

A STUDY ON STEEL INDUSTRIES IN INDIA

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ABSTRACT

The steel sector is one of the most significant and pivotal sectors in the prominence and growth of a nation. It has been considered as the spine of civilization in the universe. The level of per capita consumption of steel is an important determinant of the socio-economic growth of a nation. This research Study focuses growth and development of Steel industries in India. The Steel industry in India is growing in a rapid speed with demand increment and opportunity creation and attraction to the international players.

KEYWORDS: Steel Sector, Indian Steel Industry, Flat Products, Long Products, Socio-Economic Growth

INTRODUCTION

India is the world's third-largest producer of crude steel (up from eighth in 2003) and is expected to become the second-largest producer by 2016. The growth in the Indian steel sector has been driven by domestic availability of raw materials such as iron ore and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output.

The Indian steel industry is very modern with state-of-the-art steel mills. It has always strived for continuous modernization and up-gradation of older plants and higher energy efficiency levels. India's Iron & Steel industry is more than a century old. More than 3500 different varieties of steel industry are available in the steel industry of India. These can, however, be classified into two broad categories, Flat Products and Long Products.

Flat Products include plates and hot rolled sheets such as coils. There are derived from slabs. One of the major uses of steel plates is in ship building. Long Products include bars, rods, wires, ropes and piers. These are called long due to their shape. Long products are made from billets and blooms. These are mostly used in housing and construction and also in railway tracks.

It is a basic industry. Steel is the backbone for any economy. The experience of the developed as well as the developing countries has shown that the important role played by the iron and steel industry in the economic growth. It is a core industry. For many industries, such as engineering, machine tools, ship buildings, railways, transport, equipments,

electrical and many others, Iron and Steel industry is a basis industry.

These all industry increased consumption of iron and steel. In a sense it may be said that the iron and steel industry is the mother industry. There is a close correlation between the level of economic growth of GDP of a country and the quantum of steel consumption. It means that the direct relation between investment in the economy and the growth of steel industry. Therefore, rapid industrialization and economic development of a country depends on a very great extent on the development of iron and steel industry.

Global Scenario

- In 2014, the world crude steel production reached 1665 million tonnes (mt) and showed a growth of 1% over 2013.
- China remained the world's largest crude steel producer in 2014 (823 mt) followed by Japan (110.7 mt), the USA (88.2 mt) and India (86.5 mt) at the 4 th position.
- WSA has projected Indian steel demand to grow by 6.2% in 2015 and by 7.3% in 2016 as compared to global steel use growth of 0.5% and 1.4% respectively. Chinese steel use is projected to decline in both these years by 0.5%.
- Per capita finished steel consumption in 2014 is estimated at 217 kg for world and 510 kg for China by WSA.

Source: WSA in June 2015

Indian Scenario

- The Indian steel industry has entered into a new development stage from 2007-08, riding high on the resurgent economy and rising demand for steel.
- Rapid rise in production has resulted in India becoming the 3 rd largest producer of crude steel in 2015 and the country continues to be the largest producer of sponge iron or DRI in the world.
- As per the report of the Working Group on Steel for the 12 th Five Year Plan, there exist many factors which carry the potential of raising the per capita steel consumption in the country. These include among others, an estimated infrastructure investment of nearly a trillion dollars, a projected growth of manufacturing from current 8% to 11-12%, increase in urban population to 600 million by 2030 from the current level of 400 million, emergence of the rural market for steel currently consuming around 10 kg per annum buoyed by projects like Bharat Nirman, Pradhan Mantri Gram Sadak Yojana, Rajiv Gandhi Awaas Yojana among others.
- At the time of its release, the National Steel Policy 2005 had envisaged steel production to reach 110 million tonnes (mt) by 2019-20. However, based on the assessment of the current ongoing projects, both in greenfield and brownfield, the Working Group on Steel for the 12 th Five Year Plan has projected that domestic crude steel capacity in the county is likely to be 140 mt by 2016-17 and has the potential to reach 149 mt if all requirements are adequately met.
- The National Steel Policy 2005 is currently being reviewed keeping in mind the rapid developments in the domestic steel industry (both on the supply and demand sides) as well as the stable growth of the Indian economy

since the release of the Policy in 2005.

Production

- Steel industry was de-licensed and de-controlled in 1991 & 1992 respectively.
- Today, India is the 3 rd largest producer of crude steel in the world.
- In 2014-15, production for sale of total finished steel (alloy + non alloy) was 91.46 mt, a growth of 4.3% over 2013-14.
- Production for sale of Pig Iron in 2014-15 was 9.7 mt, a growth of 22% over 2013-14.
- India is the largest producer of sponge iron in the world with the coal based route accounting for 90% of total sponge iron production in the country.
- Data on production for sale of pig iron, sponge iron and total finished steel (alloy + non-alloy) are given below for last five years:

Table 1

Indian Steel Industry : Production For Sale (In Million Tonnes)					
Category	2010-11	2011-12	2012-13	2013-14	2014-15
Pig Iron	5.68	5.371	6.870	7.950	9.694
Sponge Iron	25.08	19.63	14.33	18.20	20.38
Total Finished Steel (alloy + non alloy)	68.62	75.70	81.68	87.67	91.46
Source: Joint Plant Committee					

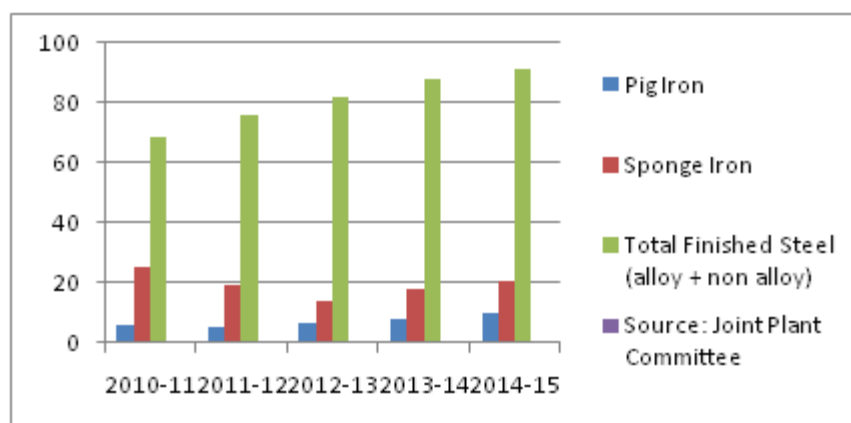


Figure 1

Demand - Availability Projection

- Demand – availability of iron and steel in the country is projected by Ministry of Steel in its Five Yearly Plan documents.

- Gaps in availability are met mostly through imports.
- Interface with consumers by way of a Steel Consumers' Council exists, which is conducted on regular basis.
- Interface helps in redressing availability problems, complaints related to quality.

Steel Prices

- Price regulation of iron & steel was abolished on 16.1.1992. Since then steel prices are determined by the interplay of market forces.
- Domestic steel prices are influenced by trends in raw material prices, demand – supply conditions in the market, international price trends among others.
- An Inter-Ministerial Group (IMG) is functioning in the Ministry of Steel, under the Chairmanship of Secretary (Steel) to monitor and coordinate major steel investments in the country.
- As a facilitator, the Government monitors the steel market conditions and adopts fiscal and other policy measures based on its assessment. Currently, basic excise duty for steel is set at 12.5% and there is no export duty on steel items. The government has also imposed export duty of 30% on all forms of iron ore except low grades which carry a duty of 10% while iron ore pellets have a export duty of 5% in order to control ad-hoc exports of the items and conserve them for long term requirement of the domestic steel industry. It has also raised import duty on most steel imports by 2.5%, taking the import duty on carbon steel flat products to 10% and that on long products to 7.5%.
- For ensuring quality of steel several items have been brought under a quality control order issued by the Government.

Imports

- Iron & steel are freely importable as per the extant policy.
- Data on import of total finished steel (alloy + non alloy) is given below for last five years:

Table 2

Indian Steel Industry: Imports (In Million Tonnes)					
Category	2010-11	2011-12	2012-13	2013-14	2014-15
Total Finished Steel (alloy + non alloy)	6.66	6.86	7.93	5.45	9.32

Source: Joint Plant Committee

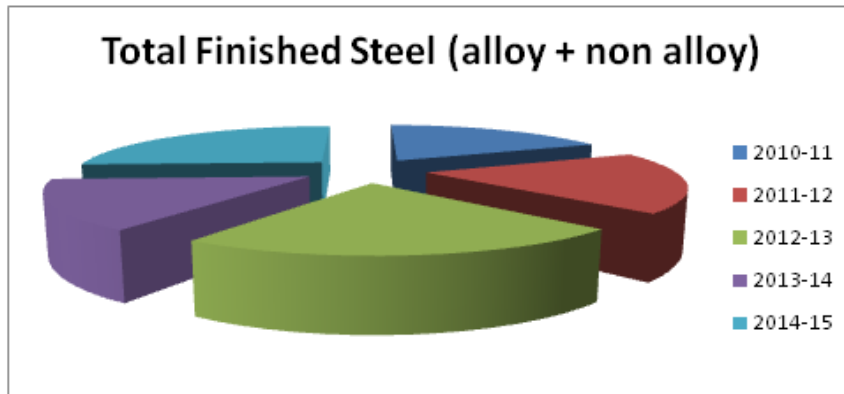


Figure 2

Exports

- Iron & steel are freely exportable.
- Data on export of total finished steel (alloy + non alloy) is given below for last five years:

Table 3

Indian Steel Industry : Exports (In Million Tonnes)					
Category	2010-11	2011-12	2012-13	2013-14	2014-15
Total Finished Steel (alloy + non alloy)	3.64	4.59	5.37	5.98	5.59

Source: Joint Plant Committee

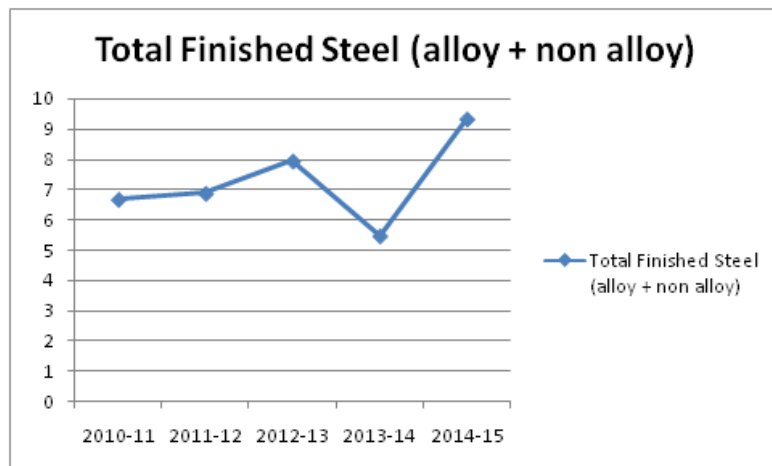


Figure 3

Top Steel Industries IN India

1. JSW STEEL

JSW Steel is one of the leading manufacturers of the steel of the country. The journey started in the year 1982 when the organization started functioning with a single mill at Vasind in Mumbai. The subsequent period witnessed an

expansion of the company to the extent which a few might have imagined. This particular phase saw several acquisitions by the company after the merger of Jindal Iron and Steel Company and the Jindal Vijaynagar Steel Ltd in 2005.

Manufacturing Units

The operations propelled in volume and currently the organization boasts of six plants at different places which are Salem in Tamil Nadu, Vijayanagar in Karnataka and Vasind, Dolvi, Tarapur and Kalmeshwar in Maharashtra. The manufacturing units have bolstered the production capacity of the firm over the years and the current capacity is around 15 million tons per annum. The goals of the company are pretty high and it wishes to touch the 40 million tons capacity mark over the next decade. The goals are backed by planning of expansion of the current units and setting up new plants in states like West Bengal and Jharkhand.

Success Mantra of JSW Steel

Similar to any other big organization, the company has achieved success on the backdrop of strong administration, technology, manufacturing, supply chain and marketing. The fact that the company has not compromised with quality has made the unprecedented success possible. One of the key attribute has definitely been its land acquisition policy which has indeed been emulated by many other manufacturing giants.

Products

The bracket of the products that the company produces is quite large. It includes almost everything from the family of the steel. The hot rolled and the cold rolled coils, the corrosion resistant durable galvanized steel, the TMT bars branded as the JSW Neosteel and many other products which cater to many industries. Almost all the products of the company have found its market outside the country which accounts for the stupendous success of the firm.

Awards and recognitions

The great efforts of this esteem organization reflect in the cabinet of awards it possesses. The list virtually does not seem to terminate. Some of the most eminent are "Commendation Certificate for significant Achievement towards Business Excellence", "Golden Peacock Eco-Innovation Award for the year 2013", "The Industry leadership award", "National sustainability Award 2008", "Golden Peacock Award for the Corporate Social Responsibility," Award for Good Green Governance by SRISHTI".

2. RASHTRIYA ISPAT NIGAM LTD/VIZAG STEEL

Very few organizations earn the respect and fetch the numerical success at the same time. Rashtriya Ispat Nigam Ltd is one of those companies. It started its journey in 1982 and since then

It has scripted stories of success. This is also known as the Vizag steel and is currently an ownership of the Government of India. It was conferred to the Navaratna status by the government in the year 2010, an award for its achievements over a very small span of time. The Organization was a result of the collaboration it had with USSR and Germany. The organization is not only counted as one of the best steel producers in the country but it definitely features in the top list of the integrated steel producers of the world. The story was a bit different in the beginning though.

The initial journey was a little rough where the organization suffered huge losses in the initial years. The complete

turnaround saw the firm registering increase in the profits by about 200%. The production capacity has also gone up to almost 7 million tons which is a prolific figure. The company has great plans of expansion, where the annual quantity of the liquid steel may scale up to 16 million tons by 2020.

Head quartered at Visakhapatnam, the steel reaches out to every nook and corner of the country in different forms of steel. The marketing arm of the company has also affixed a lot of responsibilities and they are channelized through the rural dealers as well as the urban and the high profile city dealers. E-Auction has also become a very important tool for the company to procure Orders. The export orders have ensured a great dominance of the Organization in the foreign markets as well.

Products

The company offers a variety of products to the market from the family of the steel. It produces and markets the forged rounds, the steel angles, and wire rods of various steel grades. Another product of the organization which has scaled great levels of popularity is the reinforcement bars in straight lengths or coiled form. There is a wide range in the length available as well. There are the presence of the nested and the interlocked bars as well. All these products have found a secured market in other countries making the success of the company very much a possibility.

Awards and recognitions

There is no denial to the fact this esteem Organization features among the top notch companies and more so when it comes to awards. It received many awards the most prestigious of it being conferred to the Navaratna status. It is also bestowed upon some other eminent awards such as the “Corporate vigilance excellence award”, “National vigilance excellence award” and the “Star performer in Exports award”. The list is pretty much non exhaustive.

3. TATA STEEL

Tata Steel: is certainly one amongst them. The organization was the brain child of the greatest entrepreneur of the nation Mr Jamsetji Nusserwanji Tata who believed that steel would bring a revolution and an economic independence to the country. It came into existence in the year 1907 after years of research which was conducted prior to the setting up of this esteem organization.

The company works on the values it imbibed from its founder that every stakeholder of the company should be benefitted which as a synergic effect makes the society a better place to live. The Tata Code of conduct often referred to as the “code” guides all its employees who are spread all over the world and reminds them of the values, ethics and the corporate principles. The company has also a set of active policies at place in various areas of operations which defines the approach in a vivid way. Moving into the figures, the performance of the company seems a fairy tale.

Tata Steel Limited Presence

The organization currently has a presence in more than 50 countries and employs workers in excess of 80,000.

Manufacturing Units and Production Capacity

The capacity of steel production is around 30 million tons per annum which is few notches above its closest

competitor. The turnover for the last financial year was a staggering 140,000 crores. It has manufacturing operations in different continents as well. The annual production capacity of the company's arm in Europe is 18 million tons per annum. The organization has also achieved great success in production in the south East Asia region. The manufacturing presence of the firm is there in countries like Thailand, Singapore, Australia, China and Vietnam. The company has always worked on the principle of innovation and is continuing to do so.

Innovative Technology

The superlative technical arm has ensured that the company comes up with new innovated products rather sporadically. No mention of this esteem organization is complete without mentioning about its CSR activities. They have indeed bettered the world of many.

Products

The Organization has a wide platter of products which are used in various industries. It specializes in the hot rolled coils, the wire rods, the construction bars, plates, sections wide variety of bearings, auto assemblies and many more. It specially takes care of the agricultural sector which includes the manufacturing of the sickles, shovels, crowbars, hammers and axes. The company caters to more than 5000 customers and 2 million consumers annually.

Awards and recognitions

It is almost impossible to mention all the awards and the recognition this stalwart has been able to fetch over a century. Some of the most prestigious are "World's most ethical company", "Prime Minister's Best performing Integrated Steel Plant", "Golden peacock Environment management award". The list obviously doesn't end here.

4. SAIL

Steel Authority of India Limited(SAIL) is a leading Public Sector Undertaking(PSU) in which the Government of India owns about 86 percent of equity. It is a fully integrated iron and steel maker, producing both basis and special steels for domestic construction, engineering, power, railway, automotive ad defense industries and for sale in export markets. It is ranked amongst the top ten public sector companies in India in terms of turnover.

They manufacturers and sells a broad range of steel products, including hot and cold rolled sheets and coils, galvanized sheets, electrical sheets, structural's, railway products, plates, bars and rods, stainless steel and other alloy steels.

SAIL have five integrated plants and three special steel plants, located principally in the eastern and central regions of India and situated close to domestic sources of raw materials, including the company's iron ore, lime-stone, and dolomite mines. The company has the distinction of being India's largest producer of iron ore and of having the country's second largest mines network. This gives them a competitive edge in terms of captive availability of iron-ore, limestone, and dolomite which are inputs for steel making.

5. VISA STEEL

This steel company is Flagship Company of giant VISA group. With its corporate office at Kolkata, they have three manufacturing plants, two branch offices and PAN India network of dealers and distributors. Their manufacturing

plants are located strategically nearer to raw material producing belt of country. Their two plants are located at Odisha and one at Chattisgarh. They are planning to setup one more steel plant of 1.25 million TPA at Madhya-Pradesh.

- Type - Private
- Head office – Kolkata, West Bengal
- Establishment – 2003

6. BHUSHAN STEEL

Bhushan Steel is placed at sixth position. Bhushan Steel was founded in the year 1987 with its manufacturing plant at Sahibabad. They are India's 3rd largest secondary steel producer. Headquartered in Delhi, they have their factories at UP, Odisha and Maharashtra which are equipped with modern machineries and skilled workforce. They have strong focus on R&D department and constantly strive for newer and better products. They have India's prestigious industrial group as their clients such as Maruti, Godrej, LG Electronics, Mahindra & Mahindra, Eicher Tractors, Ashok Leyland, Hitachi ACs and many more.

- Type - Private
- Head office – New Delhi, India
- Establishment – 1987

7. ESSAR STEEL

Essar Steel is placed at seventh position. Essar Steel founded in the year 1998, this ESSAR Group Company is leading name in steel industry in India and abroad. They have their steel manufacturing operations in four countries – India, Canada, USA and Indonesia. In India, they have manufacturing factories located at Hazira Bailadilla, Dabuna,, Pune, Paradip and Visakhapatnam. All of their facilities have various quality certifications such as ISO: 9001:2000, OHSAS 18001:1999, ISO 9002, etc.

- Type - Public company
- Head office – Mumbai, Maharashtra
- Establishment – 1998

8. THE FERRO ALLOYS CORPORATION LIMITED

The Ferro Alloys Corporation Limited was established in 1955 and has head office in Nagpur. It is ISO 9001:2000 certified company that works to delivery best in quality steel. Presently company has more than 18000 employees that work passionately for the success of company.

- Head office – Nagpur, Maharashtra
- Establishment – 1955
- Type - Public

- Employees - 18,000

9. MAHINDRA UGINE STEEL

Mahindra UGINE Steel is a leading steel production company of India. Founded in the year 1962 at Mumbai, MUSCO is a part of Mahindra Group. They are known for manufacturing of rings, specialty steel and stampings. They were the first Indian steel company to get ISO certification. They have been awarded several recognitions and awards by various national and international bodies. They have setup residential colonies for their workers in 41.94 hectares with play area and school facilities.

- Corporate office – Mumbai, Maharashtra
- Establishment – 1962

10. WELSPUN CORP LTD

WCL is leading name in pipe and plates industry with global footprints in countries like UK, Middle East and USA. Headquartered in Mumbai, their plants are located at Gujarat and Karnataka. The company has 24000 working force around the world. Their products have won many prestigious international awards.

- Type - Public
- Employees - 24,000
- Head office – Mumbai, Maharashtra
- Establishment – 1995

11. AHMEDABAD STEELCRAFT LTD

Ahmedabad Steelcraft Ltd is counted among the famous steel producing companies of India that was started in 1972 and has net profit was Rs. 18.10732 Million by March 2014. Company has presence including countries like US, Canada, UK, Europe, Australia, New Zealand, South East Asia, Caribbean countries, Mauritius, Israel and Guyana.

Establishment: 1972 | Revenue : 1.97312 (USD in Millions)

12. AKASHANA GLOBAL STEEL LTD

Akashna Global Steel Ltd was started in 1985 and has becoming a prominent player of steel industry. Company has annual income of Rs Rs. 1.149166 Million by 2012.

Establishment: 1985 | Revenue : 0.0109825 (USD in Millions)

13. ANIL SPECIAL STEEL INDS. LTD

Anil Special Steel Inds Ltd was started in 1968 and has market capitalization of Rs 94.35989772 Million. Company is ISO 9001:2000 certified and has more than 9 branches across PAN India. Company manufacture products like Cold Rolled and Spheriodized Annealed Steel Strips Hardened and Tempered steel strips.

Establishment: 1968 | Revenue : 50.8327 (USD in Millions) | Market Cap: 94.35989772 (Rs. in Millions) | Total Income : Rs. 3149.493433 Million | Net Profit - Rs. 49.090863 Million |.

14. ASHIRWAD STEEL & INDS.LTD was started in 1986 and has more than 28 years of experience of steel industry. Company was achieved remarkable achievements under the leadership of Puranmal Agarwal. It has Total Income - Rs. 179.111864 Million & Net Profit of Rs. 3.722874 Million

Establishment: 1986 | Revenue : 2.80356 (USD in Millions) | Market Cap : 62.625 (Rs. in Millions)

15. BAJAJ STEEL INDS.LTD

Bajaj Steel Inds. Ltd is a famous steel manufacturing company that was established in 1961 and has been in the industry from last 50 years. Company launched its IPO in 1985 and has market capitalization of Rs 500 millions. Company has huge production units across India that manufacture high quality steels like Cotton Baling Press, Double Roller

Co.Establishment: 1961 | Revenue: 74.6733 (USD in Millions) | Market Cap: 500.08 (Rs. in Millions)

16. BANGA LAXMI STEEL TRADING COMPANY LTD

Banga Laxmi Steel Trading Company Ltd. is a famous steel manufacturing company based out in west bengal. Company was setup in 1973 and has been growing at incredible rate.

Establishment: 1973

17. BELLARY STEELS & ALLOYS LTD

Bellary Steels & Alloys Ltd was started in 1984 to high quality produce steel and iron. Company has integrated steel plants with production capacity for more than 500000 TPA to 2 MTPA. Other one is Thermal Power Plant that use coal & furnace oil. This Plant is production capacity of 12 MW and equipped with all safety measures.

Establishment: 1984 | Revenue : 7.87269 (USD in Millions) | Market Cap : 1397.03512 (Rs. in Millions)

18. BENGAL STEEL INDUSTRIES LTD

Bengal Steel Industries Ltd was started in 1947 and has been producing quality steel from last 60 years. It is ISO-9001-2000 certified company and follows quality guidelines as per ISO standards. It has two production units that are equipped with modern machines and has excellent team of professionals.

Started:1947 | Revenue :0.0944172 (USD in Millions) | Market Cap: (Rs. in Millions) | Total Income - Rs. 4.827439 Million (year ending Mar 2012) | Net Profit - Rs. 7.409549 Million (year ending Mar 2012)

19. FACTOR STEEL LIMITED

Factor Steel is leading steel and alloy manufacturing company backed by Factor Group. They produce wide variety of products such as Stainless Steel, Alloy Steel, Valve Steel, Free Cutting Steel, Semi Free Cutting Steel, Carbon Steel etc. Their steel products are extensively used by Automobile companies, Construction companies, Sugar Industry, Railway springs, engineering components, Valve industry and tools industry.

CONCLUSIONS

The New Industrial policy opened up the Indian iron and steel industry for private investment by (a) removing it from the list of industries reserved for public sector and (b) exempting it from compulsory licensing. Imports of foreign technology as well as foreign direct investment are now freely permitted up to certain limits under an automatic route. Ministry of Steel plays the role of a facilitator, providing broad directions and assistance to new and existing steel plants, in the liberalized scenario.

The liberalization of industrial policy and other initiatives taken by the Government have given a definite impetus for entry, participation and growth of the private sector in the steel industry. While the existing units are being modernized/expanded, a large number of new steel plants have also come up in different parts of the country based on modern, cost effective, state-of-the-art technologies. In the last few years, the rapid and stable growth of the demand side has also prompted domestic entrepreneurs to set up fresh greenfield projects in different states of the country.

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