National Steel Policy - 2005

1. **OBJECTIVE**

1.1 **Strategic Goal:** The long-term goal of the national steel policy is that India should have a modern and efficient steel industry of world standards, catering to diversified steel demand. The focus of the policy would therefore be to achieve global competitiveness not only in terms of cost, quality and product-mix but also in terms of global benchmarks of efficiency and productivity. This will require indigenous production of over 100 million tonnes (mT) per annum by 2019-20 from the 2004-05 level of 38 mT. This implies a compounded annual growth of 7.3 percent per annum.

1.2 The above strategic goal is justified on the ground that steel consumption in the world, around 1000 mT in 2004, is expected to grow at 3.0 percent per annum¹ to reach 1,395 mT in 2015, compared to 2 percent per annum in the past fifteen years. China will continue to have a dominant share of the world steel demand. At home, the Indian growth rate of steel production over the past fifteen years was 7.0 percent per annum. The projected growth rate of 7.3 percent per annum in India compares well with the projected national income growth rate of 7-8 percent per annum, given an income elasticity of steel consumption of around 1.

1.3 In terms of consumption of steel, defined as production plus imports minus exports, the present equation is 38+2-4 = 36 mT in 2004-05. Table 1 gives the equation for 2019-20 and the projected compounded annual growth rates for production, imports, exports and consumption.

			- ((in million tonnes)
	Production	Imports	Exports	Consumption
2019-20	110	6	26	90
2004-05	38	2	4	36
CAGR*	7.3%	7.1%	13.3 %	6.9 %

 Table 1: Production, Imports, Exports and Consumption of Steel

Notes: * Compounded Annual Growth Rate

2. INDUSTRY STRUCTURE

2.1 The iron and steel industry in India is organized in three categories' viz. main producers, other major producers and the secondary producers. The main producers and other

¹ World Steel Dynamics, Steel Success Strategies, 25th June 2005

major producers have integrated steel making facility with plant capacities over 0.5 mT and utilize iron ore and coal/gas for production of steel. In 2004-05, the main producers i.e. SAIL, TISCO and RINL had a combined capacity of around 19.3 mT and capacity utilization was 104 percent. The other major producers comprising of ESSAR, ISPAT and JVSL had a capacity of 6.4 mT with capacity utilization of 97 percent. The secondary sector is dispersed and consists of:

- (a) Backward linkage from about 120 sponge iron producers that use iron ore and noncoking coal, with a capacity of around 13 mT, providing feedstock for steel producers. The capacity utilization in 2004-05 was 75 percent.
- (b) About 650 mini blast furnaces, electric arc furnaces, induction furnaces and energy optimizing furnaces that use iron ore, sponge iron and melting scrap to produce steel. Their capacity is around 14.7 mT, and capacity utilization in 2004-05 was 58 percent.
- (c) Forward linkage with about 1,200 re-rollers that roll out semis into finished steel products for consumer use. These are small and medium enterprises, whose reported capacity is around 15 mT, and capacity utilization in 2004-05 was 55 percent.

3. SWOT ANALYSIS OF THE INDUSTRY

3.1 The strengths, weaknesses, opportunities and threats for the Indian steel industry have been tabulated below. The national steel policy lays down the broad roadmap to deal with all of them.

Strengths	Weaknesses
1. Availability of iron ore and coal	1. Unscientific mining
2. Low labour wage rates	2. Low productivity
3. Abundance of quality manpower	3. Coking coal import dependence
4. Mature production base	4. Low R&D investments
	5. High cost of debt
	6. Inadequate infrastructure
Opportunities	Threats
1. Unexplored rural market	1. China becoming net exporter
2. Growing domestic demand	2. Protectionism in the West
3. Exports	3. Dumping by competitors
4. Consolidation	

4. STRATEGY

4.1 A multi-pronged strategy would be adopted to move towards the long-term policy goal. On the demand side, the strategy would be to create incremental demand through promotional efforts, creation of awareness and strengthening the delivery chain, particularly in rural areas. On the supply side, the strategy would be to facilitate creation of additional capacity, remove procedural and policy bottlenecks in the availability of inputs such as iron ore and coal, make higher investments in R&D and HRD and encourage the creation of infrastructure such as roads, railways, and ports.

5. STEEL DEMAND

5.1 *Urban Areas:* The present steel consumption per capita per annum is about 30 kg in India, compared to 150 kg in the world, and 350 kg in the developed world. ² The estimated urban consumption per capita per annum is around 77 kg in the country, expected to reach approximately 165 kg in 2019-20, implying a CAGR of 5 percent. Apart from the anticipated growth in the construction, automobile, oil and gas transportation, and infrastructure sectors of the economy, conscious promotion of steel usage among architects, engineers and students by the Institute of Steel Development and Growth (INSDAG) and the large producers will drive this additional consumption. Steps would be taken to encourage usage of steel in bridges, crash barriers, flyovers and building construction. Benefits of steel usage would be added to the technical education curricula in the country.

5.2 *Rural Areas:* The rural consumption of steel in India remains at around 2 kg per capita per annum, primarily because steel is perceived to be expensive among the village folks. Based on the promotional efforts mentioned above, and an active focus on opening new block level rural stock points, a target is set for raising the per capita rural consumption of steel to 4 kg per annum by 2019-20, implying a CAGR of 4.4 percent.

5.3 *Exports:* Although the focus of Indian steel industry is on the domestic market, export will be another window on the demand side. The growth of exports of steel from India has been around 10 percent per annum over the past decade. That speaks for the international cost competitiveness of the steel sector. It takes assiduous effort to create, and hold on to export markets. While the business decision to export will depend on the prevailing relative prices,

² Statistical Yearbook 2004, International Iron & Steel Institute, Brussels

the Government would encourage strategic alliances with buyback arrangements and dedicated export production through 100% export-oriented units. A growth rate of around 13 percent per annum is envisaged up to 2019-20. The issues related to exports have been discussed in section 13 on Trade Policy.

6. STEEL SUPPLY

6.1 While the country has rich endowments of iron ore and non-coking coal, and has cheap labour, this advantage is neutralized considerably by low material and energy efficiency, poor quality, poor productivity, and high cost of coking coal, power, freight and finance. The policy for making the critical inputs available to the industry is outlined in the following paragraphs.

6.2 *Critical Inputs:* In order to support steel production of 110 mT by 2019-20, at 100 percent capacity utilization, the required quantities of critical inputs such as iron ore, coking and non-coking coal can be seen in Table 2 below. The projected requirements are based on the assumption that new capacities will be 60 percent through the Blast Furnace (BF) route, 33 percent through the Sponge Iron – Electric Arc Furnace (EAF) route and 7 percent through other routes.

Table 2: Critical Inputs for Steel Production

			(in million tonnes
	Iron Ore	Coking Coal	Non-Coking Coal
2019-20	190	70	26
2004-05	54	27	13

6.2.1.1 *Iron ore:* At present, the in-situ reserves of relatively rich iron ore in India are 11.43 billion tonnes of haematite and 10.68 billion tonnes of magnetite ores. Though the reserves of haematite ore appear to be large, high-grade lumpy reserves constitute only 8.7 percent of the total. Further, the present commercial mining capacity for iron ore is only 175 mT³. Production of iron ore in 2004-05 was 145 mT, of which 54 mT was domestically consumed and 78 mT was exported. Of the 600 mining leases, only 246 were operated in 2003-04.

³ Estimates of the Federation of Indian Mining Industries (FIMI)

6.2.1.2 In order to ensure availability of 190 mT of iron ore for domestic production of steel by 2019-20, Government would encourage investments in creation of an additional modern mining and beneficiation capacity of 200 mT. The size of these investments will be around Rs. 20,000 crore. The current policy of captive mining leases for the private sector would continue, but it is necessary that investment plans be put in place for idle mining leases. State governments would recommend renewal of existing leases only against credible mining investment plans in a specified period. The Government would lay down priorities and guidelines for the State governments to recommend fresh mining leases, having regard to the entrepreneur's mining investment plans, and technical and financial capabilities. Environmental and forest clearances would be given priority, the Government would encourage iron ore trading in order to make this essential raw material available to the iron and steel industry throughout the country. The Government would encourage investments in adding value to iron ore fines. Scientific mining and economies of scale would also be encouraged through consortia of small users and by prescribing a minimum economic size for mines.

6.2.2 *Exports of iron ore:* After remaining stagnant at around 35 mT for about a decade (between 1991-92 to 1999-2000), exports of iron ore from India have grown in the last 4 years to 78 mT in 2004-05 on the back of large exports of iron ore fines to China. Fines and concentrates, which have little use in India except as a negative environmental externality, make up about 90 percent of Indian iron ore exports currently. As investments are made into beneficiation, sintering and pelletization in the country, which will use these fines, the growth in exports of iron ore is likely to decline. Exports have thus been estimated to be around 100 mT by 2019-20. In terms of future policy, exports of iron ore, especially high-grade lumps, would be leveraged for imports of coking coal or for investment in India. Long-term export supply of iron ore would be confined to a maximum of five-year contracts. This duration would be reviewed from time to time. A judicious balance would continue to be maintained between exports and domestic supply of iron ore.

6.2.3.1 *Coking coal:* The proven reserves of prime coking coal are only 4.6 billion tonnes. The quality of Indian coking coal is also not suitable for steel. The production of coal during 2001-02 was 328 mT, out of which coking coal amounted to only 29 mT. The low ash coking

coals required by steel makers was around 10 mT in 2001-02. Coking coal production has declined at an annual rate of 4.7 percent during the decade ending 2001-02.⁴

6.2.3.2 Poor quality domestic prime coking coal has to be blended with imported coal. Currently the steel industry imports around 19 mT of coking coal annually, and procures 7.5 mT from indigenous sources including captive mines. By 2019-20, about 70 mT of coking coal will be required, of which 85 percent will have to be imported.

6.2.3.3 The imperatives of coking coal security require that new sources of coking coal be tapped. Accordingly, the Government would aim for the coal sector to become market-driven, but in the meantime continue allocation of captive coking coal blocks to steel plants, and establish mechanisms to share their surplus resource with other steel plants. The Government would encourage joint ventures and equity participation abroad by steel and coal companies. Simultaneously, efforts would be made to develop and adapt technologies, which have synergy with the natural resource base (non-coking coal) of the country. The steel industry would be encouraged to make investments in washing and beneficiation of coal.

6.2.4 Non-*Coking Coal:* With proven reserves of 74 billion tonnes, non-coking coal constitutes around 82 percent of the total coal reserves in India. Production of non-coking coal at 294 mT during 2001-02 was 91 percent of the total coal production of 328 mT. In 2004-05, the steel sector consumed about 8 mT of non-coking coal, excluding thermal coal for captive power plants.

6.2.5.1 *Sponge iron grade non-coking coal:* The sponge iron industry using non-coking coal as input material will play an important role in future as a substitute input for coke. The capacity of sponge iron industry would increase from the current 13 mT to 20 mT by the end of 2010-11, at a growth rate of 6.5 percent per annum, and thereafter, till 2020, grow to 38 mT. The current trends indicate that a large number of sponge iron based steel units may come up in the states of Orissa and Jharkhand. By 2019-20 the steel industry will demand around 26 mT of non-coking coal of higher grades.⁵

⁴ Indian Mineral Yearbook, 2003, Indian Bureau of Mines

⁵ Including the requirements of the alternate routes and excluding requirements for captive power

6.2.5.2 Available data show a declining rate of growth in production of non-coking coal in India. In the decade of 1980s, the growth rate was 6.5 percent, which fell to 3.9 percent in the 1990s. In the last five years the growth rate has been 4.7 percent.⁶ The power plants are, therefore, planning to import large quantities of thermal coal. Further, Indian coal is high in ash content, which will force non-coking coal based steel production also to go for some imports.

6.2.5.3 While market forces should allocate resources to their most efficient uses, which would require the coal sector to be deregulated, a strategy for the transitional period would be needed. Accordingly, the sponge iron and steel industry would get first priority in the allocation of higher grades of non-coking coal of below 12 percent ash content, being essential feedstock. Greater flexibilities would be introduced in the form of sale of surplus coal, re-allocation of existing unused linkages with Coal India Limited, and allocation to consortia of small users. Joint ventures of public sector companies with the private sector would be explored in order to finance the required investments.

6.2.6.1 *Natural Gas:* The pricing mechanism for natural gas, taking into account the cyclical nature of the steel industry, needs to move gradually towards market-determined prices. It would also be desirable to put in place the regulatory framework, as natural gas stocks are limited in the country and sufficient level of competition has to be ensured in this sector. Further the industry needs time for adjustment as price shocks lead to loss of business confidence.

6.2.6.2 Considering the importance of gas based steel plants due to (a) environmental cleanliness, (b) shortages of coking coal required for other major routes, and (c) natural gas being a feedstock for sponge iron plants and not just a heating source, the present system of allocation and pricing of natural gas to the steel sector would remain under continual review.

6.2.7 *Refractories*:Refractories are used to line various high temperature vessels used in the steel manufacturing process. India has a refractory industry of 80 units with 1.6 mT capacity, and utilization of just 55 percent in 2004-05. It needs modernizing and upgrading. The Government would foster closer technical interaction between the steel industry and the refractory industry so as to achieve fewer breakdowns, reduced down time and prompt hot

⁶ Calculated from production statistics provided in the Economic Survey 2004, Ministry of Finance.

repairs. The Government would also support basic and applied research in utilizing indigenous refractory raw materials through partnerships between steel and refractory producers.

7. INFRASTRUCTURE

7.1 *Inland transportation:* It is estimated that every tonne of steel production involves transportation of 4 tonnes of material. The envisaged addition of 75 mT of steel annually implies 300 mT of additional traffic. In a globally integrated economy, minimization of the overall cost of transportation becomes an important instrument of maintaining the competitive edge in both the domestic and overseas markets.

7.2 Table 3 below shows the year-on-year growth in gross capital formation for 'Railways' and 'Transportation by other means'.

							(Rs. Crore)
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Railways	5069	5019	5307	5491	6981	8860	11609
		(-0.99)	(5.7)	(3.5)	(27.1)	(26.9)	(31.0)
Transport	16460	18153	21272	25802	21117	16476	29872
by other		(10.3)	(17.2)	(21.3)	(-18.2)	(-22.0)	(81.3)
means							

Table 3: GCF in Transport Related Infrastructure

Note: Figures in parentheses indicate year-on-year variation. Source: National Accounts Statistics- 2004-05.

7.3.1 *Railways:* The railways transport iron ore and coal from mines and ports to the plants, and steel to ports and consuming areas. However, over the last decade railways has been consistently losing traffic originating in the steel sector to the roads. The share of railways in transporting finished steel has declined from 71.9 percent in 1991-92 to 34.4 percent in 2001-02. The decline has been largely on account of railway's competitive weakness in the face of challenges from other modes of transport like roads, pipeline and coastal shipping. Replacement of the 'equalized railway freight' by 'freight ceilings' is also partly responsible for the modal switch.

7.3.2 On the basis of the present share of railways and roads in the movement of raw materials and finished/saleable steel, the expected scenario by 2019-20 appears to be as follows:

Expected traffic originating in the steel sector to be handled by the railways (mT)								
	2004-05 2019-20							
	Railways	Road	Railways	Road				
Raw Materials*	80	34	230	100				
Finished Steel	11	27	33	77				
Total	91	61	263	177				

Table 4: Modal Distribution of Traffic, 2004-05 and 2019-20

* Excludes traffic due to export of iron ore.

7.3.3 Based on the average lead distance over which the freight needs to be computed for raw materials for steel making and finished products, it is estimated that the total traffic generated for railways originating due to the iron and steel industry would be around 120 billion tonne kilometer by 2020. The total traffic for railways including export of iron ore will be around 150 billion tonne kilometer. This estimate, however, may change somewhat depending on the exact location of the new (green-field) plants and mines coming up in the next two decades.

7.3.4 The Railway facilities, therefore, would need to be expanded substantially in view of the renewed investor interests in the creation of additional steel capacities – both in green-field and brown-field projects. The outlay for railways as a percentage of total plan outlay has come down from 10.3 percent (up to 4th Plan) to 6.8 percent (10th Plan). Resource constraints may necessitate participation by the steel industry in the creation of railway infrastructure, especially in the capital-intensive areas of laying tracks and procuring wagons. Besides ensuring availability, the railways would also need to re-examine their freight structure and improve quality of services. Dedicated freight trains in the private sector would be encouraged.

7.4.1 *Roads:* Similarly, the existing road network needs to be expanded and strengthened considerably for reducing the transaction costs of the Indian producers. The steel plants and mines need to be integrated with the on-going programmes of national highway development and also with the proposed rural road schemes for expanding the delivery chain of steel across the country, especially the rural areas.

7.4.2 Geographical coverage of the country by road transportation remains woefully low despite the quantum jump in construction of roadways across India in the recent years. Performance of the Indian road sector is poor in terms of effective sustained velocity of movement. This is demonstrated by the fact that roads now carry an overwhelming 85 percent of passenger traffic and 70 percent of freight, and that highways account for around 40 percent of this movement while making up only 2 percent of the overall road network. The steel industry would be encouraged to create links to the nearest available highways. But the task of expanding the highway network would continue through public-private partnerships.

7.5.1 Ports: After liberalization of the economy, the Indian steel industry has become highly dependent on port infrastructure both in terms of imports of critical input materials like coal and coke and export of saleable steel. Keeping in view the strategic goal of achieving a production of 110 mT of steel per annum and an annual export level of 26 mT by 2019-2020, the port facilities would also have to be expanded substantially. The projected bulk to be handled at ports is shown below:

		Bulk to be handled at ports (mT)					
	2004-05			2019-20			CAGR
	Import	Export	Total	Import	Export	Total	
Raw Materials*	19.3	78	97.3	85	100	185	4.4%
Steel	2	4	6	6	26	32	11.8%
Total	21.3	82	103.3	91	126	217	5.1%

Table 5: Growth in Port Traffic, 2004-05 to 2019-20

*Including iron ore.

7.5.2 The current Government policy allows private capital in port development. Steel producers would be encouraged to develop port and berth facilities so as to improve productivity, turn around time, capacity to handle larger vessels and other operational parameters of efficiency.

7.6 *Power:* The additional requirement of power for the steel industry would be 7,000 MW by 2019-20, requiring an additional investment of Rs. 24,500 crore. The Electricity Act, 2003 and the National Electricity Policy allow captive generation of power and trading of surplus power. This will facilitate growth of investment in captive power plants by the steel industry. At the same time the Government would encourage the industry, and the secondary sector in particular, to bring down the specific consumption of power.

7.7.1 *Financial Resources:* In order to achieve the strategic goal of 110 mT of steel production by 2019-20, the industry would need additional capital to the tune of Rs. 230,000 crore. In addition, funds would be required for technological upgrade of existing facilities. However, the outstanding advances of the banking sector to the industry at the end of 2003-04 were only Rs. 26,295 crore. The cost of capital in India is among the highest as shown in Table 6.

Japan	USA	Germany	China	S. Korea	Brazil	India	World
1.4	4.1	4.2	5-6	6	9.75	11	5

Table 6: Cost of Capital (% per annum)

Source: World Bank Report, 2004

7.7.2 To mobilize such vast resources, direct foreign investment would be encouraged. In addition the external commercial borrowing norms would be reviewed periodically to facilitate smooth inflows of debt, and to bring down the cost of capital. Steel is one of the six sectors that figure in the index of industrial production for "infrastructure," but the fiscal incentives available to the infrastructure projects are not available to the steel industry. Suitable incentives would therefore be devised for the steel industry.

8. STEEL PRICES

8.1 Following de-regulation of prices for integrated steel plants in 1991-92, the domestic prices of steel have become market-determined. Market prices remain in step with international prices, though generally lower. During industry downturns, prices fall and during upturns, they rise. While rationalization of the customs and excise duty structure is aimed primarily at reducing fiscal and revenue deficits, it has an indirect influence on consumer prices. At present, there are around three thousand units manufacturing steel and steel products, which are marketed by over 100,000 traders for ultimate consumers. This dispersal of the distribution chain has been the principal reason why no price regulation of the steel trade has ever been in force. Government has recently set up a Competition Commission to look into complaints of monopolistic pricing.

8.2 *Steel futures:* The cyclical nature of the steel industry deters fresh investments due to risks of recession. The mismatch between demand and supply also leads to price volatility witnessed during recent times. Stagnation in steel prices for long periods followed by sudden

spurt also affects the consumers and the infrastructure industry. Therefore, the efforts of various stakeholders to develop risk-hedging instruments like futures and derivatives would be supported.

9. HUMAN RESOURCES

9.1 The anticipated steel production of 110 mT by 2020 would require an additional workforce of 220,000 after accounting for the expected productivity improvements.⁷ Further the creation of 1 man-year of employment in the steel industry generates an additional 3.5 man-years of employment elsewhere in the economy due to its strong linkages with other sectors such as transport, mining, construction, machinery, and steel fabrication. The total additional employment generated in the economy due to expected production of 110 mT by 2020 would be around 1 million.

9.2 The profile of the required human resources will have a larger share of the skilled and semi-skilled labour force. It is a matter of concern that availability of scientists, engineers and technicians per thousand of population in India is 7.05 compared to 113 in Japan, 90 in U.K., 53 in Korea, 54 in Australia and 85 in Germany.⁸ Further, the task is not limited to increase in the stock of technical manpower. The technical and professional institutes of the country would also be required to impart new competencies and capabilities in tune with changes in technology and the needs of globalization. The existing training and research institutes under the Ministry of Steel would be brought under an umbrella organization would include (a) suitable training programmes especially for the secondary small scale units, (b) promotion of steel consumption through dissemination of information on availability and suitability of steel for various applications, and (c) collection and analysis of data on important parameters of the industry.

⁷ At present there are large inter plant variations in labour productivity from 70 tonnes per man-year to 600 tonnes per man-year. The average productivity by 2020 has been assumed to 340 tonnes per man-year taking a mix of old and new plants.

⁸ Source: Office of Economic Advisor, Ministry of Commerce & Industry

10. TECHNOLOGIES, RESEARCH AND DEVELOPMENT

10.1 Though the choice of technology will be determined by entrepreneurs based on techno-economic considerations, the Government would encourage adoption of technologies, which:

- Have synergy with the natural resource endowments of the country.
- Are conducive to production of high-end and special steel required for sophisticated industrial and scientific applications.
- Minimize damage to the environment at various stages of steel making and mining.
- Optimize resource utilization.
- Facilitate modernization of the steel industry so as to achieve global standards of productivity and efficiency.
- Development of front end and strategic steel based materials.

10.2 India's expenditure on Research and Development has been negligible not only in absolute terms but also as a percentage of GNP at 0.86 percent. This can be compared to the developed world with an average ratio of 2.5 percent.⁹ In the case of steel industry, the ratio of expenditure on R&D as a percentage of turnover is only 0.26 percent.¹⁰

10.3 The low priority to indigenous R&D has given rise to adoption of technologies that are more suited to conditions prevailing in the developed world. For example, resource position of raw materials requires development of technologies, which can use indigenous coking coals and non-coking coals and for improvement in quality of high alumina Indian iron ore. But lack of innovation and adaptation to Indian conditions is resulting in large-scale import of coking coal and low performance in iron making. Aggressive R&D efforts would, therefore, be mounted to create manufacturing capability for special types of steel, substitute coking coal, enrichment and agglomeration of iron ore fines, develop new products suited to rural needs, enhance material and energy efficiency, utilize waste, and arrest environmental degradation. Public sector steel companies would enhance R&D expenditure in the coming years to finance internal R&D efforts and sponsor outside research, which may provide a framework for inter-disciplinary cooperation with the private sector across national boundaries. Government's contribution to fostering basic and applied R&D will be enhanced.

⁹ Handbook of Industrial Policy & Statistics, 2002, Office of Economic Adviser, Ministry of Industry & Commerce ¹⁰ For major steel companies, SAIL 0.36 percent, Vizag 0.04 percent, TISCO 0.20 percent

11. ENVIRONMENTAL CONCERNS

11.1 With a view to making various operations in steel industry environment friendly, environmental audit and life cycle assessment of existing steel plants (including sponge iron units) would be encouraged so that the relevant processes reduce emissions and effluents, minimize and better manage solid waste generation, and improve resource conservation such as energy and water. There are some fine examples of high-level environmental performance in the steel sector already. However, the steel sector would join the efforts of other industries to improve environmental performance even more. The secondary steel producers would be proactively assisted in shifting to processes that are more environment-protective. A similar policy would be followed in assisting natural resource industries, such as iron ore and coal mining, where scientific mining and mineral processing would be encouraged.

12. SECONDARY AND SMALL SCALE SECTOR

12.1 The secondary sector primarily consists of non-integrated and comparatively small steel producers. However there are large variations amongst various units in terms of scale of operations, product-mix and technology. The secondary sector plays an important role in providing employment, meeting local demand of steel in rural and semi-urban areas, and meeting the country's demand of some special products required in small volumes.

12.2 The Government will strive to provide the necessary feedstock to these units at reasonable prices from major plants through the existing mechanism of State Small Industries Corporations.

13. TRADE POLICY

13.1 *Exports:* It is estimated that the country will achieve an export ratio of around 25 percent of the total production in 2019-20 from 11 percent in 2004-05. This is comparable with a 30 percent share of exports in global production. The Government will support all efforts to make available export credit, provide trade information, and cut transaction costs in general. In view of the slow progress of multi-lateral negotiations, Government would focus on regional trade agreements to broaden the export base. Exports of value-added steel and steel products, including indirect export of steel through project exports, would be encouraged.

13.2 *Imports:* Import duty rates have been brought down progressively in the postderegulation period. The Indian steel industry has been able to successfully withstand the competitive pressures of overseas producers. However, integration with the global economy requires that the industry should be protected from unfair trade practices, which become common especially during the periods of downturn. The Government would, therefore, institute mechanisms for import surveillance, and monitor export subsidies in other countries.

14. INVESTMENT PROMOTIONS AND POLICY IMPLEMENTATION

14.1 The very nature of steel production, especially through the integrated route, requires a number of clearances of the central and state governments for investment in the steel sector. Delays at various levels not only add to project costs but also discourage fresh investments. Hence a suitable executing mechanism will be evolved to discharge the following functions:

- Provide a single-window clearance for large projects, to be followed by statutory clearances by the concerned ministries.
- Prepare and implement an action plan for achieving the strategic goal of 110 mT of steel production by 2019-20, with separate plans for the growth of flats and long products.
- Prepare and implement road maps for technological and productivity improvements benchmarking them to global standards.
- Monitor the implementation of the National Steel Policy.
- Conduct reviews to remove infrastructural, procedural and institutional bottlenecks and to achieve policy coordination among central Ministries and State Governments.
