost of Rs. 748.80 crore. The Manipur Government is also implementing a sericulture project from July 1998, at an estimated cost of Rs. 490.61 crore with financial assistance from JBIC.

7.1.317 During the Tenth Plan period, the CSB plans to focus upon the quality of raw silk by setting up quality certification systems for silkworm seed, cocoons and yarn as well as certification of export products. There is need to promote the culture of quality in every production process. The CSB has also proposed to take up market-linked production planning in the Tenth Plan period. Promotion of multivoltine based crossbreed mulberry sericulture would be continued along with expansion of Eri and Muga silk. For Jharkhand, Chhattisgarh and Uttaranchal more stress would be laid upon oak Tasar sericulture along with normal Tasar. There is an urgent need to take up bivoltine mulberry hybrid silk production to meet warp demand and also to take up production of export-oriented silk powerloom production. Besides this, the CSB proposes to take up new schemes/projects like integrated nutrient management, integrated farming systems, development of new hybrid silkworm seeds, cluster development and assistance to States for specific projects.

7.1.318 China is the major producer of silk and accounts for 75 per cent of global production. China

also dominates exports of raw silk, silk yarn and silk fabrics with a global share of around 93 per cent, 43 per cent and 29 per cent respectively. The Indian sericulture industry is also facing a major problem of imports of cheaper silk. A lot of silk is also coming through illegal channels. This affects the prices of raw silk in India, further building pressure upon cocoon prices and narrowing the margins of farmers/sericulturists.

7.1.319 The entry of China into the WTO provides opportunities as well as challenges to the Indian silk industry. It would help India to improve its global positioning. It is generally believed that the Chinese silk is highly subsidised and its products are sold at cheaper rates as compared to Indian silk. Under the Subsidies and Countervailing Measures of the WTO agreement, China would have to regulate these subsidies.

7.1.320 During the Tenth Plan period, there is an urgent need to adopt bivoltine sericulture on a large scale and to improve the quality of raw silk. Further diversification into new products and taking up value addition in the silk industry would also be necessary.

Tenth Plan Initiatives

- Achieving international standards for silk
- Improving R&D and effective transfer of technologies to farmers/ reelers
- Enhancing production of Tasar, Muga Eri silk
- Enhancement of bivoltine silk production
- Cluster development and improvement in reeling and weaving
- Strengthening linkages between producers of silk and industry

HANDICRAFTS

7.1.321 The handicrafts sector is making substantial contribution to the country's economy in terms of employment generation and foreign exchange earning through exports. Growth in this sector over the last few years has been encouraging (Annexure 7.1.3).

7.1.322 The developmental schemes under implementation in the handicrafts sub-sector cover

various areas like training, design development, technology upgradation, market promotion, exhibitions and publicity, exports etc. Training is being provided to artisans for upgrading the skills of existing craftsmen as well as to un-skilled ones with a view to expanding employment and the production base of crafts for economic growth and reviving languishing crafts. Several studies have shown that 70 to 80 per cent of the trainees get gainful employment.

7.1.323 Out of 196 departmental Basic Training Centres and 100 Advanced Training Centres providing training for carpet weaving, 141 centres have been closed. To help the artisans in Jammu and Kashmir, training centres in the State would be continued during the Tenth Plan. For post-weaving operations like washing and finishing of carpets seven centres are providing training to artisans. Training is being provided to artisans for crafts like hand printed textiles, art metal-ware, cane and bamboo, wood-wares, etc, in various training centres set up at important clusters of these crafts.

7.1.324 Regional Design and Technical Development Centres (RDTDCs) are providing design and technical guidance in different crafts to artisans at Bangalore, Kolkata and Guwahati. Various design workshops and other activities are carried out at these centres to make these crafts a success in the contemporary market, and help in preserving traditional beauty of the crafts on the basis of strong ethnic designs. Besides these RDTDCs, Development Centre for Musical Instruments at Chennai, Cane and Bamboo Development Institute at Agartala, Institute of Carpet Technology at Bhadohi and Metal Handicrafts Centre at Moradabad are undertaking research and design, developing technology, improving tools and equipment, developing new designs, prototypes, etc.

7.1.325 The Metal Handicrafts Service Centre (MHSC) at Moradabad provides common facilities for silver plating, powder coating, lacquering, testing of metals and upgradation of skills of artisans. There are three departmental training centres, two at Chennapatna and one at Tirupati (in Andhra Pradesh) to provide training in lacquer ware craft. The Cane and Bamboo Development Institute at

Agartala is working on development of proper techniques for treatment and preservation of cane and bamboo handicrafts by using suitable chemicals, lacquer, etc, to protect them from insects, fungus, etc. Other organisations like Central/State corporations, apex societies and voluntary organisations are provided financial assistance to provide training in various crafts to (i) increase the production base of those crafts with high market demand, (ii) upgradation of skills, and (iii) to revive languishing crafts. An Apprenticeship Training Scheme is being implemented and around 2,500 trainees are provided training by master craftsmen.

7.1.326 The Scheme of Market Meets has been modified to have a better and meaningful interaction with artisans, NGOs, State Governments, exporters and traders. Marketing inputs are provided through local level marketing workshops, national level melas, product promotion programmes, craft bazaars, local fairs and festivals, mini-handicraft expos and national expos. Ample opportunities are provided to artisans to market their products directly to customers and get remunerative prices.

7.1.327 Under the scheme of Setting up Urban Haats, 18 Urban Haats were to be set up during the Ninth Plan period. So far, eight haats at Agra, Ahmedabad, Bhubaneshwar, Ranchi, Karnal, Jammu, Tirupati and Kolkata have been approved. This programme would be continued during the Tenth Plan period and haats would be set up at prime market locations and places of tourist interest.

7.1.328 Export promotion efforts of the office of Development Commissioner (Handicrafts) and Export Promotion Council for Handicrafts (EPCH) include participation in international fairs, organising buyer-seller meets and sponsoring Sales/Technical cum Study teams to various countries.

7.1.329 Exports from handicrafts generally includes craft items of zari and zari goods, art metal ware, wood ware, hand printed textiles and scarves and embroidered and crocheted goods. Exports of handicrafts during the Ninth Plan period were to the tune of Rs. 41,470 crore. During 2001-02, Rs. 10,610 crore worth of handicrafts exports were achieved and for the Tenth Plan a target of Rs. 95,000 crore has been kept, indicating a growth of

over 23 per cent. Targets for estimated production and employment for 2006-07, the terminal year of the Tenth Plan, are given in Annexure 7.1.4.

7.1.330 As a comprehensive database for handicrafts is not available, the figures of production and employment in handicrafts are derived from the figures of handicraft exports. There is an urgent need to strengthen the database for handicraft units and prepare a reporting mechanism/estimates for the production and employment of handicrafts.

7.1.331 During 2001-02, a new scheme titled Ambedkar Hastshilp Vikas Yojana (AHVY) was launched with the following aim:

- Empowerment of artisans by making them active entrepreneurs - cum - primary stakeholders in the process of development and bringing them to a visible platform for easy access to domestic and overseas markets.
- Effective collective participation of all members involved in the production and marketing process for optimal growth in human resources, production, business and income.
- Organisation of artisans into community-based enterprises, e.g., self-help groups /cooperative societies, etc.

7.1.332 Social security and welfare of artisans is another area which is being given special attention. Schemes like workshed-cum-housing, health package for artisans, group insurance, etc, are being implemented, which would also be continued in the Tenth Plan period. A zero-based budgeting exercise has been carried out for the handicrafts and out of 27 schemes in the Ninth Plan period, only eight schemes would be taken up in the Tenth Plan period. Most of the schemes have been merged, regrouped and two schemes have been weeded out.

Tenth Plan Initiatives

- To enhance India's share of handicrafts in global market
- Presentation of cultural heritage through documentation and R&D
- Adoption of integrated artisan centric approach

7.1.333 To give a boost to the handlooms and handicrafts sector, a new model for marketing their products has been envisaged in the Tenth Plan. A web-based marketing of VSI products has been proposed to be taken up.

Proposed Model for Marketing of VSI Products

- Web site to be created by marketing company with stake holders like KVIC, DC(Handicrafts), Cooperatives, CAPART, NABARD, SIDBI, SBE, EXIM Bank and private sector marketing/manufacturing organisations like Tatas, Hindustan Lever, Britannia, Amul, Wipro, Reliance, Zandu, Himalaya, etc.
- Common brand building programme for brands like Indian Handicrafts, Sarvodaya, Khadi, etc. would be taken up. The website will describe the product and give details about its specifications, geographical location, specialities, values etc. along with photographs. This will be supported by a brick-and-mortar model of distribution.
- Depots, warehouses would be set up to sell products being marketed on the website and customers can make purchases online with a click of the mouse.
- The website would also help in design and ethnic value presentation, collection and collation of systematic product specifications, branding of products, information about exhibitions, expos, melas, buyer-seller meets, etc.
- Sales outlets of KVIC, KVIBs, Apex Cooperative Societies, State Handlooms, Handicrafts Development Corporations, CAPART associates, private sector organisations, exporters, etc, could be used for selling VSI products.

FOOD PROCESSING INDUSTRIES

7.1.334 The Ministry of Food Processing Industries is looking after the food processing industries and implementing policies and plans relating to the sector. The food processing sector includes sub-sectors like grain processing, fruits and vegetable products, milk products, meat and dairy products, fish and fish processing, beverages, aerated drinks, etc. The food processing industry has been identified

as a sunrise industry which can play a significant role in increasing value addition in agricultural and horticultural produce, diversification and commercialisation of agriculture, reduction in wastage of horticulture produce by increasing the processing level, generating new employment and enhancing export earnings. The performance of the sector during the Ninth Plan period and proposed targets for the Tenth Plan and figures relating to outlays and expenditure are given in Annexure 7.1.4 and Annexure 7.1.5.

7.1.335 Rice milling, processing of pulses and production of wheat flour and other wheat products are the main activities in the grain processing sector. The Rice Milling Industries Regulation Act, 1958, has been repealed and no licence is required for the manufacture of rice products. Nearly 12.5 mt of wheat is converted into various wheat products annually and the country has 820 functioning roller flour mills with an installed capacity of 19.5 mt. The production of bakery products is estimated to be in excess of 37 lakh tonnes. The organised sector produces 65 per cent of breads and biscuits, which account for 82 per cent of the total bakery products. Besides these, soft drinks, beer and alcoholic drinks are also a part of the food processing industry. The Post Harvest Technology Centre at the Indian Institute of Technology (IIT), Kharagpur, has courses and conducts short term training programmes on Home Scale Food Processing and Preservation Techniques and Processing of Minor Millet.

7.1.336 India is the world's leading milk producing country and milk production is expected to touch 81 mt in 2000-01 from 78 mt in 1999-2000. India ranks second in the production of fruits and vegetables. While in countries like Brazil, about 80 per cent of the fruits and vegetables are processed, in India only 2 per cent of horticultural produce is being processed. About 30 per cent of is wasted due to the lack of post-harvest processing facilities, cold storages and cold chains. This sector has vast potential for increasing production, exports and employment.

7.1.337 The schemes and programmes being implemented by the Ministry of Food Processing Industries include development of infrastructural facilities, setting up/expansion/modernisation of food processing industries, meat processing,

poultry and egg processing etc. Schemes for fish processing include strengthening of traditional fish processing, utilisation of low-value fish to make value-added products, etc. The Ministry also provides financial assistance for generic advertisements, strengthening of backward linkages, setting up of cold storages, refrigerated vans, etc.

7.1.338 Further, special emphasis is being laid on supporting research and developmental activities for food processing. Funds are being provided for development of traditional foods, new products, processes and packaging materials, utilisation of by-products, etc. Financial assistance is provided to universities/technical colleges/research institutes to take up specific R&D projects. The Ministry has sponsored projects on gamma irradiation, development of standards for packaging of pickles in flexible materials, mushroom based extruded foods, etc. Financial assistance is being provided to human resource development institutions for creating infrastructural facilities, laboratories, pilot plants, running of courses, etc.

7.1.339 The existing infrastructural facilities for food processing industries are inadequate and need upgradation and modernisation. Facilities for quality testing and certification are not up to the standards required for meeting the demands of the domestic as well as the highly competitive export markets. In view of this, a number of Food Parks have been sanctioned and taken up by State/promotional organisations. During the Ninth Plan period, 27 Food Parks have been sanctioned and work on most of the sites is under completion at various stages. In the Tenth Plan, more Food Parks are proposed to be created and corrective measures will be taken based on the experience gained by the implementing organisations.

Tenth Plan Initiatives

- Promotion of investment, exports and employment
- Infrastructure and institution building
- Promotion of new technologies; cluster development approach
- To increase food processing level to 10 per cent in the Tenth Plan period from the present level of 2 per cent

7.1.340 A draft National Food Processing Policy has been formulated which envisages the creation of an enabling environment, a Development Fund for Food Processing, a Food Processing Authority, infrastructural development and linkages at the farm level, etc. An approach paper on the proposed Processed Food Development Act has been circulated to various organisations for their comments. All these efforts are aimed at harmonisation of the various laws for the food processing industries sector and to bring all the laws under one authority. The Finance Minister has announced the constitution of Group of Ministers (GOM) for the purpose of ending the multiplicity of regulations in food standards and the preparation of a modern integrated food law, harmonisation of quality standards and setting up of an independent regulatory authority etc.

7.1.341 The Food Products Order (FPO), 1955, attempts to provide hygienic and quality food products to the consumers. It is mandatory for all manufacturers of fruits and vegetable products to obtain an FPO licence and to ensure good quality products manufactured under hygienic conditions. The FPO is being amended at the instance of the Central Fruit Products Advisory Committee, which has representatives of the Government, Central Food Technology and Research Institute (CFTRI), Bureau of Indian Standards (BIS), Fruit and Vegetable Processors Industry.

7.1.342 Codex Alimentarius Commission is an international body constituted by the Food and Agriculture Organisation (FAO) and World Health Organisation (WHO) to help in developing standards for food manufacturing and international trade by bringing together scientists, technical experts, Government bodies, consumers and industry representatives. Codex standards are used worldwide for ensuring safety and quality of food, for international trade negotiations as well as for settling of disputes related to food processing. A monitoring cell has been set up in the Ministry of Food Processing Industries for dissemination of information on Codex standards. Under the HACCP quality assurance system, which is based on the food safety system, the Ministry provides grants up to 50 per cent (subject to a ceiling of Rs. 10 lakh), towards the cost of implementation of HACCP, Total

Quality Management (TQM) and obtaining ISO 9000 certification, etc.

7.1.343 To enhance India's share in exports from food processing industries, there is an urgent need to adopt Codex standards. Domestic industry may face practical difficulties initially in adopting these stringent standards due to the non-availability of high quality testing laboratories and standard raw materials and the prevalence of obsolete technology, etc. However, it would be useful for the industry to focus on attaining the Codex standards as early as possible.

7.1.344 The North Eastern Regional Agricultural Marketing Corporation Ltd (NERAMAC) markets food products as well as other agro-based products. The administrative control of NERAMAC has been transferred to the Department for the Development of the North East.

7.1.345 Under the zero-based budgeting exercise, the number of schemes under the Ministry of Food Processing Industries have been reduced from 24 in the Ninth Plan to six in the Tenth Plan.

7.1.346 A study by NCAER commissioned by the Ministry points out that the growth in employment in the food processing sector is likely to be 1.25 per cent per annum during the Tenth Plan period assuming a 6 per cent GDP growth. However, if GDP growth is at 8 per cent per annum, the employment in the sector is likely to increase 2.61 per cent per annum. The estimated employment as in 2001-02 is 7.55 million persons which is likely to go up to 8.6 million persons at the end of the Tenth Plan (assuming a 8 per cent GDP growth). It is also estimated that the indirect employment generation in the sector is 2.38 times the direct employment.

7.1.347 Statement showing the details of export of processed food items during between 1996-97 and 2001-02 (target) is given in Annexure 7.1.4.

THE PATH AHEAD

7.1.348 Taking into consideration the higher potential for growth in the unorganised sector, mainly VSI and food processing sectors, in terms

of output, employment and exports, it would be prudent to strengthen these sectors to enable them to remain competitive in the market-led economy.

7.1.349 The SSI sector would be provided proper and timely inputs like:

1. Adequate credit/loans from financial institutions/banks.
2. Funds for technology upgradation and modernisation.
3. Adequate infrastructure facilities.
4. Modern testing facilities and quality certification laboratories.
5. Modern management practices and skill upgradation through advanced training facilities.
6. Marketing assistance.
7. Level playing field at par with the organised sector.

7.1.350 There is an urgent need to provide sufficient orders to the SSI sector by enabling units to supply 25 to 30 per cent of the government purchases through statutory marketing arrangements, on the lines done by Small Business Administration (SBA) of the United States. Such marketing assistance would enable SSI units to face competition and avoid sickness/closure.

7.1.351 The handlooms sector would be provided better access to inputs like hank yarn and dyes and chemicals at reasonable prices, designs and credit. This will enable handloom weavers to produce marketable products and increase their incomes. In the powerloom sub-sector, emphasis would be laid upon technology upgradation, modernisation of power service centres and testing facilities and welfare of powerloom workers. More designs would be made available by CAD/CAM centres.

7.1.352 The unorganised wool and woollen sector would require strategies like augmentation of the

availability of carpet grade wool, Angora and Pashmina wool; integrated development through a new Technology Mission to improve productivity of wool per sheep, diversification of products by mixing Angora and Pashmina wool; and reducing carpet grade wool imports. Training and extension, particularly in modern sheep rearing practices, enhancement of the quality of wool and increasing income of sheep rearers would need to be taken up on a priority basis in the Tenth Plan period.

7.1.353 The sericulture sector would require strategies like achieving international standards for silk; more intensive R&D efforts and effective transfer of technologies to farmers/reelers; enhancement of production of Tasar, Muga and Eri silk; enhancement of bivoltine silk production; strengthening of linkages between producers of silk and silk industry; and adoption of cluster development and improvement in reeling and silk weaving practices.

7.1.354 In the handicrafts sector, the strategies in the Tenth Plan would focus upon enhancement of India's share in global market; preservation of cultural heritage through documentation and R&D; and adoption of an integrated artisan-centric approach. Efforts would be made to provide welfare schemes and increase income levels of artisans, craftsmen, cooperative societies. Artisans could benefit if more direct exports are encouraged.

7.1.355 Tenth Plan strategies for the food processing industries sector would focus on promotion of investment in the industry, and enhancing production, employment and exports; providing adequate infrastructure and institution-building; promotion of new technologies; adoption of the cluster development approach; and achieving the objective of enhancing food processing levels from the current 2 per cent to 10 per cent by the end of the Plan period.

Ministry/Department-wise Ninth Plan Expenditure and Outlays for Tenth Plan (2002-07)

(in Rs. Crore)

Sl. No.	Name of the Ministry/Deptt.	Ninth Plan		Ninth Plan Anticipated Expenditure		Tenth Plan		
		Outlay	BS	Outlay	BS	Outlay	BS	IEBR
		1	2	3	4	5	6	7
A. Industry and Minerals								
1	Steel	16,232.50	85.50	6,490.70	66.00	11,044.00	65.00	10,979.00
2	Fertilisers	11,013.00	1,043.00	4,177.54	993.79	5,900.00	1,050.00	4,850.00
3	Petroleum and Natural Gas (I&M)	8,386.02	0.00	1,378.26	0.00	7,614.81	0.00	7,614.81
4	Chemicals & Petrochemicals.	6,760.00	171.00	3,406.44	187.02	3,044.00	300.00	2,744.00
5	Industrial Policy and Promotion *	1,923.75	1,923.75	1,482.00	1,482.00	2,000.00	2,000.00	0.00
6	Heavy Industry	2,027.00	551.00	1,923.74	916.75	2,063.00	700.00	1,363.00
7	Commerce	893.75	859.75	1,049.52	1,049.52	4,562.00	4,547.00	15.00
8 &	Public Enterprises	....	...	8.00	8.00	50.00	50.00	0.00
9	Textiles (I&M)	331.01	331.01	652.09	616.22	1,980.00	1,900.00	80.00
10 #	Consumer Affairs	28.37	28.37	30.36	27.02	55.00	55.00	0.00
11&	Company Affairs	....	....			50.00	50.00	0.00
12	Food and Public Distribution (I&M)	1.80	1.80	15.88	15.88	10.20	10.20	0.00
13	Surface Transport (Shipbuilding and Ship repair Sector)-M/o Shipping	161.80	161.80	166.03	120.03	1,047.86	242.86	805.00
14	Atomic Energy (I&M)	1,218.50	850.00	905.04	815.00	3,350.00	2,270.00	1,080.00
15	Bio technology	6.30	6.30	3.61	3.61	30.00	30.00	0.00
16	DSIR	21.50	21.50	11.00	11.00	25.00	25.00	0.00
17	Ocean Development	84.23	84.23	72.03	72.03	100.00	100.00	0.00
18 \$	Supply	22.19	22.19	31.11	31.11			
	Total	49,111.72	6,141.20	21,803.35	6,414.98	43,128.81	13,598.00	29,530.81
B. VSI Sector								
1	SSI & ARI	3,330.00	2,813.00	2,855.00	2,295.00	3,449.00	3,065.00	384.00
2	Textile (VSI)	1,083.50	1,083.50	1,203.00	1,203.00	1,600.00	1,600.00	0.00
3	Food Processing Ind.	235.04	235.04	195.68	195.68	650.00	650.00	0.00

* NRF Expenditure up to 2001-02 was included

@ Outlays of National Test House are not included (NTH was transferred from D/o Supply on 17.8.2001 to D/o Consumer Affairs)

\$ Deptt. of Supply merged in Deptt of Commerce in 2001-02, the expenditure pertain to DGS&D and NTH

The expenditure of NTH is not included as it was transferred in 2001-02 after allocation under D/ Supply

& No outlays in Ninth Plan

Initiatives in the Tenth Five Year Plan (2002-07)

1 Apparel Parks for Exports

Name of the scheme	Apparel Parks for Exports
Concerned Ministry	Ministry of Textiles
Nature of Scheme	New centrally sponsored scheme - already approved
Objective of the Scheme	The scheme is in pursuance of the National Textile Policy, 2000 to give a focused thrust to setting up of apparel manufacturing units of international standards at potential growth centres and to give fillip to domestic production to meet competition from imports and to enhance exports so as to achieve the target of \$ 50 billion by 2010 as envisaged in the Policy.
Details of the Scheme	<ol style="list-style-type: none"> 1. The State Government or an undertaking sponsored by the Government (the designated agency) will provide land free of cost for establishing the park of sufficient size. (The size of an apparel park may be approximately 150-250 acres, but this can be determined on the merits of a case) 2. The location of the apparel park will be such that it is conducive to the establishment of state-of-the-art manufacturing units, has access to ports, airports, rail heads etc., easy availability of raw materials and has a reasonable level of infrastructural facilities. 3. The designated agency will provide infrastructural facilities like power, water, roads, (including approach roads to the park), sewerage and drainage, telecommunications and other facilities for the park. Such facilities shall be of high standards to ensure that the units established in the park are able to function efficiently.
Funding pattern under the scheme	<p>The Central Government will give as a grant to the tune of 75 per cent of the capital expenditure incurred by the State Government on the infrastructural facilities of the Apparel Park, while the remaining 25 per cent will be borne by the agency. This grant shall be limited to a maximum of Rs.10 crore.</p> <p>The Central Government will also provide a maximum grant of Rs.5 crore for setting up of an effluent treatment plant, crèche/s, any multi-purpose centre/hall for marketing /display etc. (These facilities are required to enable the units to meet emerging labour/social/environmental standards).</p> <p>The Central Government will provide a grant up to 50 per cent of the cost of any training facility created in the park subject to a maximum of Rs.2 crore.</p>
Project Approval Committee	<p>The project proposals shall be considered by a Project Approval Committee (PAC) headed by Secretary (Textiles). Other members will be Advisor (Industry) in the Planning Commission, AS&FA, Ministry of Textiles, Textile Commissioner, a representative from Department of Expenditure with Joint Secretary, Ministry of Textiles as Member Secretary. The Committee will approve and sanction the proposals received from the agencies for the establishment of 'parks' to monitor their implementation and to evaluate the progress and achievement under the scheme.</p> <p>The agencies seeking assistance under the scheme will prepare feasibility studies and detailed project reports. Only those proposals which are approved will be eligible for assistance under the scheme. While approving the proposal, care will be taken to see that the location of the park is conducive to meet the objectives of the scheme.</p>

	While considering the proposals, due weightage shall be given to the potential of the park for attracting investments, employment generation and upgradation in technology.
Extent of Central Assistance	The Central assistance for each park would be limited to Rs.17 crore (i.e.Rs.10 crore for infrastructure facilities, Rs.5 crore for ETP and common facilities and Rs.2 crore for training facilities)
Budgetary provision	2002-03 -Rs.10 crore, Tenth Plan - Rs.75 crore
Status of Implementation	Five Apparel Parks have been approved in principle by the Planning Commission. These are located at (i) Surat (Gujarat) (ii) Tronica City (Uttar Pradesh) (iii) Visakhapatnam (Andhra Pradesh) (iv) Bangalore (Karnataka) and (v) Thiruvananthapuram (Kerala) . In a recent Cabinet decision, the limit of five apparel parks has been removed.

2 Textile Centres infrastructure development scheme (TCIDS)

Name of the scheme	Textile Centres Infrastructure Development Scheme (TCIDS)
Concerned Ministry	Ministry of Textiles
Nature of Scheme	Centrally sponsored scheme - already approved
Objective of the Scheme	To improve infrastructure facilities at potential textile growth centres and, therefore, removing bottlenecks in exports.
Details of the Scheme	<ul style="list-style-type: none"> • The scheme shall cover investments, which are in the nature of exigencies, which could not be foreseen as part of the annual Plan scheme proposals. Broadly, the scheme covers investments required for quicker and strategic removal of bottlenecks and for general export facilitation. The investment must reflect its linkage to export promotion. • Balancing investment may, inter alia, relate to construction of roads, provision of testing facilities etc. • Under the scheme funds can be given to Central/State Government Departments/ Public Sector Undertakings/other Central/State Government's agencies/ recognised industrial association or entrepreneur bodies for development of infrastructure directly benefiting the textile units. The fund would not be available for individual production units.
Funding pattern under the scheme	The Central assistance will be generally limited to 50 per cent of the critical components of the project subject to a maximum of Rs. 20 crore for a particular centre.
Project Approval Committee	An Empowered Committee under the chairmanship of Secretary (Textiles). A committee would be duly constituted by the concerned State/UT / agency/PSU to implement and monitor each of the approved proposals. A representative of Ministry of Textiles would be included in the Committee.
Performance evaluation	The performance of the TCIDS scheme as a whole will be evaluated annually by an appropriate authority or agency to be decided by the Empowered Committee of the Scheme.
Extent of Central assistance	A maximum of Rs. 20 crore for a particular centre.
Budgetary provision	Annual Plan 2002-03-Rs.15 crore Tenth Five Year Plan - Rs. 75 crore
Status of Implementation	The proposal has not been received

3 Technology Upgradation Funds Scheme (TUFS)

Name of the scheme	Technology Upgradation Fund Scheme (TUFS)
Concerned Ministry	Ministry of Textiles
Nature of scheme	Central sector scheme - Already approved
Objectives of the Scheme	To provide a focal point for modernisation efforts through technology upgradation in the industry.
Details of the scheme	This scheme was introduced in 1999 as an instrument for modernisation and technology upgradation and covers all sub-sectors of textiles like spinning, weaving, knitting, processing, garment making, cotton ginning and pressing and the jute sector. Under the TUF Scheme, generally only new machinery will be permitted. However, machinery with a minimum residual life of 10 years, import of second hand machinery will also be eligible subject to maximum expired life (vintage) of 5 years as reckoned from the year of manufacture. Investment in land and factory building including renovation, effluent treatment plant (ETP), water treatment plant for captive industrial use, captive power generation will be eligible to the extent necessary for the plant and equipment to be installed for technology upgradation and the total of such investments will not normally exceed 25 per cent of the total investment in such plant and machinery.
Funding Pattern under the Scheme	The main feature of the TUF Scheme would be a 5 per cent reimbursement on the interest actually charged by the identified financial institutions on the sanctioned projects. To modify the scheme to make it more investor-friendly, the weaving sector can now avail either 5 per cent interest reimbursement or 12 per cent of upfront credit linked capital subsidy for SSI units.
Project Approval Committee	The Inter-ministerial Steering Committee under the chairmanship of Secretary (Textiles) lays down norms for monitoring and appraisal mechanism for effective implementation of the scheme on a macro-basis. Secretaries of the Department of Expenditure, Ministry of Commerce, Ministry of Industry, Department of Banking, Addl. Secretary and Financial Adviser, Ministry of Textiles, Adviser, Planning Commission, Textile Commissioner, Jute Commissioner, Deputy Governor, RBI, Chairmen of IDBI, SIDBI, IFCI are the prominent members of the Committee in addition to other trade bodies.
Budgetary Provision	2002-03 - Rs.250 crore Tenth Plan - Rs.1,270 crore.
Status of implementation	Up to 31 May 2002, 1,654 textile units have applied for loans amounting to Rs.14,365.26 crore. Out of this, 1,419 proposals for loans amounting to Rs.5,226.59 crore had been sanctioned and an amount of Rs. 3,607.37 crore has already been disbursed for 1,134 units. The fund requirement under this scheme has essentially been from the mill sector with SSI sector having only limited access to benefits of the scheme.

4 Technology Mission on Cotton (TMC)

Name of the scheme	Technology Mission on Cotton (TMC)
Concerned Ministry	Ministry of Textiles
Nature of scheme	Centrally sponsored scheme - Already approved
Objective of the Scheme	The main objectives of the scheme are to improve the productivity and quality of cotton, reducing cost of production by increasing the yield per hectare by the proper transfer of technology to the growers, improving the infrastructure in the market yards for cotton and improving cotton processing facilities by upgrading/ modernising the existing ginning and pressing factories resulting in cotton processing with minimum or no contamination to achieve better value added products like yarn, cloth, garments and made-ups etc.
Details of the scheme	The scheme is being jointly implemented by the Ministry of Agriculture and Ministry of Textiles in the form of four Mini Missions under TMC. While 'Mini Mission for R & D' (MM-I) and the 'Mini Mission for dissemination of technology' (MM-II) come under the purview of Ministry of Agriculture, the 'Mini Mission for improvement in marketing infrastructure' (MM-III) and the 'Mini Mission for modernisation of ginning and pressing factories' (MM-IV) are under the Ministry of Textiles.
Funding pattern under the scheme	The expenditure in Mini Missions I and II will be shared by the Ministry of Agriculture and State Governments on 75:25 basis. Under Mini Mission III, 60 per cent of the cost of improvement will be borne by Ministry of Textiles and balance 40 per cent by the concerned APMC/State Governments. Under Mini Mission IV, 25 per cent cost of the modernisation of the upgradation for ginning factories will be borne by Ministry of Textiles under TMC.
Project Approval Committee	An Empowered Committee under the chairmanship of the Cabinet Secretary monitors and directs the Technology Mission to decide the modifications in the components, areas of operation, etc. as considered essential from time to time.
Budgetary Provision	2002-03 - Rs. 30 crore Tenth Plan - Rs.150 crore.
Status of implementation	Up to June 2002, under MM-III, 89 project proposals (setting up of 16 new market yards, improvement of 58 market yards and activation of 15 market yards) at a total estimated cost of Rs.152.85 crore have been sanctioned. Out of these, the Government of India share would work out to Rs.76.75 crore. Under MM-IV, modernisation of 172 ginning & pressing factories, have been sanctioned at an estimated cost of Rs. 202.53 crore out of which Government of India share would be Rs. 34.04 crore.

5 Assistance to States for Development of Export Infrastructure & Allied Activities

Name of the scheme	Assistance to States for Development of Export Infrastructure & Allied Activities
Concerned Ministry	Department of Commerce, Ministry of Commerce and Industry
Nature of Scheme	New Centrally sponsored schemes - Already approved
Objective of the Scheme	Intends to establish a mechanism for seeking the involvement of the State Governments in export efforts through assistance linked to export performance which will result in growth in the infrastructure necessary for promotion of exports .
Details of the scheme	Projects for development of complementary infrastructure for exports, creation of new export promotion industrial parks and augmentation of facilities in the existing ones, development of minor ports, setting up of common facility centres for trade, equity participation in infrastructure projects including the setting up of SEZs., projects of national/regional importance and activities permitted as per EDF in relation to the North East and Sikkim.
Funding pattern under the scheme	The funds are to be allocated to the State Governments on the basis of laid down criteria.
Project Approval Committee	There shall be a State Level Export Promotion Committee (SLEPC) headed by the Chief Secretary and consisting of the Secretaries of concerned departments at the State level and a representative of the States cell of the Department of Commerce (DoC) and the Joint Director General of Foreign Trade posted in that State/region. SLEPC will scrutinise and approve specific projects and oversee the implementation of the scheme. For outlays under the Central component, there shall be an Empowered Committee in the Department of Commerce, headed by the Commerce Secretary and consisting of representatives from the Planning Commission and the respective ministries to consider and sanction the proposals received as per the prescribed procedure. If any project has any bearing on the external sector, a representative of the Ministry of External Affairs would be invited for the meeting of the Empowered Committee.
Extent of Central assistance	100 per cent
Budgetary provision	2002-03- Rs. 330 crore Tenth Plan- Rs. 1,725 crore
Status of Implementation	Started in 2002-03

6 Market Access Initiative

Name of the scheme	Market Access Initiative
Concerned Ministry	Department of Commerce, Ministry of Commerce and Industries
Nature of the scheme	Central sector scheme - Already approved
Objective of the scheme	To put in place an instrument which is not only WTO compatible but would also mitigate the negative effects of various handicaps faced by the exporters vis-à-vis their counterparts in the competing countries.
Details of the scheme	To identify the priorities of research relevant to trade and commerce and sponsor research studies consistent with the priorities, arranging for wide dissemination and discussions on the result of such studies, trade promotion organisation for market survey/studies, assist exporters and export trade councils in participation in international departmental store promotion programmes, promotion of India, Indian products and Indian brands. State Government efforts in carrying out export potential survey of the State for identified product groups would also be supplemented.
Funding pattern under the scheme	Central assistance ranging from 50 to 80 per cent
Project Approval Committee	Empowered Committed under Secretary (Commerce)
Budgetary provision	Annual Plan 2002-03 Rs. 42 crore Tenth Five Year Plan - Rs. 552 crore
Status of implementation	Initiated in 2001-02

7 Research and Development in Automotive Industry

Name of the scheme	Research and Development in Automotive Industry
Concerned Ministry	Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises
Nature of the scheme	Central Scheme
Objective of the scheme	To strengthen the testing and certification facilities.
Details of the scheme	<ol style="list-style-type: none"> 1. The proposed scheme envisages partnership with industry. 2. In addition to the upgradation of existing facilities, two new facilities - one in the north and one in the south - are proposed to be set up in the Tenth Plan for meeting the requirements of safety and environmental regulations. 3. Besides, some new testing facilities are required to be set up. These include 'life cycle testing' and 'world class test track' which are not there at present. 4. Increased allocation from the existing automotive cess fund created for R&D of automotive industry would be made available.
Project Approval Committee	SFC / EFC as applicable
Budgetary provision	Annual Plan 2002-03 Rs. 25 crore Tenth Five Year Plan - Rs. 150 crore
Status of implementation	Existing automotive research institution like the Automotive Research Association of India (ARAI) are being supported.

8 Industrial Cluster Development Scheme

Name of the scheme	Industrial Cluster Development Scheme
Concerned ministry	Deptt. of Industrial Policy and Promotion , Ministry of Commerce and Industry
Nature of the scheme	Central sector scheme
Objective of the scheme	<ul style="list-style-type: none"> • The scheme aims to pick the industrial clusters with high growth potential. The main emphasis of the scheme would be on the making strategic interventions to convert static local efficiency into dynamic competitiveness. • The scheme makes it possible to have intervention for each cluster to be need-based and specifically designed.
Details of the scheme	<ol style="list-style-type: none"> 1 The main emphasis of the scheme would be on making strategic interventions to convert static local efficiency into dynamic competitiveness by: <ul style="list-style-type: none"> • creating conducive conditions for the development of inter-firm cooperation; • promote innovation and collective learning by creating a suitable customised infrastructure support and service network; • promoting product design and development through focused support and association with specific R&D Institutions; • assist the units in developing/setting up common facilities like raw material depots, testing facilities, design centres, information hub, etc. • assisting appropriate technology transfer, information sharing and quality improvement. 2 The services offered would also include organisation of fairs and export promotion, client rating, waste management, pollution control, quality certifications, product promotion, product testing, information sharing, training and HRD, product innovation and R&D support.
Funding pattern under the scheme	Share of Central Government will be limited to 75 per cent of the project cost. The remaining 25 per cent have to be financed by other stakeholders of the respective cluster. The release of funds shall be project-specific. The central assistance would be in the form of grant.
Project Approval Committee	An Apex Committee, chaired by Secretary (IP&P) is proposed for scrutinising the proposals received and giving approvals on a project to project basis.
Budgetary provision	Annual Plan 2002-03 Rs. 45 crore Tenth Five Year Plan - Rs. 675 crore
Status of Implementation	Process of approval of competent authority has been initiated

9 Pharmaceutical Research & Development - support Fund

Name of the scheme	Pharmaceutical Research & Development - support Fund
Concerned Ministry	Department of Science and technology
Nature of Scheme	Central Scheme
Objective of the Scheme	Encouraging R&D in the pharmaceutical sector in a manner compatible with the country's needs and with particular focus on diseases endemic or relevant to India by creating an environment conducive to channelising a higher level of investment into R&D in pharmaceuticals in India.
Details of the Scheme	<p>In order to strengthen the pharmaceutical industry's research and development capabilities and to identify the support required by Indian pharmaceutical companies to undertake domestic R&D, a Committee was set up in 1999 by the Department of Chemicals and Petrochemicals (DCPC) by the name of Pharmaceutical Research and Development Committee (PRDC) under the Chairmanship of Director General, CSIR.</p> <p>The PRDC had recommended inter-alia ,the setting up of a Drug and Pharmaceutical Research and Development Support Fund (PRDSF).</p> <p>M/o Finance had agreed to allocate Rs.150 crore as a Plan Fund for creation of R&D fund.</p>
Funding pattern under the Scheme	Corpus fund -Rs 150 crore - to be allocated
Budgetary provision	Corpus fund -Rs 150 crore - (one time) to be allocated

10 Agri Export Zones (AEZ)

Name of the scheme	Agri Export Zones
Concerned ministry	Ministry of Commerce
Nature of the scheme	The scheme was announced in Export import Policy 2002-07
Objective of the scheme	<p>To promote agricultural export from the country and remunerative returns to the farming community in a sustained manner.</p> <p>AEZs are being set up for end-to-end development for export of specific products from a geographically contiguous area.</p>
Details of the scheme	<ol style="list-style-type: none"> 1. AEZs are identified by the State Government, who evolve a comprehensive package of services provided by all State Government agencies, State agriculture universities and all institutions and agencies of the Union Government for intensive delivery in these zones. 2. Such services which are managed and coordinated by State Government include a provision of pre/post harvest treatment and operations, plant protection, processing, packaging, storage and related R&D etc. 3. The Agricultural Products Export Development Authority (APEDA) will supplement, within its schemes and provisions, efforts of State Governments for facilitating such exports.
Funding pattern under the scheme / Extent of assistance	<p>Central scheme - Financial support to APEDA</p> <p>Units in AEZ would be entitled for all the facilities available for exports of goods in terms of provisions of the respective schemes.</p>

11 Leather Industry Development Programme

Name of the scheme	Leather Industry Development Programme
Concerned ministry	Department of Industrial Policy and Promotion
Nature of the scheme	Central sector scheme
Objective of the scheme	Modernisation of all sub-segments of leather industry, attract FDI , environmental mission and manpower development and development of leather clusters.
Funding pattern under the scheme / Extent of assistance	100 per cent Central sector scheme

Performance of the VSI Sector Production, Employment and Exports

S. No.	Sub-Sector (Scheme)	Unit	Ninth Plan Actual Achievement					Tenth Plan Target	
			1997-98	1998-99	1999-00	2000-01	2001-02 (Anti.)	2002-03	2006-07 Terminal Year
(A) Production									
1	Small Scale Industries.	Rs. crore	462641	520650	572887	609024	690522	624363	1401939
2	Coir Fibre	000 Tonnes	296	334	356	364	375	390	435
3	Handloom Cloth	Mill. Sq m	7603	6792	7352	7506	7579	7875	10000
4	Powerloom Cloth	Mill. Sq m	20951	20690	23187	23803	25273	24360	132821
5	Raw Silk	M. Tonnes	15236	15544	15214	15857	18395	21900	26450
6	Handicrafts	Rs. Crore	10411	12175	13916	16340	18677	22765	47204
7	Raw Wool	Mill kg.	44.74	45.50	46.50	47.00	47.50	47.50	49.00
(B) Employment									
1	Small Scale Industries	Million persons	16.7	17.2	17.9	18.6	19.3	20.1	23.7
2	Coir Industries	Million persons	0.43	0.46	0.48	0.53	0.54	0.56	0.65
3	Handlooms	Million persons	12.4	12.4	12.4	12.4	12.4	12.0	12.0
4	Powerlooms	Million persons	3.8	4.0	4.1	4.2	4.2	4.25	4.5
5	Sericulture	Million persons	6.057	6.141	6.364	5.400	5.573	5.825	6.003
6	Handicrafts	Million persons	5.292	5.424	5.560	5.700	5.841	6.010	6.770
7	Wool Develop. (unorganised sector)	Million persons	0.3	0.5	0.5	0.5	0.5	0.5	0.7
(C) Exports									
1	Small Scale Industries	Rs. Crore	44437	49481	53975	59978	65000	73600	126000
2	Coir Industries	Rs. Crore	239	292	303	314	325	450	700
3	Handlooms	Rs. Crore	1855	2008	1892	2127	2200	2950	4500
4	Powerlooms	Rs. Crore	8418	8915	9915	10200	11000	NA	NA
5	Silk	Rs. Crore	1060	1251	1756	2480	2530	2650	4050
6	Handicrafts	Rs. Crore	6458	7072	8060	9271	10610	12732	17000

Physical Performance of the Food Processing Industries (FPI) Sector production and Exports

S. No.	Sub-Sector (Scheme)	Unit	Ninth Plan Actual Achievement					Tenth Plan Target	
			1997-98	1998-99	1999-00	2000-01	2001-02 (Anti.)	2002-03	2006-07 Terminal Year
Production									
1	Fruit & Vegetable Products	Lakh tonne	9.10	9.40	9.80	9.90	10.50	11.00	14.00
2	Milk Products	Lakh tonne	720	750	780	801	849	890	1100
3	Soft Drinks	Mill. Bottles	4920	5670	230	6450	6600	6800	7500
4	Fish Products	Mill. Tonne	5.39	5.26	5.65	5.95	6.29	6.50	7.00
5	Meat & Meat Products	000' Tonne	3600	3809	3875	3950	4200	4350	4900
6	Eggs	Mill Nos.	30000	31000	32000	32500	33000	33445	35500
7	Broiler	Mill. Nos.	450	500	550	600	700	750	950
Exports									
1	Fruit & Vegetable	Rs. crore	762	706	994	1346	1265	1340	2050
2	Animal Products	Rs. crore	908.30	851.70	905.00	1637.10	1440.00	1600	2300
3	Rice (both Basmati & non-Basmati)	Rs. crore	3370.00	6279.40	3125.80	2943.30	3500.00	3850	5500
4	Marine Products	Rs. crore	4697.00	4626.80	5116.60	6443.80	5800.00	6000	8350
5	Walnuts	Rs. crore	56.40	68.90	60.50	109.90	85.00	90	135

Annexure 7.1.5

Plan Outlay/Expenditure of VSI and EPI Sector (Sub-Sector/Scheme-Wise)

(Rs. crore)

S. Sub-Sector No (Scheme)	Ninth Plan Actual Expenditure					Ninth Plan (Expdr)	Tenth Plan	
	1997-98	1998-99	1999-00	2000-01	2001-02 (anti.)		2002-03	2002-07 Terminal Year
I M/o SSI								
1 SIDO	132.53	203.29	251.41	279.55	407.00	1273.78	313.00	1975.00
2 NSIC (Budgetary Support)	132.17 (28.50)	148.00 (27.30)	161.90 (27.12)	149.35 (34.21)	111.33 (25.42)	702.75 (142.55)	117.00 (32.00)	564.00 (180.00)
3 Other Schemes	0.76	1.14	1.84	0.69	0.58	5.01	5.00	45.00
Total: SSI (IEBR)	265.46 (103.67)	352.43 (120.70)	415.15 (134.78)	429.59 (115.14)	518.91 (85.91)	1981.54 (560.20)	435.00 (85.00)	2584.00 (384.00)
II M/o A&RI								
1 Coir Industry	12.48	8.88	12.50	13.84	11.60	59.30	18.00	115.00
2 PMRY	94.83	135.46	189.46	200.98	193.50	814.23	169.00	750.00
Total: A&RI	107.21	143.34	201.96	214.82	205.10	873.53	188.00	865.00
III M/o Textiles (VSI)								
1 Handlooms	97.00	81.50	80.92	101.45	111.11	471.98	140.00	625.00
2 Powerlooms	2.89	3.63	9.32	6.87	6.00	28.71	12.00	60.00
3 Handicraft	45.97	49.20	52.81	66.66	87.00	301.64	88.00	425.00
4 Sericulture	49.48	63.49	67.00	78.19	116.08	374.24	87.50	450.00
5 Wool & Woolen Dev.	5.09	4.52	5.06	3.76	8.00	26.43	8.00	40.00
Total Textiles (VSI)	200.43	202.34	215.11	256.93	328.19	1203.00	415.50	1600.00
IV M/o FPI								
1 Food Processing Industries	22.87	30.00	37.79	50.00	55.00	195.66	75.00	650.00

