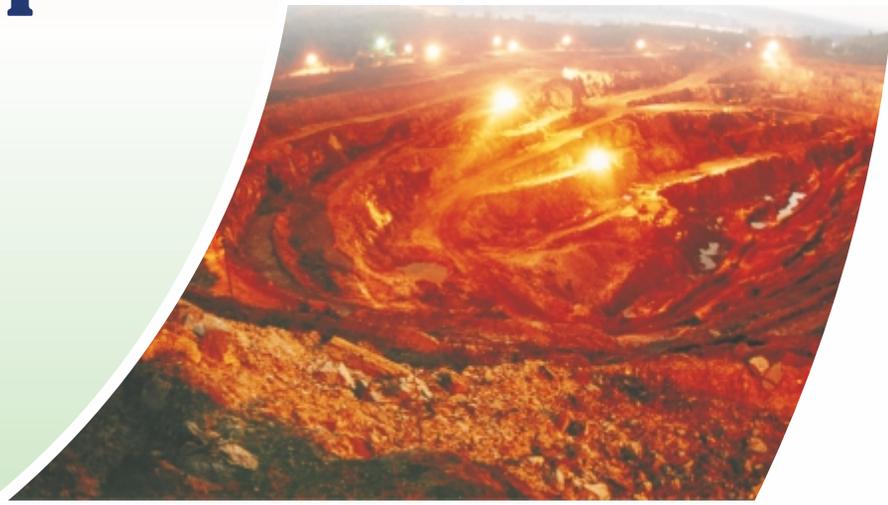




ANNUAL REPORT 2021-22



MINISTRY OF STEEL
Government of India



AatmaNirbharBharat



SAIL has supplied 48, 200 tonnes of steel for the 341 Kms long six lane wide Purvanchal Expressway, inaugurated by Shri Narendra Modi, Hon'ble Prime Minister in Sultanpur, Uttar Pradesh on 16th November, 2021.



ANNUAL REPORT 2021-22



सत्यमेव जयते

Ministry of Steel
Government of India

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CHAPTER-I

HIGHLIGHTS

1.1 Trends and Developments in Steel Sector

- During the period January to December 2021, India was the 2nd largest producer of Crude Steel in the world. [provisional, Source: World Steel Association (WSA)].
- Crude Steel production expanded from 101.455 Million Tonne (MT) in 2017 to 118.134 MT (provisional) in 2021. Crude Steel production in 2021 showed a growth of 17.8% over 2020.
- Capacity for domestic crude steel expanded from 137.975 Million Tonne Per Annum (MTPA) in 2017 to 154.269 MTPA (provisional) in 2021.
- During 2021 (January-December), the following was the industry scenario (provisional, Source: JPC):
 - a) Crude Steel production stood at 118.134 MT. SAIL, RINL, TSL Group, AM/NS, JSWL & JSPL together produced 73.057 MT with a share of 62% in total production which was up by 14.0% over the Corresponding Period Last Year (CPLY). The rest amounting to 45.08 MT came from the other producers. With 81% share in total Crude Steel production, the Private Sector produced 95.286 MT Crude Steel which was up by 17.2% over the CPLY.
 - b) Pig Iron production was at 5.876 MT, up by 29.2% over the CPLY. With a share of 27% in total Pig Iron production, SAIL, RINL, TSL Group, AM/NS, JSWL & JSPL together produced 1.582 MT which was up by 26.6% over the CPLY. The rest came from the other producers with a growth of 30.2% over the CPLY. The Private Sector produced 5.150 MT which was up by 29.6% over the CPLY.
 - c) Facts for Total Finished Steel (non-alloy + alloy/stainless) in 2021 [provisional (January-December), Source: JPC]:
 - ❖ Production of Total Finished Steel stood at 111.858 MT showing a growth of 21.3% over the year.
 - ❖ Export of Total Finished Steel stood at 12.799 MT showing an annual growth of 26.1%.
 - ❖ Import of Total Finished Steel was at 5.001 MT, up by 12.0% over the CPLY.
 - ❖ India was a net exporter of total Finished Steel.
 - ❖ Consumption of total Finished Steel was 106.134 MT showing a growth of 18.8% over the CPLY.

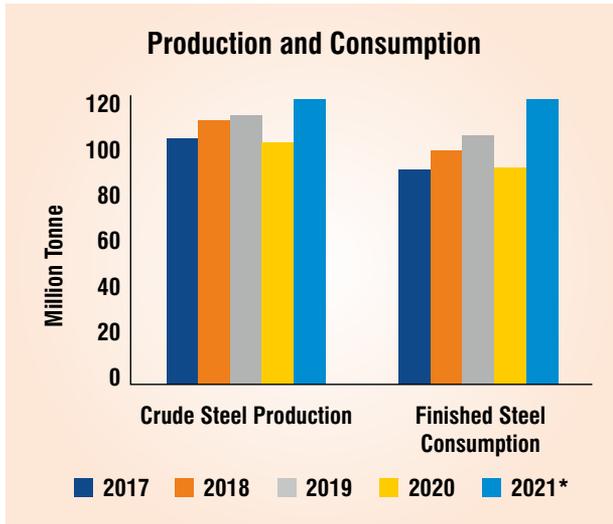
Detailed information on production, consumption, import and export of total Finished Steel and production of Crude Steel for the last five years (2017-2021) are shown in the table below.

(in Million Tonne)

Item	2017	2018	2019	2020	2021*
Crude Steel					
Production	101.455	109.250	111.344	100.256	118.134
Finished Steel					
Production	93.737	100.574	104.062	92.231	111.858
Consumption	88.679	96.737	102.622	89.331	106.134
Import	7.828	7.295	7.440	4.463	5.001
Export	10.871	6.692	8.205	10.150	12.799

Source: JPC; *Provisional, January-December, 2021





*Provisional

1.2 Meetings of the Consultative Committee for Ministry of Steel

1.2.1 Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh, chaired the meeting of the Consultative Committee of the Ministry of Steel in Parliament House Annexe on 06.08.2021 on the subject "Production-Linked Incentive (PLI) Scheme for Specialty Steel". Members of the Committee were briefed about the features of the Production Linked Incentive (PLI) Scheme, a part of Hon'ble Prime Minister's vision of Atmanirbhar Bharat, approved by the Union Cabinet on July 22, 2021 and notified on July 29, 2021. The Scheme has been further amended vide corrigendum dated December 24, 2021. The scheme, in brief, aims at :-

- Enhancing domestic production of value-added steel by attracting significant investment.
- Incentivising production of speciality steel with incentives payable from 2023-24 and will be applicable for five product categories, viz, Coated/Plated Steel Products, High Strength/Wear Resistant Steel, Specialty Rails, Alloy Steel Products and Steel Wires, and Electrical Steel.
- Companies registered in India engaged in manufacturing the identified product categories using steel melted and poured within the country are eligible to participate in the scheme. Selection of companies will be through a transparent selection process with equal weightages to both incremental production and investment thresholds.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh chairing the meeting on "Production-Linked Incentive (PLI) Scheme for Specialty Steel".



The budgetary outlay for the scheme is Rs. 6,322 crore. Detailed guidelines for effective implementation of the scheme have been issued on 20th October, 2021. The Government anticipates bringing in additional investment of about Rs.40,000 crore along with generating an overall employment to about 5.25 lakh. Further, it is anticipated that the composition of specialty steel in import basket will reduce to a minimum in the next few years.

1.2.2 Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh chaired the second meeting of the Consultative Committee of the Ministry of Steel, at Kevadia, Gujarat on 15.11.2021 on the subject "Steel Usage".

Members of the Committee were briefed about the important role being played by Steel in the industrial development of India, being a key input for critical sectors such as Infrastructure, Construction, Engineering & Packaging, Automobile and Defence. It was informed that during the financial year 2020-21, the total finished steel consumption in the country was 96.2 Million Tonne and is expected to reach about 160 Million Tonne (MT) by 2024-25 and about 250 MT by 2030-31. It was informed that the Government's recently announced GatiShakti Master Plan will complement the Rs.100 lakh crore investment plan for infrastructure developed over the next five year. Since construction and infrastructure sectors are major consumers of steel and will continuously be the driver of increased consumption of steel it will further give boost to the steel usage in the country.

1.2.3 Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh chaired the third meeting of the Consultative Committee of the Ministry of Steel, in Parliament House Annexe on 21.12.2021 on the subject "Development of Manganese ore industry in India". The members of the Committee were briefed about the issue of manganese ore exploration with State Governments and the possibilities of new manganese bearing areas in India to boost the domestic production of manganese ore as per National Steel Policy, 2017 which will help in achieving the objective of "AtmaNirbhar Bharat". During the meeting, an entire gamut of issues was covered including usage of Manganese ore, Global scenario of manganese ore, Manganese production in India and contribution of MOIL in country's manganese production and future Road map as per Steel demand in the country by 2030.

1.2.4 Hon'ble Minister of Steel, Sh. Ramchandra Prasad Singh and the Chairman of the Consultative Committee of the Ministry of Steel held meeting with the members of the Committee on 10.02.2022 in Parliament House Annexe, New Delhi along with Hon'ble Minister of State for Steel and Rural Development, Sh. Faggan Singh Kulaste and senior officers of the Ministry of Steel and CPSEs. The subject for discussion by the Committee was "Policy Interventions for Secondary Steel Sector".

A detailed presentation was made by the Ministry of Steel covering the strengths, challenges and actions taken including way forward for secondary steel sector.

During the meeting, Hon'ble Members of the Committee offered valuable suggestions for further strengthening the secondary steel sector. Hon'ble Chairman of the Committee appreciated the suggestions given by the members and reiterated the commitment of the Government for growth of the secondary steel sector and moving towards AtmaNirbhar Bharat in steel sector.

1.3 Highlights of CPSEs during 2021-22

1.3.1 Steel Authority of India Ltd. (SAIL)

- Crude Steel production of 12.770 MT and Finished Steel production of 10.005 MT has been achieved upto December, 2021.
- Sales Turnover of Rs. 72,220 crore (upto December, 2021) has been achieved as against Rs. 45,286 crore during CPLY.
- Profit Before Tax (PBT) of Rs. 12,829 crore (upto December, 2021) has been achieved as against PBT of Rs. 2,271 crore during CPLY.
- Profit After Tax (PAT) of Rs. 9597 crore (upto December, 2021) has been achieved.

- Networth of the company was Rs. 37,182 crore as on 31.12.2019, Rs. 39,777 crore as on 31.03.2020, Rs. 43,495 crore as on 31.03.2021 and Rs. 50,594 crore as on 31.12.2021.
- An interim dividend of Rs. 4 per share has been declared for the FY 2021-22.

1.3.2 Rashtriya Ispat Nigam Ltd. (RINL)

- Crude Steel production of 4.01 MT and Finished Steel production of 2.774 MT, a growth of 47% and 75% respectively, over CPLY has been achieved.
- Sales Turnover of Rs. 19,401 crore and Saleable Steel Sales volume 37.33 lakh tonne (provisional, upto December, 2021) a growth of 69% and 21% respectively, over CPLY has been achieved.
- PBT of Rs. 946 crore (provisional, upto December, 2021) has been achieved as against loss of Rs. 2017 crore during CPLY.
- PAT Rs. 790 crore (provisional, upto December, 2021) has been achieved against loss of Rs. 1839 crore during CPLY.
- Networth of the company is Rs. 2464 crore as on 31.03.2021 and Rs. 3240 crore as on 31.12.2021.
- Export of around 10 Lakh tonne of saleable steel has been achieved till December, 2021
- Export sales of Rs. 4572 crore has been achieved, a growth of 45% over CPLY.

1.3.3 NMDC Ltd.

- Production of iron ore 28.33 MT (upto December, 2021) has been achieved.
- Total Sale of 28.28 million tonne (upto December, 2021) has been achieved.
- Turnover of Rs. 19179 crore (actual, upto December, 2021) has been achieved.
- PBT of Rs. 10,101 crore (actual, upto December, 2021) has been achieved.
- PAT of Rs. 7,583 crore (actual, upto December, 2021) has been achieved.
- NMDC has paid 1st interim dividend of Rs. 9.01 per share and has declared 2nd interim dividend of Rs. 5.73 per share. (Total Rs. 14.74 per share) for FY 2020-21.

1.3.4 MOIL Ltd.

- Production of 8.59 lakh tonne of manganese ore (provisional, upto December, 2021) has been achieved.
- Total income of the company was Rs. 1028.15 crore (provisional, upto December, 2021).
- PBT of Rs. 282.46 crore (provisional, upto December, 2021) has been achieved.
- PAT of Rs. 211.37 crore (provisional, upto December, 2021) has been achieved.
- The Networth of the company was Rs. 2819.90 crore as on 31.03.2021 and Rs. 2920.61 crore as on 31.12.2021 (provisional).
- MOIL has paid final dividend of Rs.116.29 crore for the FY 2020-21 which includes Rs. 62.61 crore paid to Central Government upto December, 2021.



1.3.5 MECON Ltd.

- Turnover of Rs. 280.10 crore (provisional, upto December, 2021) has been achieved.
- The Networth of the Company was Rs. 335.79 crore (provisional) as on 31.12.2021.
- PBT/PAT of (-) Rs. 82.27 crore (provisional, upto December, 2021).

1.3.6 MSTC Ltd.

- Turnover of Rs. 411.50 crore (provisional, upto December, 2021) has been achieved.
- PBT of Rs. 131.34 crore (provisional, upto December, 2021) has been achieved.
- PAT of Rs. 85.39 crore (provisional, upto December, 2021) has been achieved.
- The company has paid an interim dividend of Rs.14.08 crore (Gol share of Rs. 9.12 crore) for the FY 2021-22.

1.3.7 KIOCL Ltd.

- Production of Iron Ore Pellets of 1.385 MT (upto December, 2021) has been achieved.
- Sale of 1.261 MT of Iron Ore Pellets (upto December, 2021) has been achieved.
- Revenue from Operations of Rs. 1868 crore (provisional, upto December, 2021) has been achieved.
- PBT of Rs. 102.64 crore (upto December, 2021) has been achieved.
- PAT of Rs. 76.81 crore (upto December, 2021) has been achieved.
- The company has declared an interim dividend of Rs. 0.98 per equity share for FY 2020-21.

CHAPTER-II

ORGANISATIONAL STRUCTURE AND
FUNCTIONS OF MINISTRY OF STEEL

2.1 Introduction

The Ministry of Steel is under the charge of the Minister of Steel and is assisted by Minister of State for Steel. The Ministry is responsible for planning and development of Iron and Steel industry, development of essential inputs such as iron-ore, limestone, dolomite, manganese ore, chromites, ferro-alloys, sponge iron etc. and other related functions. Details of the subjects allocated to the Ministry are at Annexure-I. The details of Minister-in-charge and the officers up to the level of Deputy Secretary is at Annexure-II. The Ministry of Steel has a sanctioned strength of 246 employees out of which 190 employees are in position as on December 31, 2021.

2.1.1 Key Functions of the Ministry of Steel

- Promoting the development of infrastructure required for enhancing national steel production.
- To facilitate adequate availability of raw materials for steel industry from domestic & overseas sources.
- Creating and updating a comprehensive data base for various segments of the steel industry.
- To monitor the physical and financial performance of CPSEs and capital expenditure on projects.
- Monitoring performance of commitments made in the MOUs and modernization and expansion programme of CPSEs.
- Facilitate improvement in performance of Iron & Steel industry through R&D and technology intervention, Quality Control and improvements in techno-economic parameters.
- Boosting domestic demand for steel through promotional efforts.

2.1.2 Key Divisions

The Ministry has 34 sections dealing with various subjects. The key divisions include Board Level Appointments, Coordination, International Cooperation, Raw Materials, Technical Division, Steel Development (Institutes), SAIL, MF, NMDC, MECON, RINL, KIOCL, MOIL, Trade and Taxation, Make in India (Industrial Development).

2.2 Other Related Organisations of the Ministry of Steel

2.2.1 Joint Plant Committee (JPC)

Accredited with ISO 9001: 2015 certification, Joint Plant Committee (JPC) is the only institution in the country under the aegis of Ministry of Steel, Government of India to collect data on the Indian iron and steel industry, resulting in the creation and maintenance of a complete and non-partisan databank on this industry. JPC with its headquarters at Kolkata has a Pan-India presence through regional and extension offices engaged in data collection.

JPC is currently headed by Additional Secretary to Government of India, Ministry of Steel as its Chairperson and has representatives from the Government of India, steel producers, steel associations and other organisations as its esteemed Members. JPC performs following functions:

- Collection of production, stock and raw material data from the producers.
- Collection of domestic retail market prices from four metros.



- Collection of emerging data items like retail prices from steel clusters, employment data, etc.
- Regular follow-up, monitoring and related liaison activities with industry.
- Visit to defaulting steel producing units for on-spot data collection.
- Active role in field level collection during segment surveys.
- Organizational support to seminars and exhibitions including Ministry of Steel events such as Steel Consumers' Council meetings, Secondary Steel Sector awards among others.

A range of publications and data reports, on monthly and annual basis, ensure the spread of information and data to all stakeholders of industry. A dynamic website with online query module and a mobile app ensures access to data in real time to all stakeholders.

Economic Research Unit (ERU), a wing of JPC at New Delhi, provides support for research, forecasting exercises, examination of policy matters and techno-economic studies.

2.3 List of Public Sector Units under the administrative control of the Ministry of Steel:

Sl. No.	Name of the Company	Headquarters	Major Subsidiaries
1.	SAIL	Ispat Bhawan, Lodi Road, New Delhi - 110003	SAIL Refractory Co. Ltd. Post Bag No. 565 Salem-636005 (TN)
2.	RINL	Administrative Building, Visakhapatnam - 530031 (Andhra Pradesh)	EIL, OMDC and BSLC C/o SAIL Office, Ground Floor, Plot No. 271, Bidyut Marg, Shastri Nagar, Unit -IV, Bhubaneswar, Odisha-751001
3.	NMDC Ltd.	Khanij Bhawan, 10-3 -311/A, Castle Hills, Masab Tank, Hyderabad-500028 (Telangana)	
4.	MOIL Ltd.	MOIL Bhawan, 1-A, Katol Road, Nagpur-440013 (Maharashtra)	
5.	MSTC Ltd.	MSTC Ltd., Plot No. CF-18/2, Street No.175, Action Area 1C, New Town, Kolkata - 700156	Ferro Scrap Nigam Ltd., (FSNL) FSNL Bhawan, Equipment Chowk, Central Avenue, Bhilai-490001 (Chhattisgarh)
6.	MECON Ltd.	MECON Building, Ranchi-834002 (Jharkhand)	
7.	KIOCL Ltd.	II Block, Koramangala Bengaluru-560034 (Karnataka)	



CHAPTER-III

THE INDIAN STEEL SECTOR: PROGRESS AND POTENTIAL

3.1 Introduction

At the time of Independence in 1947, India had only three steel plants – the Tata Iron and Steel Company, the Indian Iron and Steel Company and Visveswaraya Iron and Steel Ltd. and a few electric arc furnace-based plants. The period till 1947 thus witnessed a small but viable steel industry in the country, which operated with a capacity of about 1 million tonne and was completely in the private sector. From the fledgling one million tonne capacity status at the time of independence, India has now risen to be the 2nd largest crude steel producer in the world and the largest producer of sponge iron. From a negligible global presence, the Indian steel industry is now globally acknowledged for its product quality. As it traversed its long history since independence, the Indian steel industry has responded to the challenges of the highs and lows of business cycles. The first major change came during the first three Five-Year Plans when in line with the economic order of the day, the iron and steel industry was earmarked for state control. From the mid-50s to the early 1970s, the Government of India set up large integrated steel plants in the public sector at Bhilai, Durgapur, Rourkela and Bokaro. The policy regime governing the industry during these years involved:

- **Capacity control measures:** Licensing of capacity, reservation of large-scale capacity creation for the public sector units.
- **A dual-pricing system:** Price and distribution control for the integrated, large-scale producers in both the private and public sectors, while the rest of the industry operated in a free market.
- Quantitative restrictions and high tariff barriers.
- **Railway freight equalization policy:** To ensure balanced regional industrial growth.
- Controls on imports of inputs, including technology, capital goods and restrictions on finances and exports.

3.1.1 The large-scale capacity creation in the public sector during these years contributed to making India the 10th largest steel producer in the world as crude steel production grew markedly to nearly 15 million tonne in the span of a decade from a mere 1 million tonne in 1947. But the trend could not be sustained from the late 1970's onwards, as the economic slowdown adversely affected the pace of growth of the Indian steel industry. However, this phase was reversed in 1991-92, when the country replaced the control regime by liberalization and deregulation. The provisions of the New Economic Policy initiated in the early 1990's impacted the Indian steel industry in the following ways:

- Large-scale capacities were removed from the list of industries reserved for the public sector. The licensing requirement for additional capacities was also withdrawn subject to locational restrictions.
- Private sector came to play a prominent role in the overall set-up.
- Pricing and distribution control mechanisms were discontinued.
- The iron and steel industry were included in the high priority list for foreign investment, implying automatic approval for foreign equity participation up to 50%, subject to the foreign exchange and other stipulations governing such investments in general.
- Freight equalization scheme was replaced by a system of freight ceiling.
- Quantitative import restrictions were largely removed. Export restrictions were withdrawn.

3.1.2 For steel makers, opening up of the economy opened up new channels of procuring their inputs at competitive rates from overseas markets and also new markets for their products. It also led to greater access to information on global operations/techniques in manufacturing. This, along with the pressures of a competitive global market, increased the need to enhance efficiency levels so as to become internationally competitive. The steel consumer, on the other hand, was now able to choose items from an array of goods, be it indigenously manufactured or imported. With the opening up of the economy in 1992, the country experienced rapid growth in steel making capacity. Large integrated steel plants were set up in the Private Sector by Essar Steel, Ispat Industries, Jindal Group etc. Tata Steel also expanded its capacity. Some of the notable milestones in the period included the following:

- Emergence of the private sector with the creation of around 9 million tonne of steel capacity based on state-of-the-art technology.
- Reduction/ dismantling of tariff barriers, partial float of the rupee on trade account, access to best-practice of global technologies and consequent reduction in costs – all these enhanced the international competitiveness of Indian steel in the world export market.

3.1.3 After 1996-97, with the steady decline in the domestic economy's growth rate, the Indian steel industry's pace of growth slowed down and in terms of all the performance indicators – capacity creation, production, consumption, exports and price/ profitability – the performance of the industry fell below average. In foreign trade, Indian steel was also subjected to anti-dumping/ safeguard duties as most developed economies invoked non-tariff barriers. Economic devastation caused by the Asian financial crisis, slowdown of the global economy and the impact of glut created by additional supplies from the newly steel-active countries (the steel-surplus economies of erstwhile USSR) were the factors that pulled down growth levels. However, from the year 2002, the global industry turned around, helped to a great extent by China, whose spectacular economic growth and rapidly-expanding infrastructure led to soaring demand for steel, which its domestic supply could not meet. At the same time, recoveries in major markets took place, reflected by increase in production, recovery of prices, return of profitability, emergence of new markets, lifting of trade barriers and finally, rise in steel demand – globally. The situation was no different for the Indian steel industry, which by now had acquired a degree of maturity, with emphasis on intensive R&D activities, adoption of measures to increase domestic per capita steel consumption and other market development projects, import substitution measures, thrust on export promotion and exploring global avenues to fulfil input requirements.

3.1.4 The rapid pace of growth of the industry and the observed market trends called for certain guidelines and framework. Thus, was born the concept of the National Steel Policy, with the aim to provide a roadmap of growth and development for the Indian steel industry. The National Steel Policy (NSP) was announced in November 2005 as a basic blueprint for the growth of a self-reliant and globally competitive steel sector. The long-term objective of the National Steel Policy 2005 was to ensure that India has a modern and efficient steel industry of world standards, catering to diversified steel demand. The focus of the policy was to attain levels of global competitiveness in terms of global benchmarks of efficiency and productivity. With the passage of time and continued growth in the domestic steel industry, it was felt that the NSP 2005 needs to be in sync with changing times. Accordingly, after a detailed review, the Government has released the National Steel Policy 2017, which has laid down the broad roadmap for encouraging long term growth for the Indian steel industry, both on demand and supply sides, by 2030-31, with a vision to create a technologically advanced and globally competitive steel industry that promotes economic growth. At the same time, as a facilitator in the present-day de-regulated, liberalized economic/market scenario, the Government has also announced a policy for providing preference to Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement. This policy seeks to accomplish Hon'ble Prime Minister's vision of 'Make in India' with the objective of nation building and to encourage domestic manufacturing. DMI&SP was last amended on 31.12.2020.

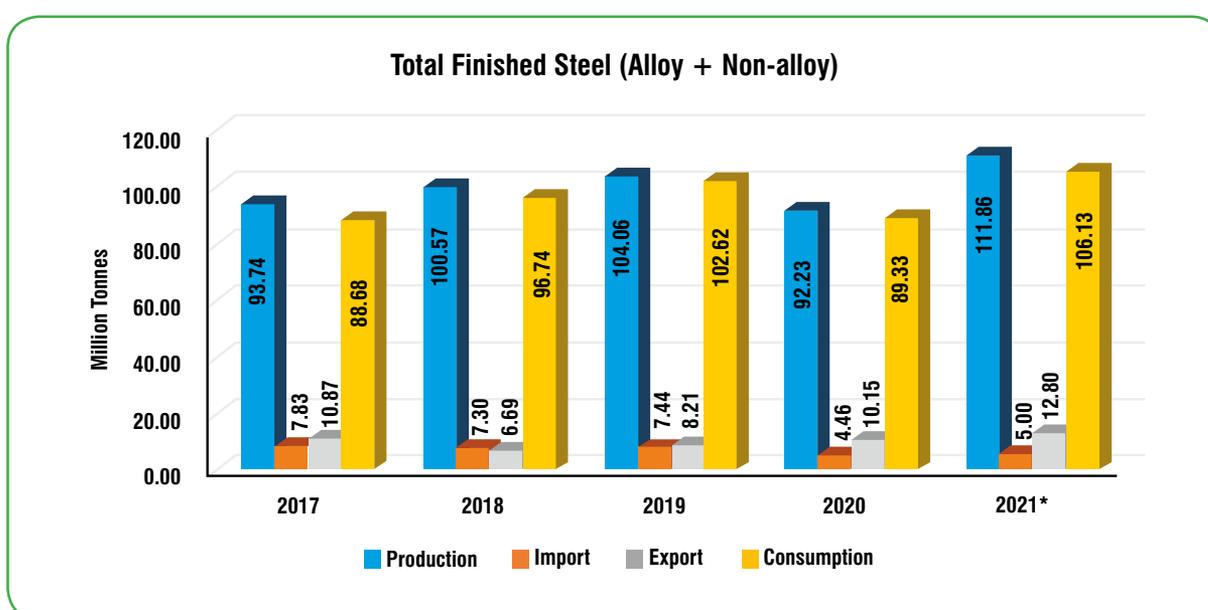
3.2 Production, Consumption and Growth of Steel

3.2.1 The table below shows the trend in production, import, export and consumption of total finished steel (alloy + non-alloy) in the country in the last five years:



Year	Total Finished Steel (alloy + non-alloy) (in Million Tonnes)			
	Production	Import	Export	Consumption
2017	93.737	7.828	10.871	88.679
2018	100.574	7.295	6.692	96.737
2019	104.062	7.440	8.205	102.622
2020	92.231	4.463	10.150	89.331
2021*	111.858	5.001	12.799	106.134

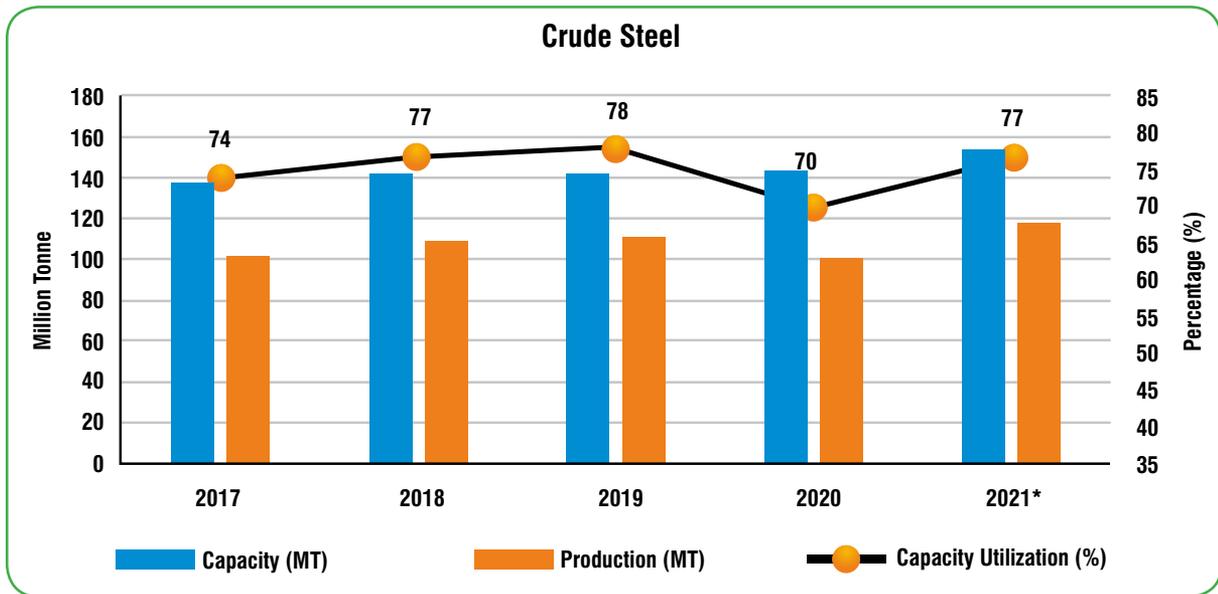
Source: JPC; *Provisional figure (January-December, 2021)



3.2.2 Data on crude steel production, capacity and capacity utilization during the last five years is given in the table below:-

Year	Crude steel		
	Capacity (MT)	Production (MT)	Capacity Utilization (%)
2017	137.975	101.455	74
2018	142.236	109.250	77
2019	142.299	111.344	78
2020	143.914	100.256	70
2021*	154.269	118.134	77

Source: JPC; *Provisional (January-December, 2021)

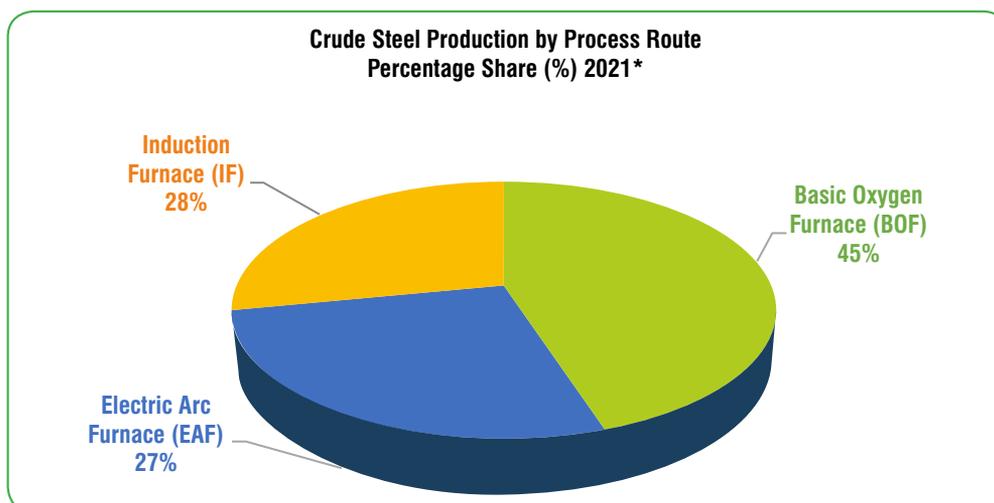


- Crude Steel production grew from 101.455 MT in 2017 to 118.134 MT in 2021.
- The growth in production was driven by capacity expansion, from 137.975 Million Tonnes (MT) in 2017 to 154.269 MT in 2021, during this five-year period.
- Domestic consumption of Total Finished Steel (alloy + non-alloy) was at 106.134 MT in 2021 as against 88.679 MT in 2017.
- Export of Total Finished Steel (alloy + non-alloy) during 2021 stood at 12.799 MT as compared to 10.871 MT in 2017; import of Total Finished Steel (alloy + non-alloy) during the same year stood at 5.001 MT as compared to 7.828 MT in 2017.
- India was a net exporter of Total Finished Steel in 2021.

3.2.3 The shares of the different process routes in total production of crude steel in the country during the terminal years of the last five-year span are shown in the table below:

Crude steel production by Process Route		
Process Route	Percentage share (%)	
	2017	2021*
Basic Oxygen Furnace (BOF)	45	45
Electric Arc Furnace (EAF)	27	27
Induction Furnace (IF)	28	28
Total	100	100

Source: JPC; *Provisional (January-December, 2021)



3.2.4 India is also a leading producer of Sponge Iron with a host of coal-based units located in the mineral-rich States of the country. Over the years, the coal-based route has emerged as a key contributor and accounted for 78% of total sponge iron production in the country in 2021. India has been the world's largest sponge iron producer every year since 2003. The table below shows the total production of sponge iron in the country, indicating the break-up of the share of coal and gas-based route of production for the last five years:

Production of Sponge Iron (MT)					
Year	2017	2018	2019	2020	2021*
Coal based	23.282	27.161	30.120	27.519	30.606
Gas based	6.223	7.052	6.699	6.074	8.402
Total	29.505	34.213	36.819	33.593	39.008

Source: JPC; *Provisional (January-December, 2021)

3.2.5 India is also an important producer of Pig Iron. With setting up of several units in the private sector during the period of post-liberalisation, imports have reduced and India has turned out to be a net exporter of Pig Iron. The private sector accounted for 88% of total production of Pig Iron in the country in 2021. The domestic availability situation of pig iron is given in the table below for the last five years:

Pig Iron Domestic Availability Scenario (MT)					
Year	2017	2018	2019	2020	2021*
Production	6.888	6.249	5.983	4.548	5.876
Import	0.016	0.067	0.013	0.007	0.015
Export	0.668	0.335	0.421	0.823	1.407
Consumption	6.205	5.841	5.669	3.735	4.506

Source: JPC; *Provisional (January-December, 2021)

3.3 Global ranking of Indian steel

World's Crude Steel production stood at 1950.5 MT during January-December 2021, up by 3.7% over the same period of last year, based on provisional data released by the World Steel Association on January 25, 2022. During this period, Chinese crude steel production reached 1032.8 MT, a decline of 3% over the same period of last year. China remained the largest Crude Steel producer in the world, accounting for 75% of Asia & Oceania region and 53% of world's Crude Steel production during this period. India was the 2nd largest Crude Steel producer and recorded a growth of 17.8% in production during this period as compared to the same period of last year.

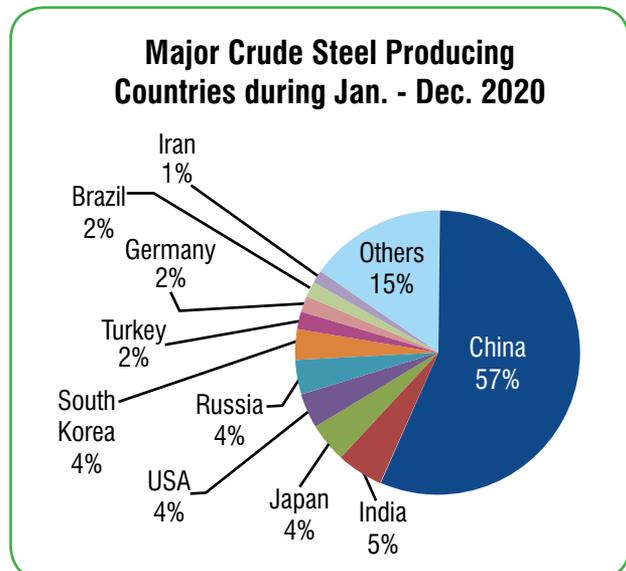
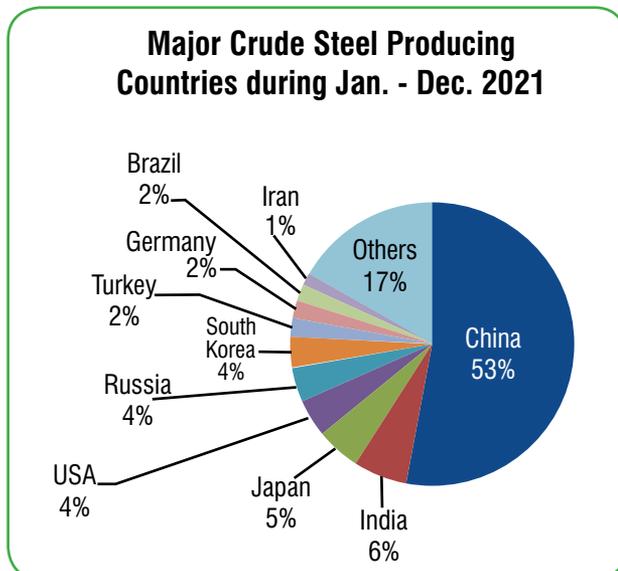
World Crude Steel Production January-December 2021

Rank	Country	Qty (MT)*	% change over the same period of last year
1	China	1032.8	-3
2	India	118.1	17.8
3	Japan	96.3	15.8
4	USA	86	18.3
5	Russia (e)	76	6.1
6	South Korea	70.6	5.2
7	Turkey	40.4	12.7
8	Germany	40.1	12.3
9	Brazil	36	14.7
10	Iran (e)	28.5	-1.8
	Top 10	1624.8	2.09
	World	1950.5	3.7

Source: World Steel Association. *Provisional
'e' stands for estimate

Note: There are 9 countries in Asia & Oceania Region – Australia, China, India, Japan, New Zealand, Pakistan, South Korea, Taiwan and Vietnam.

Share of major crude steel producing countries in total world production





3.4 Steel: Facts of Indian steel sector during the year 2021:

Indian Steel Scene: 2021*

Total Finished Steel (alloy + non-alloy)	Qty (MT)	% change**
Production	111.858	21.3
Import	5.001	12.0
Export	12.799	26.1
Consumption	106.134	18.8
Crude steel		
Production	118.134	17.8
Capacity Utilization (%)	77	-

Source: JPC; *Provisional; ** over same period of last year

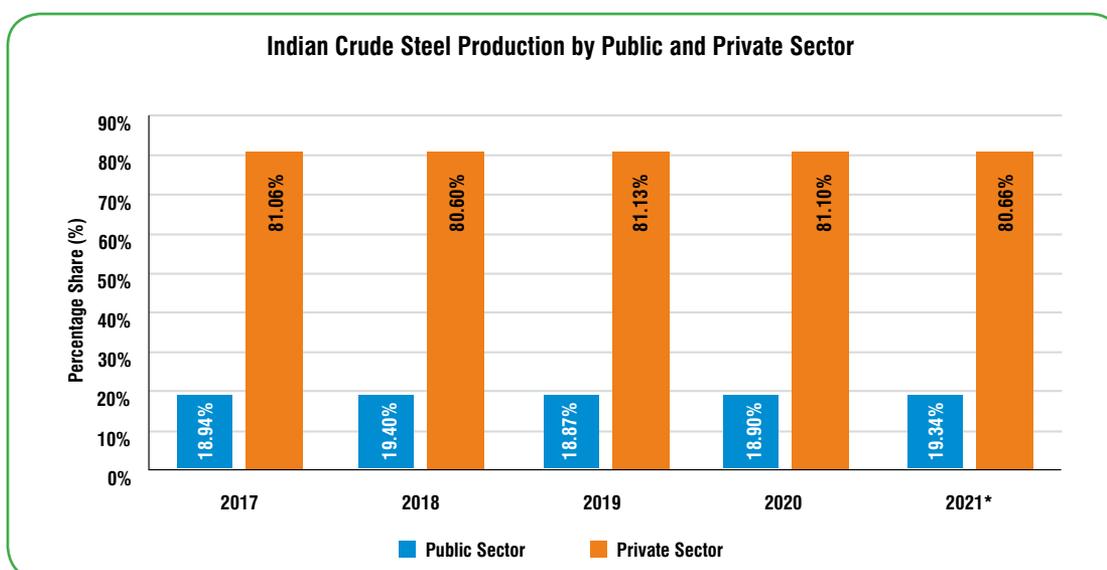
Mushrooming growth of coal-based sponge iron units in key mineral-rich pockets of the country resulted in rapid increase of domestic Sponge Iron production, enabling the country to achieve and maintain the number one position in the global market. With several expansion projects at different stages of implementation, the future of the Indian steel industry is optimistic. The data pertaining to production, consumption, import, export etc. of steel sector are at Annexure III-XI.

3.5 Trends in Production, Private/Public Sector

The following table highlights the contribution of the private and public sector in crude steel production in the country during the last five years:

Indian Crude Steel Production						
Sector	Unit	2017	2018	2019	2020	2021*
Public Sector	MT	19.215	21.191	21.014	18.948	22.849
Private Sector	MT	82.240	88.059	90.330	81.308	95.286
Total Production	MT	101.455	109.250	111.344	100.256	118.135
Share of Public Sector	%	18.9	19.4	18.9	18.9	19.3

Source: JPC; *Provisional (January-December, 2021)



3.6 Annual Plan 2021-22

The Annual Plan of the Ministry on the basis of Revised Estimates 2021-22 is to the tune of Rs. 13443.88 crore. This includes Internal and Extra Budgetary Resources (IEBR) of Rs. 13439.07 crore and Gross Budgetary Support (GBS) of Rs. 4.81 crore, as detailed in the table below:

Plan Outlay for Annual Plan 2021-22

(Rs. in crore)

Sl. No.	Name of the PSU/Organisation	IEBR	GBS	Total
A. Schemes of PSUs				
1.	Steel Authority of India Ltd.	8000.00	0.00	8000.00
2.	Rashtriya Ispat Nigam Ltd.	730.00	0.00	730.00
3.	NMDC Ltd	3720.00	0.00	3720.00
4.	KIOCL Ltd.	653.60	0.00	653.60
5.	MOIL Ltd.	293.71	0.00	293.71
6.	MECON Ltd.	12.50	0.00	12.50
7.	MSTC Ltd.	17.40	0.00	17.40
8.	Ferro Scrap Nigam Ltd.	11.00	0.00	11.00
9.	SAIL Refractory Company Ltd.	0.86	0.00	0.86
	Total-A	13439.07	0.00	13439.07
B. Scheme of Ministry of Steel				
10.	Schemes for promotion of R&D in Iron & Steel Sector	0.00	4.81	4.81
	Total-B	0.00	4.81	4.81
	Grand Total: A+B	13439.07	4.81	13443.88

3.7 Funds/Grants provided by Govt to Statutory bodies/ autonomous organization/ societies/ private/ voluntary organization/public corporation/JVs/Organisations etc.

During the Financial Year 2021-22 (upto 31.12.2021) Ministry of Steel has released a total amount of Rs. 87.97 lakh to three institutions viz. ICAR-IARI (an autonomous organization under Ministry of Agriculture & Farmers Welfare), PEC Chandigarh (public funded academic institution) and BITS Pilani (private academic institution). This amount has been released under Ministry's R&D Scheme i.e 'Scheme for Promotion of Research and Development in Iron and Steel Sector'. The details of funds released during 2021-22 under the aforesaid scheme is at Annexure-XVI.



CHAPTER-IV

STEEL POLICIES, RECENT INITIATIVES AND IMPACT OF COVID-19 PANDEMIC

4.1 National Steel Policy 2017

NSP 2017 aims to increase focus on expansion of MSME sector, improve raw material security, enhance R&D activities, reduce import dependency and cost of production, and thus develop a “technologically advanced and globally competitive steel industry that promotes economic growth” eyeing self-sufficiency in production, developing globally economical steel manufacturing capabilities by facilitating investments and cost efficient productions with adequate availability of raw materials.

With focus on R&D, the technology would be of utmost focus over the next decade and MSME steel plants would be the key drivers to achieve the additional capacity required for the India’s consumption led growth and improvement in the overall productivity and quality.

Expected impact / outcome of NSP 2017

The following targets have been set in the NSP 2017:

S.No.	Parameter	Projections (2030-31)
1.	Total crude steel capacity (in MTPA)	300
2.	Total crude steel demand/production (in MTPA)	255
3.	Total finished steel demand/production (in MTPA)	230
4.	Sponge iron demand/production (in MTPA)	80
5.	Pig iron demand/production (in MTPA)	17
6.	Per Capita Finished Steel Consumption (in Kgs)	158

The other expected outcomes are as under:

a) India to be world leader in energy efficiency and sustainability

Ministry of Steel, in association with suitable agency, will constantly monitor techno- economic performance of all the steel plants within the country vis-a-vis the global best practices. Transfer of technology for production of automotive steel and other special steels will be facilitated by setting up JVs with global leaders.

b) Cost-effective and quality steel destination

145 Indian Standards for steel and steel products have already been notified under the mandatory quality certification mark scheme of BIS. Efforts will be made to bring in additional steel products, which are used in critical end-use applications, under the mandatory scheme to ensure protection of human health, environment and safety.

c) Attain global standards in Industrial Safety & Health

The Ministry is coordinating with steel companies to ensure that on the job trainings on maintaining a safe workplace are provided to employees of the steel companies.

d) Substantially reduce the Carbon footprint of the Industry

In order to address the environment related issues, the Ministry is facilitating the formation of a forum to chalk out best practices and is also focusing on development of a Waste Management Plan for the industry.

e) Domestically meet the entire demand of high grade automotive steel, electrical steel, special steel and alloys.

4.2 Policy for providing preference to Domestically Manufactured Iron and Steel Products (DMI&SP Policy) in Government Procurement

The Government had introduced DMI&SP Policy on 8th May, 2017 to provide preference to domestically produced iron & steel material in Government tenders. Further, to fine tune this objective the Policy was revised on 29th May, 2019 and on 31st December, 2020. The salient features of the Policy are as under:

- This policy provides preference to Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.
- The policy covers a list of 49 manufactured products of iron and steel. The policy also covers capital goods for manufacturing iron & steel products.
- While earlier the domestic content was specified as 15-50 per cent on the 49 products of iron & steel, the new list of 49 products have minimum prescribed value addition ranging between 20-50 per cent making it difficult for imported steel to compete with domestic bidders for government contracts.
- Each Ministry or Department of Government and all agencies/entities under their administrative control is under the purview of the DMI&SP policy as notified by the Ministry of Steel. All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies come within the purview of this Policy, if that project / scheme is fully / partly funded by Government of India.
- The policy is applicable to projects where the procurement value of iron and steel products is greater than Rs. 5 lakh. The policy is also applicable for other procurements (non-project), where annual procurement value of iron and steel products for that Government organization is greater than Rs. 5 lakh. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this policy.
- The policy is applicable to purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of Ministry or Department of Government or their PSUs and also to capital goods for manufacturing iron & steel products in compliance to prescribed quality standards, as applicable.
- No Global Tender Enquiry (GTE) shall be invited for tenders related to procurement of Capital Goods for manufacturing iron & steel products having estimated value upto Rs. 200 Crore except with the approval of competent authority as designated by Department of Expenditure.
- The policy has provisions for waivers to all such procurements, where specific grades of steel are not manufactured in the country or the quantities as per the demand of the project cannot be met through domestic sources.

The policy is envisaged to promote growth and development of domestic steel Industry and reduce the inclination to use low quality and low cost (unfairly traded) imported steel in Government funded projects.

This policy has provided and expected to provide significant savings to the Indian Economy and restrict the use of low quality and cheap imported steel in Government funded projects alongside developing domestic capability for import substitution. DMI&SP Policy has so far resulted in steel import substitution to the tune of Rs. 22,400 crore.



4.3 Steel Import Monitoring System (SIMS) for import data dissemination

With a view to ensure prior availability of granular data like end-use, IS grade etc. regarding steel import in public domain, before the entry of such imports in India, a Steel Import Monitoring System (SIMS) was notified by DGFT on 5th September, 2019 and became effective from 1st November, 2019. SIMS requires the importer to submit advance information online for import of all steel tariff lines at 8-digit HS Code level wherein they get an automatic registration number for carrying out imports. A token registration fee has been prescribed for this purpose. SIMS initially covered only 284 HS codes of Chapter 72, 73 and 86 but has since been extended to all items under Chapter 72, 73 and 86 of ITC HS codes. SIMS is very useful for the Indian domestic steel industry in responding to the market conditions in a more dynamic manner.

4.4 Enhancing the scope of the Quality Control Orders on Steel

Ministry of Steel gave major thrust to Steel Quality Control Order (SQCO) from 2015 onwards thereby banning substandard/ defective steel products to ensure that only quality steel conforming to the relevant BIS standards is made available to the end users. During the last five years, 115 Indian Standards have been notified under the Quality Control Order covering carbon steel, alloy steel and stainless steel. This brings the total number of Indian Standards covered under the Quality Control Order to 145.

Ministry, as a Policy, now covers raw material as well as goods and articles made up of steel such as stainless-steel pipes and tubes, laminations/ cores of transformers, products of tin plate and tin free steel etc. in the notification to prevent circumvention of the Steel Quality Control Order.

A dedicated portal has been developed to process the applications for seeking clarification/exemption as regards applicability of SQCO on a particular grade of steel in a time bound and transparent manner.

4.5 Recent Initiatives

4.5.1 Ensuring raw material security for the Steel sector

Raw material is a critical enabler for ensuring sustained growth in Iron & Steel industry. The industry faces challenges both in the short and long term in terms of raw material security across iron ore and coal. Ministry of Steel has taken up related issues with Ministry of Mines, Ministry of Coal and the concerned State Governments.

Iron ore

As per NSP, 2017, Ministry of Steel has set up a target to achieve 300 MT Crude Steel Capacity with 255 MT crude steel productions by 2030-31 and for this there is a need of 437 MT of iron ore. In the FY 2021-22, NMDC has been given a target to raise its production of iron ore from 34.15 MT in the previous year to 47 MT and SAIL has been given a target to increase its production from 30.06 MT to 40 MT in the current FY.

The long pending issue of Donimalai iron ore mine of NMDC in Karnataka, which was suspended since November, 2018, has been finally settled. The Karnataka Government issued order on 01.12.2020 permitting NMDC Limited to restart mining operations at its Donimalai mines in Bellary District, Karnataka. Mining operations resumed in Donimalai iron ore mine from 18th February, 2021. The operationalization of the Donimalai iron ore mines will increase the annual iron ore production in the country by 7 MTPA.

As per the recommendation of Standing Committee on Coal and Steel, Ministry of Steel has requested to Ministry of Mines to frame a policy for providing incentives to the beneficiation and agglomeration industries and to give direction to compulsory utilize low-grade fines for beneficiation and pelletisation to move towards zero waste mining in the country. Ministry of Mines has constituted a Committee in the Indian Bureau of Mines to examine the issue regarding "Utilization of low and lean grade iron ore resources in the country".

Coal

The entire demand of coking coal is not met from domestic production as the supply of high-quality coal/ coking coal (low-ash-coal) in the country is limited. Accordingly, the Indian steel Industry has been largely dependent on imported coking coal.

Most of the coking coal produced domestically in the country had a very high ash content making it redundant in the manufacture of steel which resulted in import of 51.83 MT in 2019-20 and 51.20 MT in 2020-21 of coking coal. In the present FY, 28.02 MT of coking coal has been imported upto September, 2021.

Taking into account that Coking coal is a major cost factor in steel production to the tune of 42%, Ministry of Steel is making efforts to reduce the import bill on coking coal by diversifying the import destinations. A Memorandum of Understanding (MoU) has been signed on 14.10.2021 by the Minister of Steel, Government of India and the Minister of Energy, Russian Federation on Cooperation regarding coking coal, which is used in steel making. The MoU will benefit the Indian steel sector by diversifying the sources of coking coal which may lead to reduction in input cost for the steel players due to long term commitment of supply of high-quality coking coal to India (up to 40MT till 2035). This MoU also envisages implementation of joint projects/commercial activities in coking coal sector, including development of coking coal deposits and logistics development, sharing of experience in coking coal production management, technologies of mining, beneficiation, processing as well as training. In addition, the MoU envisages promoting research collaboration between the two countries.

4.5.2 MoU with Russia: A MoU has been signed between Ministry of Steel and the Russian Federation on 14th October, 2021 for cooperation in the field of coking coal, used for steel making. The MoU will benefit the Indian steel sector by diversifying the sources of coking coal which may lead to reduction in input cost for the steel players due to long term commitment of supply of high-quality coking coal to India (up to 40 MT till 2035).



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh signing the MoU with Russia on bilateral cooperation in the sector of coking coal used in steel making.

4.5.3 DRI Making through Coal Gasification in Iron & Steel Making

A meeting was organized under the Chairmanship of the Hon'ble Union Minister of Steel on 16.09.2021 to discuss the challenges and opportunities in using Coal Gasification for Iron and Steel making to minimize dependency on imported coal and maximizing use of abundant non-coking coal available in the country. Detailed discussions/ deliberations were held alongwith the stakeholders which included experts from the steel industry viz. SAIL, Tata Steel, JSPL; consultants viz. MECON, Dasturco; research organisation viz. CSIR-CIMFR etc. CIS-CIMFR informed that under Methanol economy project of NITI Aayog, a fluidized bed gasifier of 1.5 TPD capacity has been installed in the CIMFR and different types of coal are being tested. CIMFR also informed that they have also done a mapping of all the coal blocks of India for identifying blocks suitable for Coal Gasification. Although lower coal ash are most suitable for gasification, a technology



can be developed for using high ash coal in consultation with companies like MECON and based on the operating experience of JSPL. At the end of the meeting, it was decided that there is a need for development of indigenous coal gasification technology which is suited for the indigenously produced coal. The Chair urged the stakeholders to come together in development of the technology which can be gainfully utilized by the steel industry and help in reducing the dependence of imported coal and promote “Atmanirbhar Bharat”.



4.6 Key initiatives for Atmanirbhar Bharat

4.6.1 Production Linked Incentive (PLI) Scheme for Specialty Steel: PLI scheme for domestic production of specialty steel with an outlay of Rs. 6322 crore has been approved and detailed guidelines have been notified on 20th October, 2021. The Scheme provides incentive in three incentive slabs (Slabs A,B,C) varying between 4% - 12% on incremental production in identified 5 product categories and 19 sub-categories. The five broad categories of Specialty steel identified for the scheme are Coated/Plated steel products; High strength/wear resistant steel; Specialty rails; Alloy steel products and Steel wires and Electrical steel. These steel products are used in a variety of applications including white goods, automobile body and components, pipes for transportation of oil and gas, boilers, ballistic and armour sheets, high-speed railway lines, turbine components, distribution and power transformers. This will result in capacity addition of 25 MT, additional investments of about Rs. 40000 crore and employment generation of 5.25 lakh, of which approximately 68,000 will be direct, and the rest will be indirect employment.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh at the seminar on PLI Scheme for Specialty Steel, aimed at bolstering Atmanirbhar Bharat initiative in the Steel Sector at New Delhi.



Release of the report on PLI for Steel prepared by Invest India during the Seminar on PLI scheme.

4.7 Other Key Highlights

4.7.1 CAPEX : The Government is according high priority to capital expenditure (CAPEX) to mitigate the adverse effects of the COVID-19 induced contraction in economic activities and to revitalize the economy. Capital expenditure (CAPEX) is incurred by CPSEs either from their own resources or through Government budgetary support (GBS). The CAPEX of CPSEs under the Ministry of Steel is being financed entirely through their own resources i.e., Internal and Extra Budgetary Resources (IEBR). The Steel CPSEs achieved a CAPEX of Rs. 7,215.96 crore in FY 2020-21. During the current fiscal (FY 2021-22), the CAPEX target for the CPSEs of the Ministry of Steel has been enhanced to Rs. 13,302 crore (BE).



Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh at a meeting to review the progress of capital expenditure (CAPEX) by Steel CPSEs.



4.7.1.1 In view of the importance of CAPEX in strengthening infrastructure and enhancing production capacity in the post pandemic period and the significantly higher targets set for CAPEX for the current year as compared to the previous year, the Ministry is regularly monitoring CAPEX with the CPSEs. The Union Steel Minister is reviewing the progress of CAPEX projects of the Steel CPSEs with the CMDs of SAIL, NMDC, RINL, KIOCL MOIL and MECON and senior officers of the Ministry of Steel. The Steel CPSEs have been directed to step up the pace of their CAPEX and to set daily targets for close monitoring and time bound project implementation. This achievement of targets shall motivate the work force, enhance India's steel production and spur higher growth. He has further directed CMDs to redouble efforts to ensure that there are no slippages in milestones for achieving the project targets for the year 2021-22.

4.7.1.2 Besides encouraging and directing the steel CPSEs to speed up CAPEX, the Ministry is also addressing the inter-ministerial issues for faster implementation of CAPEX projects by the CPSEs. In addition, Steel CPSEs have also been advised to regularly report the CAPEX progress to their Board of Directors.

4.7.1.3 The CPSE-wise CAPEX progress is as follows:

(Rs. in crore)

S. No.	CPSE	Actual In 2020-21	BE 2021-22	Exp. up to 31 January, 2022
1.	SAIL	4283.00	8000.00	4869.00
2.	NMDC	2031.00	3720.00	1670.00
3.	RINL	737.37	595.00	575.17
4.	MOIL	136.66	293.50	176.47
5.	KIOCL	41.05	653.60	262.60
6.	Others	37.62	39.90	32.76
	Total	7266.70	13302.00	7586.00

4.7.2 Facilitation of NIP Projects : Ministry of Steel has been proactively taking up issues related to National Infrastructure Pipeline projects of steel companies with concerned Central/State Government, Ministries/Department through Inter-Ministerial Steering Committee (IMSC) meetings and 03 meetings of IMSC were held during 2021 to resolve issues.

4.7.3 GeM : Procurement of goods and services through GeM by Steel CPSEs has increased significantly over the year with the value of orders during April-November, 2021 being 4943.14% higher over CPLY. The details of procurement of goods and services through GeM Portal by Steel CPSEs during current fiscal up to November '21 vis-a-vis CPLY is as following:

Organization	April-November, 2020		April-November, 2021	
	No. of Orders	Value of orders (Rs. in crore)	No. of Orders	Value of orders (Rs. in crore)
Steel CPSEs	2116	72.15	7068	3638.63

4.7.4 MSME Payments : The status of pending payments to MSMEs by CPSEs of the Steel Ministry is being monitored on weekly basis to ensure that the same is credited timely and well within the 45 days' time limit for such payments with 97.4% of the payment during April-November of the current fiscal being made within 30 days. During April-November 2021, Steel CPSEs have made a payment of Rs. 3358.61 crore to MSMEs which is 64.5% higher than payment of Rs. 2041.61 crore made during CPLY.

4.8 COVID-19 Response

- **Supply of Liquid Medical Oxygen (LMO) by Steel companies:** The Steel sector rose to the occasion to meet the LMO requirement of the nation during the second wave of Covid-19. The Steel plants supplied 2.96 Lakh tonne of LMO to 22 States from 01.04.2021 to 31.12.2021. The supply of LMO from the steel plants, which was barely 538 tonne on 01.04.2021, touched a peak of 4749 tonne on 13.05.2021. Both public and private sector steel plants took proactive steps to reduce production of liquid nitrogen and liquid argon to enhance the production of LMO saving thousands of precious lives. The steel plants even reduced their production to ensure that the excess gaseous oxygen, which would otherwise be used for steel making, is converted into LMO to the extent feasible and made available to the Covid patients.
- **Jumbo Covid Care facility:** To unburden the existing hospital infrastructure and to further reduce the dependence on LMO for Covid patients, 5378 beds have been set up as part of Jumbo Covid Care Facilities using gaseous oxygen around steel plants till December, 2021. This has gone a long way in addressing the need for oxygen as well as medical infrastructure during the Covid pandemic.

CHAPTER-V

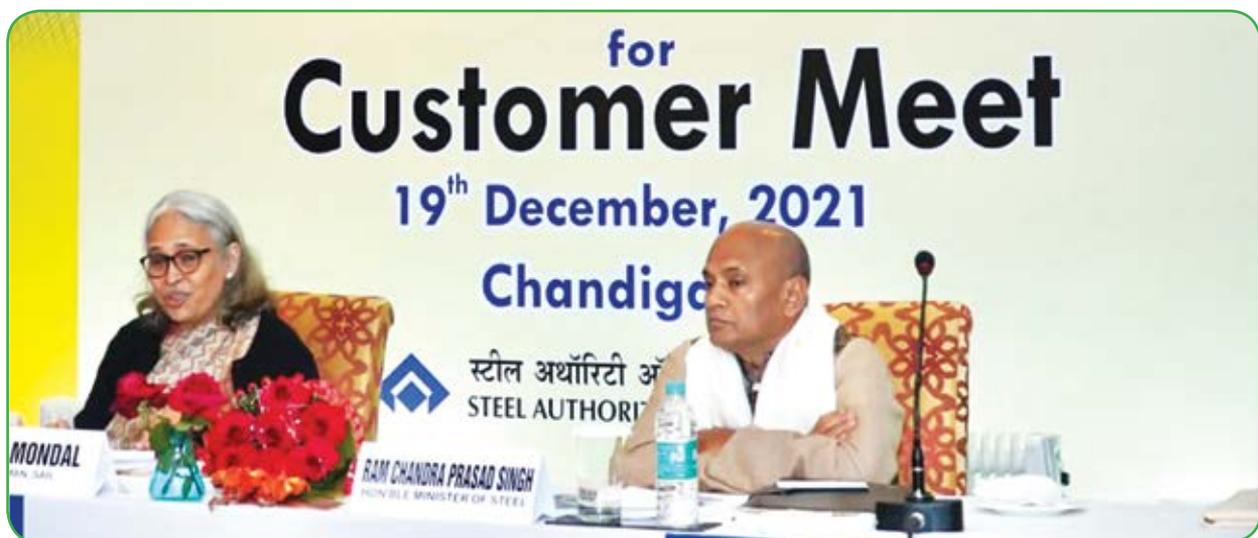
PUBLIC SECTOR

5.1 Introduction

There are seven Central Public Sector Enterprises (CPSEs) under the administrative control of the Ministry of Steel. Detailed overview of the CPSEs and their major subsidiaries is as under:

5.2 Steel Authority of India Ltd. (SAIL)

Steel Authority of India Limited (SAIL) is a company registered under the Companies Act, and is a “Maharatna” Central Public Sector Enterprise (CPSE). It has five integrated steel plants at Bhilai (Chhattisgarh), Rourkela (Odisha), Durgapur (West Bengal), Bokaro (Jharkhand) and Burnpur (West Bengal). SAIL has three special and alloy steels plants viz. Alloy Steels Plant at Durgapur (West Bengal), Salem Steel Plant at Salem (Tamil Nadu) and Visvesvaraya Iron and Steel Plant at Bhadravati (Karnataka). SAIL has also several Units viz. Research and Development Centre for Iron and Steel (RDCIS), Centre for Engineering and Technology (CET), Management Training Institute (MTI) and SAIL Safety Organisation (SSO) all located at Ranchi, Colliery Division located at Dhanbad, Environment Management Division (EMD) and Logistics & Infrastructure Department (L&I) located at Kolkata, SAIL Growth Works at Kulti and SAIL Refractory Unit with headquarters at Bokaro. Chandrapur Ferro Alloy Plant, (CFP) is located at Chandrapur, Maharashtra. The Central Marketing Organisation (CMO), with its headquarters at Kolkata, coordinates the countrywide marketing and distribution network of the Company.



Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh at the Customer Meet at Chandigarh.

5.2.1 Capital Structure

The Authorized Capital of SAIL is Rs. 5,000 crore. The paid up capital of the Company is Rs. 4130.53 crore as on 31.12.2021, out of which 65% is held by the Government of India and the balance 35% by the Financial Institutions, GDR holders, Banks, Employees, Individuals, etc.

5.2.2 Financial Performance

The company recorded turnover of Rs. 72,220 crore during April-December, 2021 and Rs. 68,452 crore during Financial Year ended 31st March, 2021. The Profit after Tax was Rs. 9,597 crore during April-December, 2021 and Rs. 3,850.02 crore during the Financial Year ended 31st March, 2021. The company has declared an interim dividend of Rs. 4 per share for the FY 2021-22.



Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh at the review meeting of Durgapur Steel Plant, ASP and ISP during his visit to Durgapur Steel Plant.

5.2.3 Production Performance

The details of actual production are as under:

(in Million Tonne)

	2019-20	2020-21	2021-22*
Hot Metal	17.438	16.582	13.816
Crude Steel	16.155	15.215	12.770
Saleable Steel	15.147	14.602	12.455

* upto December, 2021

During Q1 FY' 20-21, in the wake of severe spread of COVID-19 (2nd Phase), production of SAIL's Steel Plants was regulated due to various restrictions imposed by MHA, GoI/ respective State Governments at all steel plants/ units.



Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh at the Medium Structural Mill at Durgapur Steel Plant.



5.2.4 Raw Materials

During 2021, SAIL met the full requirement of iron ore for its Steel Plants by producing 34.63 Million Tonne (MT) of iron ore from its captive mines. The production of fluxes (Limestone and Dolomite) from captive mines was 1.88 MT and raw coking coal production from captive collieries of SAIL was 0.26 MT. Chasnalla Washery processed 0.91 MT raw coal, which was sourced from SAIL coal mines and procured from CIL sources and produced 0.45 MT washed coking coal.

In order to avoid possible disruption in supplies of iron ore due to expiry of various iron ore merchant mining leases by 31.03.2020, under the directives of Ministry of Mines dated 16.09.2019, 03.12.2019 and 04.01.2020, SAIL made 4.31 MT of iron ore fines/ dumps/ tailings available in the open market during CY'21.

5.2.5 Manpower

The manpower strength of SAIL as on 01.01.2022 was 62,960 (Executive 10632/Non-Executive 52328). The manpower has reduced by 2,604 from 1st April, 2021 to 31st December, 2021.

5.2.6 Capacity Expansion and Modernization Projects

Steel Authority of India Ltd. had undertaken Modernisation and Expansion Plan (MEP) of its Integrated Steel Plants at Bhilai, Bokaro, Rourkela, Durgapur, Burnpur and Special Steel Plant at Salem. Enhancement of Crude Steel production capacity from 12.8 million tonne per annum to 21.4 Million Tonne per annum was envisaged under the plan. However, the current operating crude steel capacity of SAIL is 19.51 MTPA.

The MEP at Bhilai, Rourkela, Burnpur, Durgapur, Bokaro and Salem Steel Plants have been completed and facilities are under operation, stabilization and ramp up. One out of 4 Casters in SMS-III of Bhilai Steel Plant envisaged as a Beam Blank Caster under MEP is under conversion to Bloom-cum-Beam Blank Caster.

Addition, Modification, Replacement (AMR) Projects

Apart from Modernisation and Expansion Projects, SAIL undertakes Capital Investments from time to time under AMR schemes. Major highlights of the large projects (costing >Rs. 50 Crore) initiated/ completed during 2021, are as follows:

Facilities completed:

- Replacement of Converter Shells in all the Three Converters of Steel Melting Shop at Durgapur Steel Plant.
- Power Evacuation for 2x20 MW New Power Plant at Durgapur Steel Plant.
- Up gradation of Stoves for BF-4 at Bhilai Steel Plant.

Orders placed:

- Modification of the Washing Circuit of CSW Plant (Crushing Screening Washing Plant) of Dalli Mines of Bhilai Steel Plant.
- Power Supply Arrangement for Proposed 2000 TPD BOO Oxygen Plant at Bokaro Steel Plant.

5.3 Rashtriya Ispat Nigam Ltd. (RINL)

Rashtriya Ispat Nigam Limited, a Navratna CPSE, is the corporate entity of Visakhapatnam Steel Plant – the country's first shore-based integrated steel plant at Visakhapatnam, Andhra Pradesh registered under the Companies Act, 1956, has its registered office at Visakhapatnam.

RINL has one integrated steel plant of 7.3 MTPA Liquid Steel capacity at Visakhapatnam, Andhra Pradesh. In addition, the company operates three mines viz. Jaggyyapeta mines (Limestone), Garbham (Manganese) mines in Andhra Pradesh and Madhram mines (Dolomite) in Telangana State. RINL also has mines for quartzite and river sand at Kintada and Sarepalli respectively in Andhra Pradesh.

The company has one subsidiary, Eastern Investment Limited (EIL) with 51% shareholding, which in turn has 2 subsidiaries, M/s Orissa Mineral Development Company Ltd (OMDC) and M/s Bisra Stone Lime Company Ltd. (BSLC). These three companies became Public Sector Undertakings with effect from 19.03.2010 and headquarter of these companies are at Bhubaneswar (Odisha).

RINL is marketing its products through a wide marketing network of 5 Regional offices, 23 Branch Sales Offices / Stock yards which cater to the delivery requirements across the country.

RINL set up Forged Wheel Plant (FWP) at Lalgunj, UP, to cater to the requirement of Indian Railways for import substitution. The project is under testing / trial runs stage.



Hon'ble Union Minister of State for Steel & Rural Development, Shri Faggan Singh Kulaste, during his visit to the Forged Wheel Plant of RINL in Rae Bareli, Uttar Pradesh.

5.3.1 Capital Structure

RINL-VSP is a wholly owned Government company under the administrative control of Ministry of Steel. The authorized share capital of the company is Rs. 8000 crore and issued/subscribed/fully paid-up share capital is Rs. 4889.85 crore as on 31.12.2021.

5.3.2 Financial Performance

RINL registered a turnover of Rs. 19,401 crore (Prov.) during the period April, 2021 to December, 2021 and the company made a Net Profit of Rs. 790 crore (Estimated) upto December, 2021 as against Net Loss of Rs. 1,839 crore during corresponding period last year (CPLY), with overall improvement in Production, Sales and contribution margin.



5.3.3 Production Performance

(in Million Tonne)

Production	2019-20	2020-21	2021-22*
Hot Metal	5.161	4.682	4.428
Crude Steel	4.759	4.302	4.010
Saleable Steel	4.452	4.163	3.885

* Provisional upto December, 2021

5.3.4 Raw materials

RINL do not have captive mines for major raw materials; iron ore and coking coal. The Company has been procuring iron ore mainly from NMDC and partly from auctions / tenders. Coking Coal is mainly sourced from global suppliers.

5.3.5 Manpower

The manpower strength of RINL as on 31st December, 2021 was 15928 (Executive 5258 and Non-Executive 10670) achieving reduction of 786 manpower as on 31st December, 2021.

5.4 NMDC Ltd.

NMDC Limited is a “Navratna” CPSE under the Ministry of Steel, Government of India, primarily engaged in the business of exploring minerals and developing mines to produce raw materials for the industry. It is also expanding its activities towards steel making and other value-added products.



Visit of Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh to NMDC mine.

Incorporated on November 15, 1958, NMDC has been actively contributing to development of the nation for six decades and grown from strength to strength on its journey to nation building. From a single-product-single-customer company, NMDC has grown to a major iron ore supplier to the domestic steel industries.

NMDC operates the large mechanized iron ore mines in the country at Bailadila (Chhattisgarh) and Donimalai (Karnataka). The Diamond Mine of NMDC is situated at Panna (Madhya Pradesh), Sponge Iron Unit of NMDC is situated at Paloncha, Telangana and 1.2 mt capacity Pellet Plant in Karnataka.

5.4.1 Capital Structure

The Authorized share capital of the company is Rs.400 crore. The paid-up equity share capital is Rs. 293.07 crore as on 31.12.2021, out of which 60.79% is held by the Government of India and the balance 39.21% by the financial institutions/banks/individuals/employees etc.

5.4.2 Financial Performance

The Company recorded turnover of Rs.19,179 crore in the financial year 2021-22 (upto December, 2021.) The post-tax net profit for the year was Rs 7,583 crore (provisional upto December, 2021).

5.4.3 Production Performance

The details of the actual production are given below:

Items	2019-20	2020-21	2021-22*
Iron ore (in MT)	31.49	34.15	28.33

*Actual upto December, 2021

5.4.4 Manpower

The manpower strength of NMDC as on 31.12.21 was 5464.

5.4.5 Major Expansions / Initiatives:

- NMDC is setting up a 3.0 MTPA Integrated Steel Plant at Nagarnar, near Jagdalpur, Dist. Bastar, Chhattisgarh. The plant is in advanced stage of completion and about 98% of civil work, 98% of structural erection and 96% of equipment erection have been completed. Pre-commissioning activities have been started and various infrastructures like connectivity of water, power, logistics for movement of materials, etc. are in place.
- NMDC has taken up construction of Slurry Pipeline project which consists of 2.0 MTPA Pellet Plant at Nagarnar, 2.0 MTPA Ore Processing Plant at Bacheli and 130 Km Slurry Pipeline from Bacheli to Nagarnar and its Auxiliary systems in the State of Chhattisgarh. Major packages like Slurry pipeline laying package, Slurry Pump house package and Main substation Packages are awarded and works are in progress at site. NMDC is in the process of finalisation of agencies for balance packages like Technological package of Pellet & Ore processing Plant.
- NMDC has taken up installation of 12.0 MTPA Screening Plant-III at Kirandul Complex, Bailadila, Chhattisgarh. Major packages like Dry circuit package, Substations packages, building packages are awarded and work is in progress at site. NMDC is in the process of finalisation of agencies for balance packages like Wet circuit & RWLS Package.

NMDC is also in the process of augmenting its production & evacuation capacity by installing the following additional infrastructure facilities:

- Construction of 5th screening line in existing Screening Plant-II and upgradation of downstream conveyor at Kirandul Complex, Bailadila Chhattisgarh has been commissioned in Jan-21 and plant is in operation.
- Construction of 5th Screening line in existing Screening Plant and up-gradation of downhill conveyor system at deposit-5, Bacheli Complex, Bailadila, Chhattisgarh are in progress at site.
- Installation of 7.0 MTPA Screening & Beneficiation Plant-II at Donimalai Complex, Karnataka. NMDC is in the process of obtaining Statutory clearances for the project. Parallely tender documents are also under finalisation.



Hon'ble Union Minister of Steel, Shri Ram Chandra Prasad Singh, laying the foundation stone for a 7.0 MTPA Screening and Beneficiation Plant at NMDC's Donimalai Iron Ore Mine.

- Doubling of Kirandul – Kottavalasa Line between Kirandul – Jagdalpur (150 kms approx.) through East Cost Railways on deposit work basis. Doubling of 85 kms completed and is in operation. Further, doubling of another 21 km is likely to be completed shortly. Completion of balance 44 kms doubling (between Kirandul & Dantewada) is planned to be completed progressively by December, 2022.

Solar Projects of NMDC Ltd.

- Installation of “Roof top solar power plants (1 MW)” at various production units are completed and is in operation since July 2019. NMDC is also in the process of Installing 425 KW Rooftop Solar Power Plants in Bachelhi Township, Dantewada Dist. Chhattisgarh.

5.5 MOIL Ltd.

MOIL is a Schedule-A Mini Ratna Category-I CPSE. MOIL is the largest producer of manganese ore in the country with share of around 48% in domestic production. MOIL has set up a plant based on indigenous technology to manufacture 1500 MTPA capacity of electrolytic manganese dioxide (EMD). This product issued mainly for the manufacture of dry battery cells. EMD produced by MOIL is of good quality and is well accepted by the market. A ferro manganese plant having present capacity of 12,000 MTPA was set-up in 1998 by MOIL for value addition.

In the past, an area of 814.71 Ha. was reserved by Maharashtra Government in favour of MOIL for prospecting in Nagpur and Bhandara districts. Recently, after exploration and requisite clearances, environment clearance (EC) has been given in respect of 126.84 Ha area in Kodegaon, which is adjacent to MOIL's Gumgaon mine. As the resources identified are available at a depth of more than 200 meters from the surface, underground mining will have to be resorted to. In view of this, MOIL is going ahead with purchase of land for the mine and getting other statutory clearances. In the meantime, steps for sinking of a new shaft shall also be taken. This will be a new mine – the 12th mine of the Company and the first new underground mine since inception.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh and Hon'ble Union Minister of Road Transport and Highways Shri Nitin Gadkari during the inauguration of 2nd vertical Shaft at Chikla Mine, Mine Hospitals and Administrative Building at Tirodi Mine of MOIL.

MOIL has identified manganese bearing areas in terms of an MoU with National Remote Sensing Centre (NRSC), Hyderabad for remote sensing studies of four districts of Madhya Pradesh, namely Balaghat, Chhindwada, Jabalpur and Jhabua. On the basis of the report, MOIL has carried out field survey and applied for permission for core drilling from Govt. of Madhya Pradesh in potential zones of these four districts. Recently, Govt. of Madhya Pradesh has reserved 850 Km² and 487 Km² areas in Balaghat and Chhindwara districts respectively to carry out exploration work. This will enable MOIL to take up exploration project in the reserved areas of Balaghat and Chhindwara districts. Applications for other two districts, i.e., Jabalpur and Jhabua, are in process.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during his visit to Balaghat Underground Mine.

5.5.1 Capital Structure

The authorized and paid-up share capital of the Company is Rs. 300.00 crore and Rs. 237.33 crore respectively, as on 31st December, 2021. MOIL got listed on 15th December, 2010 on National Stock Exchange and Bombay Stock Exchange. Current shareholding of Govt. of India, Govt. of Madhya Pradesh and Govt. of Maharashtra is 53.84%, 5.40% and 5.11% respectively and rest 35.65% is held by the public.



5.5.2 Financial Performance

(Rs. in crore)

Parameter	2019-20	2020-21	2021-22*
Total Income	1219.18	1279.85	1028.15
Profit Before Tax	340.49	240.11	282.46
Profit After Tax	248.22	176.63	211.37

*Provisional up to December, 2021

5.5.3 Production Performance

Parameter	2019-20	2020-21	2021-22*
Manganese Ore (Lakh Metric Tonne)	12.77	11.43	8.59
E.M.D. (Metric Tonne)	925	1070	879
Ferro Manganese (Metric Tonne)	10421	8851	7618

*Provisional up to December, 2021

5.5.4 Manpower

The manpower strength of MOIL as on 31.12.2021 was 5802.

5.6 MECON Ltd.

MECON Limited, a Miniratna CPSE under Ministry of Steel, is one of the leading multi-disciplinary Design, Engineering, Consultancy and Contracting organization in the field of Metals and Mining, Energy (Power, Oil & Gas), Infrastructure, Environmental Engineering and other related/diversified areas with extensive overseas experience. MECON provides entire gamut of services required for setting up of Greenfield and Brownfield projects from Concept to Commissioning including Turnkey execution. MECON is an ISO: 9001 accredited company and is registered with International Financial Institutions like World Bank, Asian Development Bank, African Development Bank, European Bank of Reconstruction & Development and United Nations Industrial Development Organization etc. MECON has also ventured into newer areas of business with strategic partners to meet challenges emerging from changed business scenario.

5.6.1 Financial Performance

(Rs. in crore)

Parameter	2019-20	2020-21	2021-22*
Turnover	561.17	718.00	280.10
Operating Profit	38.68	(25.34)	(106.37)
PBT	87.03	19.11	(82.27)
PAT	69.00	6.24	(82.27)

*Provisional upto December, 2021

5.6.2 Manpower

The manpower strength of MECON as on 31.12.2021 was 1138.

5.7 MSTC Ltd.

MSTC Limited was incorporated as “Metal Scrap Trade Corporation Limited”, under the provisions of the Companies Act, 1956 on September 9, 1964 at Kolkata. MSTC Limited became a PSU in 1982-83. It was the canalizing agency for import of carbon steel melting scrap, sponge iron, hot briquetted iron and re-rollable scrap till February, 1992. It was also the canalizing agency for import of old ships for breaking. Imports of such items were decanalised with effect from August 1991. Subsequently, the company diversified into mainly providing e-auction /e-procurement services. Under this segment, the Company undertakes disposal of ferrous and non-ferrous scrap arisings, surplus stores, condemned plants, minerals, Agri and forest produce etc. for Government Departments, Public Sector Undertakings and private companies. The Trading Division is engaged in import as well as domestic sourcing of bulk industrial raw material for actual users as well as traders. This division looks after sourcing, purchase and sale of industrial raw materials like low ash metallurgical coke, HR coil, naphtha, crude oil, coking coal, steam coal, line pipes etc. on behalf of customers across steel, oil and gas, power sectors in private and public sector. Major activities of the Company include:

E-commerce: Under this segment of business, MSTC acts as a standalone and neutral e-commerce service provider for various Central/State Government Departments and other private entities to ensure transparent and fair sale and purchase transactions. MSTC has evolved as the only PSU under this segment of business with full fledged in-house operations and grown to become the largest Government Company in India in e-Commerce sector.

Recycling: MSTC has embarked upon setting up of the first mechanized Auto Shredding plant in India for processing of scrap from the End-of-Life Vehicles (ELV). A joint venture Company namely Mahindra MSTC Recycling Private Limited has been formed. The Company’s first Collection and Dismantling plant for End-of-Life Vehicles (ELVs) at Greater Noida has completed two years of operations. The Company’s second plant, located at Chennai, has commenced operations from February, 2020. Another plant has started operations in Pune. The Company plans to set up similar plants in Indore, Ahmedabad, Hyderabad and Kolkata in the coming year.



New Corporate Office building of MSTC Limited, at New Town, Rajarhat, Kolkata, inaugurated by Shri Ram Chandra Prasad Singh, Hon’ble Union Minister of Steel, on 26th August, 2021 in the presence of Shri Faggan Singh Kulaste, Hon’ble Union Minister of State for Steel and Rural Development.



5.7.1 Capital Structure

As on 31-12-2021, the Authorized Capital of the company is Rs.150.00 crore and paid-up Capital is Rs.70.40 crore. Government of India holds 64.75% shareholding and the balance 35.25% shareholding is held by the public and others.

5.7.2 Physical Performance

(Rs. in crore)

Parameter	2019-20	2020-21	2021-22*
E-Commerce	126238.91	128796.31	105000.98
Trading	1152.32	189.59	326.85
Total Volume of Business	127391.23	128985.90	105327.83

*Provisional upto December, 2021

5.7.3 Financial Performance

(Rs. in crore)

Parameter	2019-20	2020-21	2021-22*
Turnover	830.71	427.75	411.50
Operating Profit	131.53	117.16	133.84
Profit Before Tax	129.49	114.68	131.34
Profit After Tax	75.20	101.07	85.39

*Provisional upto December, 2021

5.7.4 Manpower

The manpower strength of MSTC as on 31.12.21 was 318.

5.8 KIOCL Ltd.

KIOCL Limited (formerly Kudremukh Iron Ore Company Limited), a Schedule-A, Mini Ratna Category-I CPSE under the Ministry of Steel was incorporated on 02.04.1976 with an objective to mine & beneficiate low grade magnetite iron ore from Kudremukh Iron Ore mine in Chickmagaluru District of Karnataka State. Government of India holds 99.03% of its equity. The Company is currently engaged in the business of manufacturing and selling of Iron Ore Pellets and Foundry Grade Pig Iron from its manufacturing facilities of 3.5 MTPA Pelletisation Plant and 0.216 MTPA mini-Blast Furnace Unit at Mangaluru. The Company had its captive berth and ship loading facilities at Mangaluru. The manufacturing facilities are accredited with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

Operations of Blast Furnace Unit was suspended w.e.f. 05.08.2009 due to generation of negative contribution. The Company is in the process of adding additional production facilities as forward and backward integration to the existing Blast Furnace Unit Viz. Coke Oven Plant and Ductile Iron Spun Pipe (DISP) Plants to make its operations viable.

The Company under diversification activities is providing Operation and Maintenance services.

Ministry of Mines, Govt. of India notified KIOCL as Exploration Entity under Mines and Minerals (Development and Regulation) Act 1957. Accordingly, the Company has ventured into the business of exploration of mineral deposits for the country.

Ministry of Environment, Forest and Climate Change, Govt. of India vide letter dated 27.02.2020, had accorded Environmental Clearance for setting up of Non-Recovery Coke Oven Plant (0.18 MTPA) with Cogen Captive Power

Plant (10MW) and Ductile Iron Spun Pipe (DISP) (0.2 MTPA) within the existing premises of Blast Furnace Unit at Mangalore. KIOCL has floated Global Tenders for the main packages.

Govt. of Karnataka issued Gazette notification dated 23.01.2017 for reservation of 470.40 ha Iron Ore Block in Devadari Range, Sandur Taluk, Bellary District in favour of KIOCL for mining of iron and Manganese ore, under Section 17A (2) of MMDR Act, 1957. KIOCL has initiated action for obtaining statutory clearances from authorities for execution of mining lease deed. In this direction, Ministry of Environment, Forest and Climate Change (Forest Conservation Division), Government of India vide its letter dated 24th June, 2021 communicated the Stage-I / in-principle approval of Government of India under the Forest (Conservation) Act, 1980 for diversion of 401.5761 hectare of forest land for Iron Ore and Manganese Ore Mining in Devadari Hill Range in favour of KIOCL Limited.

5.8.1 Physical Performance

(in Million Tonne)

Particulars	2019-20	2020-21	2021-22*
Production of Iron Ore Pellets	2.375	2.210	1.385
Sales of Iron Ore Pellets	2.356	2.311	1.261

*Provisional upto December, 2021

5.8.2 Financial Performance

(Rs. in crore)

Particulars	2018-19	2019-20	2020-21	2021-22*
Revenue from Operations	1,887.71	1,937.65	2,383.61	1868
Profit Before Tax	184.12	63.68	410.23	102.64
Profit After Tax	111.86	43.48	301.17	76.81

*Provisional upto December, 2021

5.8.3 Manpower

The manpower strength of KIOCL as on 31.12.21 was 709.

5.9 Ferro Scrap Nigam Ltd. (FSNL)

FSNL is a wholly owned subsidiary of MSTC Ltd. with a paid up capital of Rs. 3200 lakh. FSNL is rendering its specialized services of Scrap & Slag management to plants throughout India. The main objective of FSNL is to generate "Wealth from Waste" by recycling Slag & Scrap generated during Iron & Steel making process as a waste. FSNL is not only saving country's valuable mineral resources but also contributing to protect the environment. In addition, the company is also providing Steel Mill Services such as Scarfing of Slabs & Hot Slag Pit Management.

FSNL is multi locational company having its Registered & Corporate office at Bhilai-Chhattisgarh and presently providing services at SAIL- Rourkela, Burnpur, Bhilai, Bokaro, Durgapur, Salem, RINL-Vishakhapatnam, Arcelor Mittal Nippon Steel India Ltd. at Hazira & Midhani- Hyderabad.



Physical Performance

Item	2019-20	2020-21	2021-22*
Recovery of scrap (lakh metric tonne)	48.59	34.37	27.36
Market Value of Production (Rs. in crore)	4275.94	3024.79	2407.64

*Provisional upto December, 2021

Financial Performance

(Rs. in lakh)

Item	2019-20	2020-21	2021-22*
Total Turnover i.e, Service Charge realized including misc. Income, etc.	40989.64	36496.85	30585
Gross Margin Before Interest & Depreciation	6186.21	4851.82	5444
Interest & Depreciation	1584.53	1645.33	1205
Profit Before Tax	4601.68	3206.49	4239
Profit After Tax	3058	2275	3172

*Provisional upto December, 2021

5.10 EIL, OMDC and BSLC

a. Eastern Investments Limited (EIL), a subsidiary company of Rashtriya Ispat Nigam Limited, (RINL) is a Government of India Enterprise under the administrative control of the Ministry of Steel. EIL is an investment Company and is the holding Company of two mining companies i.e. OMDC & BSLC.

Financial Performance:

(Rs. in crore)

Parameter	2021-22*
Total Income	0.78
Expenditure	0.36
Profit Before Tax (PBT)	0.42
Profit After Tax (PAT)	0.33

*Provisional upto December, 2021

b. The Orissa Minerals Development Company Limited (OMDC)

The Orissa Minerals Development Company Limited (OMDC) is a mining company, engaged in production and sale of Iron & Manganese Ore from its mines at District Keonjhar, Odisha. OMDC became step down subsidiary of RINL and a Schedule 'B' PSU under Ministry of Steel w.e.f. 19.03.2010.

Financial Performance:

(Rs. in crore)

Description	2020-21*
Income	77.54
Expenditure	59.99
Profit Before Tax (PBT)	17.55
Profit After Tax (PAT)	14.05

*Provisional upto December, 2021

c. The Bisra Stone Lime Company Limited (BSLC)

The Bisra Stone Lime Company Limited (BSLC) is a mining company, engaged in production and sale of Dolomite & Limestone from its mines at District Sundargarh, Odisha. BSLC became step down subsidiary of RINL and a Schedule 'C' PSU under Ministry of Steel w.e.f. 19.03.2010.

Physical Performance

(in tonne)

Production	2020-21*
Limestone	54,871
Dolomite	9,16,092
Despatch	
Limestone	3,869
Dolomite	8,94,825

*Provisional upto December, 2021

Financial Performance:

(Rs. in crore)

Description	2020-21*
Income	84.62
Expenditure	77.72
Profit Before Tax (PBT)	5.95
Profit After Tax (PAT)	5.8

*Provisional upto December, 2021

CHAPTER-VI

PRIVATE SECTOR

6.1 Introduction

The private sector of the Steel Industry is currently playing an important role in production and growth of steel industry in the country. The private sector units consist of both large-scale steel producers on one hand and relatively smaller and medium scale units such as Sponge Iron Plants, Mini-Blast Furnace Units, Electric Arc Furnaces, Re-rolling Mills, Cold-rolling Mills and Cooling Units on the other. They not only play an important role in production of primary and secondary steel, but also contribute substantial value addition in terms of quality, innovation and cost effectiveness.

6.2 The leading steel producers in the private sector with their given capacities are given in the table below:

S.No.	Name of Steel Company	Existing Capacity for 2021-22 (in MTPA)
1.	Tata Steel Ltd.	23.00
2.	JSW Steel Ltd.	19.40
3.	Arcelor Mittal Nippon Steel India Ltd.	9.60
4.	Jindal Steel and Power Ltd.	8.00
5.	ESL Steel Ltd.	1.88
6.	Jindal Stainless Ltd.	1.10
7.	Jindal Stainless (Hisar) Ltd.	0.78

Source: JPC

Note: Figures as provided above are provisional in nature and subject to revision upon data finalization by JPC. These figures may vary with the figures reported by the respective company.

6.3 TATA STEEL GROUP

Tata Steel group is among the leading global steel companies with a crude steel capacity of 33 million tonne per annum. It is one of the world's most geographically-diversified steel producers, with operations and commercial presence across the world. The group recorded a consolidated turnover of Rs. 1,56,294 crore in the financial year ending March 31, 2021. In 2021, Tata Steel's Jamshedpur plant was recognized as Global Lighthouse by the World Economic Forum. Tata Steel Ltd. has an existing capacity of 14 million tonne. Together with Tata Steel BSL Ltd. and Tata Steel Long Products Ltd., Tata Steel has a total production capacity of 20.6 million tonne in India.



6.4 JSW Steel Ltd.

JSW Steel Ltd. is one of the foremost integrated steel company in India with an installed capacity of 28 MTPA and has plans to scale it up in India and overseas. JSW Steel's manufacturing facility at Vijayanagar, Karnataka is the largest single location steel-producing facility in India with a capacity of 12 MTPA. The Company has been at the forefront of state-of-the-art, cutting-edge technology, research and innovation while laying the foundation for long-term growth. Strategic collaborations with global technology leaders to offer high value special steel products for various applications across construction, automobile, appliances and other sectors.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during his visit to Jindal Vijayanagar Steel Plant in Karnataka.

6.5 Arcelor Mittal Nippon Steel, India (AM/NS India)

AM/NS India, a joint venture between Arcelor Mittal and Nippon Steel was established in December 2019 with a current annual capacity of 10 million tonne. AM/NS India is an integrated flat carbon steel manufacturer - from iron ore to ready to-market products. The company's manufacturing facilities comprise iron making, steel making and downstream facilities spread across India. AM/NS India offers more than 300 grades of steel, all of which conform to international quality standards, ascribing to being a trusted and reliable provider of steel to customers in India and beyond. Their products are accredited by Indian and global industry bodies. The company also operates significant iron ore pelletization facilities, with a current annual capacity of 20 million tonne.



6.6 Jindal Steel & Power Limited

Jindal Steel & Power Limited is an industrial powerhouse and one of the leaders in the Indian steel industry with a significant global presence. It operates the largest coal-based sponge iron plant in the world and has substantial presence in domestic power, mining and infrastructure sectors. The Company's geographical footprints span across Asia, Africa, Australia and the Middle East.

The Company produces economical and efficient steel and power through backward and forward integration. The Company's product portfolio spans across the steel value chain from widest flat products to a whole range of long products and rails. JSPL have Blast Furnace with a volume of 4554 m³, 2.75 MTPA New Electric Oxygen Furnace (NEOF), advanced Plate Mill capable of producing up to 5-meter-wide plates—the widest ever built in India, 9 MTPA Pelletisation complex, Syn gas based DRI plant and Coal Gasification Plant for steel-making based on Swadeshi coal and 2.4 MTPA Rebar Mill.

6.7 Vedanta (ESL Steel Ltd.)

ESL Steel Ltd. (formerly known as Electrosteel Steels Limited), a Vedanta Group Company is an Integrated Steel Producer, was incorporated in 2006 as a Public Limited Company with operations in Bokaro, Jharkhand, India. In June 2018, Vedanta Limited acquired the management control of ESL through the Corporate Insolvency Resolution Process. The company has a current annual capacity of 1.88 MTPA. The facility primarily consists of Sinter Plants, Coke Oven, Blast Furnaces, Oxygen Plant, Basic Oxygen Furnaces, Billet Caster, and Wire Rod Mill, Bar Mill, Ductile Iron Pipes Plant and a Power Plant. The Company's product range includes TMT Bars, Wire Rods, Ductile Iron Pipes, Pig Iron & Billets.



6.8 Jindal Stainless Limited (JSL)

Jindal Stainless Limited (JSL) is India's largest manufacturer of stainless steel with a capacity of 1.1 million tonne per annum. It is located in the eastern coast of India in the state of Odisha. The manufacturing complex comprises 2,50,000 tonne per annum of Ferro Alloys facilities with world class technology and equipments. The complex, equipped with captive power generation facility (264 MW), is eventually scalable up to 3.2 million tonne per annum of stainless-steel production. A rail-linked Inland Container Depot (ICD) is also operated at the Jajpur facility which has a capacity of handling 4,500 large containers for moving goods and raw materials.



6.9 Jindal Stainless (Hisar) Limited (JSHL)

JSHL is a fully integrated stainless-steel plant with a capacity of 0.8 mtpa. It is also the world's largest producer of stainless-steel strips for razor blades and India's largest producer of coin blanks, serving the needs of Indian and international mints. JSHL's state-of-the-art Specialty Product Division (SPD) caters to the high-end precision and specialty stainless steel requirements of reputed Indian and international customers. The product range includes stainless steel slabs and blooms, hot rolled coils, strips, plates, coin blanks, precision strips, and cold rolled coils. JSHL also manufactures high-nitrogen steel for the Defence sector, which improves material efficiency in armour applications.





CHAPTER-VII

CAPACITY BUILDING, TECHNICAL INSTITUTIONS AND SKILL DEVELOPMENT

7.1 Onboarding Mission Karmayogi

The Government has approved the 'Mission Karmayogi', the National Programme for Civil Service Capacity Building (NPCSCB) which is a paradigm shift in enhancing the capacity of the civil servants by building their behavioral, domain and functional competencies, creating a framework of shared resources and transitioning from a rules-based to roles-based model of civil service to democratize learning and to create future-ready civil service. The programme will be delivered through the online i-GoT-Karmayogi e-learning platform of DoPT which create equitable access to world-class anytime-anywhere learning to all Government officials.

The program aims to inculcate behavioral & functional competencies needed by a Government official at any position and equip him with all knowledge needed to best discharge his duties. The programme will cover several aspects of training including HR management through integration with e-HRMS, monitoring & evaluation and competency framework. Competency will be based on the framework called FRAC- Framework of Roles, Activities and Competencies with behavioural, functional and domain level. There will be three kinds of processes involved in implementation: identification of roles and responsibilities through FRAC, content creation and assessment & evaluation.

In order to implement the Mission Karmayogi within the Ministry, a Capacity Building Unit (CBU) led by Joint Secretary, Ministry of Steel has been constituted to roll out and implement the programme along with monitoring the capacity building progress of all employees in the Ministry and onboarding content on i-GoT-Karmayogi platform. Ministry of Steel has onboarded two contents on 'Iron & Steel Making' and 'Preventive Vigilance' during the year 2021 on i-GoT-Karmayogi platform.

7.2 Technical Institutions

7.2.1 Efforts are being made to constantly upgrade the technical skills of the workforce in the Steel Sector. The following institutes have been set up for the purpose :

7.2.2 National Institute of Secondary Steel Technology (NISST)

National Institute of Secondary Steel Technology was set up as a registered society on 18th August, 1987 to provide trained technical manpower, industrial services, testing facilities, consultancy services for energy efficiency and reducing pollution levels, a platform for interaction between industry and educational/research institutions and other services to the secondary steel sector. Presently Additional Secretary, Ministry of Steel, is the Chairperson of the Institute.

NISST undertakes various activities as following:

- Industrial Consultancy, Training and Skill Development.
- Energy Audits (Accreditation from Bureau of Energy Efficiency, Ministry of Power, GOI).
- Safety Inspection (Competent persons for safety inspection from Government of Punjab and UT of Daman & Diu and Dadra Nagar Haveli for safety Inspections).
- Lab Testing (NABL Accreditation & BIS recognition of Mechanical & Chemical Labs).

NISST is working jointly with MSME for undertaking cluster development programme in Iron & Steel Sector. SMEs of steel sector appreciate and feel the laudable contribution of this Institute. NISST focuses its activities and efforts keeping in view the National Steel Policy.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during his visit to Mandi Gobindgarh Steel Cluster.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during his visit to Vardhman Special Steel Plant at Ludhiana.

7.2.3 Biju Patnaik National Steel Institute (BPNSI)

Based on the concept plan developed by a task force set up by the Ministry of Steel, a decision was taken to set up a National Steel Institute at Puri, as a Training-cum-Service-cum-Research & Development centre. Accordingly, Biju Patnaik National Steel Institute was registered under the Societies Registration Act 1860 and started functioning from January 1, 2002. The Cabinet had on February 20, 2004 approved the setting up of BPNSI at Puri as a full-fledged institute with capital funding from JPC. Aligning with the Purvodaya scheme of Government of India, the institute shifted to Kalanganagar, the mega steel cluster of Odisha from 1st March, 2021 for achieving the vision of being a finishing school in steel sector and make youth employable. For the period of 2021, the Institute trained 597 students from polytechnics on Energy Management through virtual mode.



7.2.4 Institute for Steel Development & Growth (INSDAG)

The Institute for Steel Development & Growth (INSDAG) was set up in 1996 and started functioning from 1999. It was promoted by Ministry of Steel along with major Steel Producers in the country like SAIL, RINL, Tata Steel, JSW, Essar Steel and JSPL. The objective of the Institute is to promote consumption of steel in the country by means of technical publications and study reports, dissemination of knowledge on steel-based designs, steel codes and standards to the students of engineering colleges, faculties, academicians, professionals, architects & structural engineers.

INSDAG has developed an innovative design methodology pertaining to low-cost house targeting the rural poor people in India. Model houses have been constructed at some locations all over India. With the initiative of MoS and SAIL, one such model house has been successfully constructed within the campus of NIRD & PR, Hyderabad. This house consumes about 1550 Kg. of steel including 800 Kg. of structural steel, reinforcements (TMT) in RCC foundation and ferrous elements in FC panels having overall steel-to-cement ratio as 0.3. INSDAG developed design details of model Rural Village comprising of Low-Cost Houses, Anganwadi Centres, Panchayat Hall, Community Toilet, etc. with steel. These designs are cost effective and easily implementable in rural / semi-rural areas.

7.3 Skill Development

7.3.1 Pradhan Mantri Kaushal Vikas Yojana (PMKVY) Short Term Training (STT)

The training already done primarily in 24 States of the country, namely Assam, Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Goa, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal. A total of 129 Training Centers participated in imparting the training programs of IISSTC through 45 numbers of Training Partners. The basic thrust of above training program was school dropouts (8th/10th pass) and for entry level candidates to target the poor population. The trainings were conducted at remote districts which are backward and underdeveloped.

Short Term Training Program (STTP) under PMKVY 2.0 for FY 2015-16 to December, 2021

Sl. No.	Year	Enrolled	Trained	Assessed	Passed	Certified	Placed
1	2015-16	28301	28301	27873	23971	22732	2730
2	2016-17	The Program was on Hold					
3	2017-18	12912	9678	8373	7733	7536	1937
4	2018-19	4888	5209	5200	5199	5365	4056
5	2019-20	8122	8015	7451	6512	6453	3198
6	2020-21		800	2546 (Incl. Trained during FY 2019-20)	2475	2565 (Incl. passed during FY 2019-20 but certified this FY)	1290
7	April 2021 to 24th Dec 2021	1104	1104	970	940	940	On Going
	TOTAL	55327	53107	52413	46830	45591	13211

N.B. 1. The targets are continuous and given by NSDC for the total period of PMKVY 2.0 (2016-20).

7.3.2 In the year 2021-22 the activities of Indian Iron and Steel Sector Skill Council (IIS SSC) under Recognition of Prior Learning (RPL) training programmes have been truncated due to the Covid19 pandemic. The Council could certify 6000 candidates. Training was done at PSUs like SAIL, RINL, AM/NS, JSW Steel Plant and Hindustan Unilever Kolkata to upgrade their existing manpower and certify them for prior learning. SMEs also participated in the training under IIS SSC for their existing work force.

Recognition of Prior Learning (RPL) and STT under Non-PMKVY for 2020-21 to 2021-22

Sl. No.	Scheme	Training Done	Remarks
1	FY 2020-21(April 2020 to 15th January' 21): PSUs Training under RPL (SAIL-Bokaro Steel Plant-20, AM/NS-32, RINL-114, Hindustan Unilever Kolkata-17)	183	Existing Employees Being Re-Skilled
2	FY 2020-21: SME Sector & Training (CTTC-30)	30	Existing Employees Being Re-Skilled
3	FY 2020-21(April 2020 to 15th January' 21): Other Schemes(NSKFDC-573, NSFDC-230)	803	Short Term Training (STT)
4	FY 2021-22: SME Sector & Training (TVSSCS CPR Division-20)	20	Existing Employees Being Re-Skilled
5	FY 2021-22(April 2020 to September 2021): PSUs Training under RPL (RINL-117)	158	Existing Employees Being Re-Skilled
	PSU training under RPL from April, 2021-December, 2021 : (SAIL-41)		
6	FY 2021-22(April 2021 to 24th Dec'21): Other Schemes (DDUGKY-87, Non PMKVY-16, UPSDM-150)	253	Short Term Training (STT)
	Total	1447	

7.3.3 Apprenticeship

All the PSUs like SAIL, RINL are taking apprentices through new portal. Plants are taking apprentices mainly for DGT Courses. JSW Bellary has shared a requirement for nearly 500 fresh apprentices to be screened by IIS SSC and linked to apprenticeship portal. IIS SSC has shared a list of 700 candidates and screening process is being initiated so that successful candidates would be linked to apprenticeship. IIS SSC is encouraging the individuals and SME units to participate in NAPS (National Apprenticeship Promotion Scheme) on optional trade. IIS SSC already developed 4 modules on optional trade. IIS SSC is taking help of 3rd party aggregator (TPA) to promote the scheme.



CHAPTER-VIII

RESEARCH AND DEVELOPMENT

8.1 Background

In India, R&D in the Iron & Steel Sector is pursued by the various stakeholders viz. R&D Laboratories under CSIR (NML & IMMT), Academic Institutions (IITs & NITs) and the leading steel companies e.g. SAIL, Tata Steel, JSW Steel and AMNS. The leading steel companies are carrying out research from their own funds. Ministry of Steel is supplementing the R&D initiatives of the steel sector by providing financial assistance through a Government funded scheme: “Promotion of Research & Development in the Steel Sector”.

8.2 R&D with financial assistance from Ministry of Steel

- Ministry of Steel is operating an R&D scheme viz. “Promotion of R&D in Iron & Steel Sector”, for providing financial assistance for pursuing R&D to address the technological issues faced by the sector and also indigenous development of processes/ technologies.
- R&D Project proposals are invited from reputed Academic Institutions/ Research Laboratories and Indian Steel Companies for pursuing R&D projects for the benefit of the Iron & Steel Sector in the country.

8.2.1 The thrust areas for providing support

- Development of innovative/ path breaking technologies for utilization of iron ore fines and non-coking coal.
- Beneficiation of raw materials like iron ore, coal etc. and agglomeration.
- Improvement in quality of steel produced through the various routes of steel making including the Induction Furnace route.
- Development of commercially viable technology for utilization of steel plant and mine wastes including LD/EAF/ IF Slag.
- R&D for achieving global benchmarks in Productivity, Quality, Raw material consumption, Energy consumption, Water consumption, Refractory consumption etc.
- Development of Low carbon technologies for reduction in GHG emission.
- Development of innovative technology for effective recovery of waste heat in different iron & steel making processes including downstream processes.
- To pursue R&D for increasing the consumption of steel.
- Development of innovative solutions for addressing the challenges faced by the Iron & Steel industry.
- To pursue R&D on any other subject of national importance concerning the Iron & Steel sector.

8.2.2 Scope of Support

- R&D work in Lab Scale/ Bench Scale and scale-up to Pilot Scale/Demonstration Plants will be supported.
- Joint proposals with other laboratories/institutions/industries are desirable for providing support under the scheme.

- In case of lab scale research by the research laboratories & academic institutions funding upto 70% of the total cost is permissible.
- In case of Industrial/ Commercial organizations, financial assistance of upto 50% of the total cost is permissible.
- For Pilot/ Demonstration Scale R&D projects, financial assistance will be limited to upto 40% of the total cost & the balance to be met by the industrial partner.

8.2.3 Quantum of Support

The quantum of funding of the R&D projects from Ministry of Steel during the last five years is given below:

Sl. No	Year	Government Funding (Rs. in crore)
1	2016-17	15.00
2	2017-18	14.00
3	2018-19	15.00
4	2019-20	15.00
5	2020-21	0.54
6	2021-22 (upto Dec 2021)	0.88
	Total (Rs. in crore)	60.42

- The details of funds released during 2021-22 under the scheme “Promotion of R&D in Iron & Steel Sector” is at Annexure-XVI.
- The budget allocated for the scheme for the FY 2021-22 is Rs. 4.81 crore and for the FY 2022-23 is Rs. 4.49 crore.

8.2.4 Approval & Monitoring Mechanism of the R&D Projects

- An Evaluation Group comprising members from Principal Scientific Adviser to the Government of India, DRDO, DST, Premiere Academic Institutions and Industry, carry out evaluation of the R&D proposals received for funding under the scheme.
- A Project Approval and Monitoring Committee (PAMC) under the Chairmanship of Additional Secretary & Financial Adviser and Joint Secretary, Ministry of Steel, Director IIT Kharagpur, Director IMMT, Director NML are the 2nd Stage approving body for the R&D proposals recommended by Evaluation Group.
- Final approval is accorded by the designated authority based on the cost of the project as per the guidelines issued by Department of Expenditure.
- A Project Review Committee monitors the progress of the on-going projects on a regular basis.

8.2.5 R&D Projects pursued under the Scheme

- Under this scheme R&D projects have been funded to all major stakeholders viz., SAIL, CSIR Labs viz. CSIR-NML, CSIR-IMMT, CSIR-CBRI, CSIR-CRRI etc. besides some academic institutions like, IIT Kharagpur, IIT Kanpur, IIT Madras, IIT BHU, MNIT Jaipur etc.
- Major projects covered under the scheme include exclusive R&D initiatives to upgrade Indian low/lean grade iron ore and Indian coking/non-coking coal and finding ways to produce quality steel with low Phosphorus in Induction Furnace, development of alternative iron making, utilization of steel plant wastes such as steel slag, addressing climate change issues etc.



8.2.6 R&D by Steel Companies (Public Sector and Private Sector)

8.2.6.1 Initiatives by Public Sector Units

Steel Authority of India Limited (SAIL)

Research and Development Centre for Iron and Steel (RDCIS) is the corporate R&D unit of Steel Authority of India Limited (SAIL). Over the years, RDCIS has earned credentials of being an R&D Centre of international repute in the field of ferrous metallurgy.

It undertakes R&D projects in diverse realms of Iron & Steel Technology under the categories of Basic Research, Product Development, Plant Performance Improvement, Scientific Investigation & Design and Technical Services. Specific R&D has also been undertaken for Process & Product Development, Reducing Energy Consumption and Waste Utilization. Projects pursued specifically in the area of waste utilization are Utilization of solid wastes through sintering (RDCIS), Utilization of waste plastic, plastic oil, CDCP dust in coke making (RDCIS), Laboratory study for briquetting of BOF Sludge and compatible steel plant wastes, Improving off-site application potential of BOF steel-making slag at DSP.

Rashtriya Ispat Nigam Limited (RINL)

R&D initiatives at RINL are directed towards meeting the present and future requirements of the plant. Programs in the areas of process improvement, waste management, new product development, cost reduction, environment protection etc. are taken up internally as well as with external research organizations under collaborative research.

NMDC Ltd.

R&D centre at NMDC has the capability and capacity to undertake project associated to mineral beneficiation & processing, mineralogical studies, material handling and storage, metallurgical studies of iron ore and coal, chemical analysis etc. R&D Centre extends its vital support to NMDC's existing and upcoming projects. Expertise of R&D Centre is also being extensively used by other organizations (in both public and private sector) engaged in iron ore, coal and other allied sectors globally. The research initiatives are directed towards the vision and mission of the organization. R&D Centre also undertakes collaborative projects with reputed organizations and institutes across the globe having expertise in the field of waste utilization, mining, beneficiation and other allied areas.

NMDC has established NMDC Innovation & Incubation Centre (NICE) in association with i-TIC Foundation at IIT-Hyderabad premises, with a focus to nurture and incubate start-up companies with new and innovative ideas in Deep Technology. R&D Centre is also recognized by Department of Scientific and Industrial Research (DSIR). The Chemical laboratory has been accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL ISO 17025:2017) in the field of chemical analysis.

MECON Ltd.

MECON has developed Infrared camera-based ladle/torpedo ladle condition monitoring system to avert major accidents in steel plants due to ladle failure owing to erosion of refractory lining. This system has already been installed at RSP funded by MoS and SAIL.

MOIL Ltd.

Specific R&D undertaken: In-house development of heavy-duty pumps for hydraulic sand stowing (which is required to fill the underground workings after excavation of mineral to avoid subsidence) which is much efficient for handling more sand and less water ratio. This results in less water consumption and energy conservation.

KIOCL Ltd.

R&D activities and innovation initiatives at KIOCL are being taken up departmentally based on the need on continuous basis to improve upon the existing process system bring down the cost of production and to achieve the set targets.

8.2.6.2 Initiatives by Private Sector Units

Tata Steel Limited (TSL)

The brief details of a few ongoing (FY 2021-22) projects are as below:

- Development of Pilot facility for CO₂ capture from Blast Furnace off gas.
- Modeling for Alternate Iron Making Process.
- High Grade Sensible Heat Recovery from Molten Slags.
- Process to reduce stickiness of iron ore fines.
- Optimization of coal blends composition for coke plant.
- Decarbonization of Iron Making Process.

JSW Steel Ltd.

Focus areas of R&D

- New product development, product customization and new applications.
- Quality and productivity improvements through process efficiency improvements.
- Process waste utilization and value-added products developments.
- New process / technology development for process intensification.
- Optimal resource utilization and conservation of natural resources.
- Increasing the research horizon through collaboration with premier institutions and research centres.

Arcelor Mittal Nippon Steel (AMNS)

The objective of the R&D program is to make Arcelor Mittal Nippon Steel India Ltd. a leading and sustainable steel producer in India through focused and applied research in the areas of:

- New and innovative steel products
- By-products of steel plant
- Process improvements
- New and local raw materials

The R&D is an 'In-house R&D' approved by DSIR. At present 25 R&D engineers are engaged in R&D. Specific R&D undertaken for Process & Product Development, R&D for import substitution & export promotion, Reducing Energy Consumption, Waste Utilisation, conservation of resources viz. raw materials, water etc. and their results/ outcome/ achievements/ commercialization.



CHAPTER-IX

PROMOTION OF STEEL USAGE

9.1 Background

- Steel consumption shows a strong correlation with GDP, especially during the nation building phase and plays a pivotal role for prompt environmentally sustainable economic development of any Nation. In India also, Steel Industry can play an important role to make India one of the largest economies in the world.
- National Steel Policy 2017 was issued by the Government with the objective to make the country self-reliant in all type of steel as well as making Indian Iron & Steel Industry globally competitive. Ministry of Steel is continuously making efforts to enhance steel production capacity domestically and at the same time increase domestic demand and usage of steel.
- As per WSA, construction is one of the most important steel-using industries, accounting for more than 50% of world steel demand. Buildings, from houses to car-parks to schools and skyscrapers, rely on steel for their strength. Steel is also used on roofs and as cladding for exterior walls. The world's population is expected to increase by 2 billion persons in the next 30 years, from 7.7 billion currently to 9.7 billion in 2050, according to United Nations report launched in 2019. This will be accompanied by rapid urbanisation. As the need for buildings and infrastructure continues to grow worldwide, reducing consumption of natural resources and associated emissions is crucial for future sustainability. Whilst the operation of buildings accounts for 28% of global CO₂ emissions, they also present many opportunities for reducing emissions and mitigating climate change. Steel Makers around the world are increasingly providing construction solutions that enable energy-efficient and low-carbon-neutral buildings.
- To promote steel usages in various sectors, Ministry of Steel has been jointly organising workshops/ webinars to spread the awareness for benefits of enhanced steel usage in various sectors. Ministry of Steel has also formed a Committee of experts from INSDAG, IITs, Ministry of Road Transport and Highways (MoRTH) and industry experts for development of designs for long span (30m, 35m and 40m) steel based Bridges. The design for 30m is being vetted by the experts for finalisation.
- The Committee formed jointly with Ministry of Petroleum and Natural Gas to prepare a roadmap for promoting domestically produced steel in Oil and Gas Sector has submitted the final report in August, 2021. A Joint Working Group (JWG), having members from Ministry of Housing and Urban Affairs (HUA), Ministry of Skill Development, Ministry of Steel, BIS, CPWD, Technical Institutions (IITs) and from Industry, has also been set up for fostering steel usage in Housing and Construction sector to develop standardized design and layouts of housing configurations with Steel structure.
- Not only is steel affordable, readily available and safer, its intrinsic properties, such as strength, versatility, durability and 100% recyclability allow for improved environmental performance across the entire life cycle of projects. The advanced high-strength steels used in steel-plate applications also find uses in a number of related industries. Offshore oil rigs, bridges, civil engineering and construction machines, rail carriages, tanks and pressure vessels, nuclear, thermal and hydroelectric plants – all these applications benefit from the attributes of modern steels. However, the consumption of Steel in our country is lower compared to developed nations and there is large scope to improve the steel usages in various sectors.

9.2. Steel Usage scenario in India

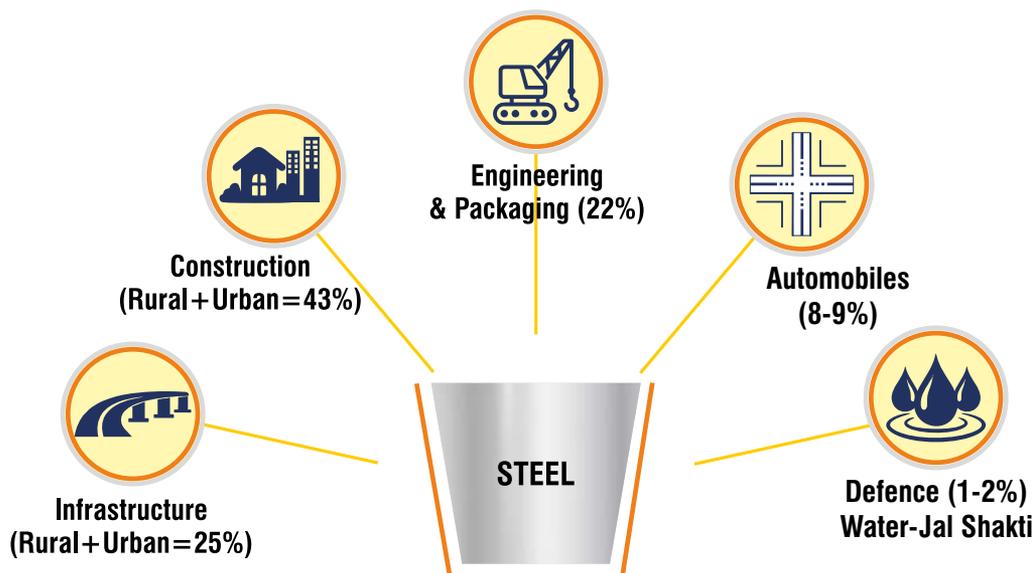
9.2.1 During the last 05 financial years, the consumption of Steel in India has been as following:

Total Finished Steel (alloy/stainless + non-alloy) Consumption		
Year	Quantity (MT)	Change (%)
2017-18	90.71	7.9
2018-19	98.71	8.8
2019-20	100.17	1.5
2020-21	94.89	-5.3
2021-22*	76.646	-

*Provisional upto December, 2021

The consumption of steel during FY 2020-21 was low due to the impact of Covid-19 pandemic.

9.2.2 In India, steel is primarily consumed in growth driving sectors such as Housing & Construction (43%), Infrastructure Development (25%), Engineering & Packaging (22%), Automotives (8-9%) and Defence (1-2%).



9.2.3 During 2020-21, the total steel consumption in the country was 94.89 Million Tonne. However, India’s annual per capita steel consumption during 2020-21 is 70 kg and is one-third the global average (227.5kg). India’s rural per capita consumption at around 21.3 kg per annum is well below the national level. There is large scope to improve the steel usages in various sectors.

9.3 India’s steel demand outlook

9.3.1 India’s total steel demand is expected to grow at 7.2% CAGR through FY 2031 and reach ~230 MT. This growth will be driven by the building & construction (rising urbanization rate) and infrastructure segments (investments in roads, railways and airports, increasing steel intensity).



9.4 Government initiatives driving steel usage

9.4.1 Gati Shakti Master Plan and Infrastructure Development: The recently announced Gati Shakti Master Plan will complement the Rs. 100 lakh crore investment plan by the Government for infrastructure development over the next five years. The Gati Shakti Master Plan takes a holistic approach to sector-specific developments to implement and monitor Rs. 100 lakh crore of investment. The following initiatives will boost the demand of steel in various sectors thereby enhancing steel usage:

- **Bharatmala:** In the road transport and highways sector, two lakh km route of national highway network is to be achieved by 2024-25. Along the coastal areas, 5590 km of four and six-lane national highways is to be completed by 2024-25. All state capitals in North Eastern Region to be connected with either four-lane National Highway or two alternate alignments of two-lane configurations each by 2024-25.
- By 2024-25, Indian Railways is expected to see a decongestion by 51 per cent due to completion of several critical projects. Cargo to be handled by Indian Railways will be 1600 million tonne up from 1210 million tonne in 2020. Western and Eastern Dedicated Freight Corridors for faster movement of freight trains to be completed.
- **Sagarmala:** Shipping sector will see an increase in cargo capacity at the ports to 1759 Million Metric Tonnes per Annum (MMTPA) by 2024-25 from 1282 MMTPA in 2020. Cargo movement on all national waterways will be 95 Million Metric Tonne (MMT) by 2024-25 from 74 MMT in 2020. Cargo movement on river Ganga is set to be increased from 9 MMT to 29 MMT by 2024-25.
- **Regional Connectivity Scheme – UDAN:** Civil aviation sector to see an increase in the aviation footprint globally. 220 airports, heliports and water aerodromes to be operational by 2024-25. 109 airports including existing 51 airstrips, 18 Greenfield airports, 12 water aerodromes and 28 heliports to be developed by 2024-25.
- New and Renewable Energy sector capacity is to be increased from 87.7 Gigawatt to 225 Gigawatt by 2024-25. 50 percent of India's power generation capacity is to be met by renewable energy sources by 2024-25.
- Power transmission network is to be upgraded from 4,25,500 circuit km to 4,54,200 circuit km by 2024-25. Transmission network performance parameters to match the best global standards.
- In Petroleum and Natural Gas sector, 17000 km long trunk pipeline, connecting major demand and supply centers for industries, is to be added by 2024-25 making a total length of 34500 km of pipeline across the country. All states to be connected with the trunk natural gas pipeline network by 2027.
- In the Telecommunication sector, a total length of 35,00,000 km of optical fiber cable network is to be laid down by 2024-25. Connecting all 2,50,000 Gram Panchayats with high-speed internet and 4G mobile connectivity by 2022.

9.4.2 Apart from above, existing Government initiatives such as Pradhan Mantri Awas Yojana – Urban and Gramin, Make In India, Pradhan Mantri Ujjwala Yojana, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), Smart city development, AMRUT and Clean Ganga Mission will be demand drivers for steel.

9.4.3 The Government has also launched the 'Make-in-India' programme, which aims to provide an impetus to the manufacturing and mining sector of the country through various policy initiatives and incentives which is expected to benefit the domestic steel industry.

9.4.4 In the "Jal Jeevan Mission - Nal Se Jal" programme of the Ministry of Jal Shakti, usage of Steel pipes (coated mild steel or ductile iron pipes) for the primary water (trunk line) will provide sustainable distribution network due to its strong rust and corrosion resistance; long life to enable distribution of safe and sustainable distribution of piped drinking water to Indian households.

9.5 Efforts made by Ministry of Steel to promote steel usage:

Ministry of Steel (MoS) is actively working to promote steel use by conducting Awareness programmes with various stakeholders and by providing Enabling Environment.

9.5.1 Awareness Programmes:

- Ministry of Steel has launched “**Ispati Irada**” campaign to encourage steel usage across sectors. “Ispati Irada” is a collaborative branding campaign with the objective of promoting the benefits of steel usage in various facets of nation building and how it impacts the lives of citizens in the country.
- Active collaboration done with nations such as Japan for learning enabling procedures to promote higher usage of steel in construction and Infrastructure.

9.5.2 Joint Workshop/Webinars were held with various Ministries/Departments, which are working for infrastructure development in the country such as Ministry of Housing and Urban Affairs (MoHUA), Ministry of Rural Development, Ministry of Agriculture & Farmers Welfare, Ministry of Civil Aviation, Ministry of Railways, Ministry of Defence, Ministry of Petroleum & Natural Gas; Housing Developers, Designers, Architects, Academicians and Industry to promote steel usage in various sectors.

The sector wise initiatives are given below:

I. Building, construction and infrastructure sector-

- Ministry of Steel organised Webinar in collaboration with the Ministry of Economy, Trade & Industry (METI), Japan by engaging Japanese experts.
- A roundtable discussion through Webinar was organised with Indian Developers/Builders, Designers/Consultants, Fabricators, Academicians from IITs and steel producers to enhance steel usage in the country especially in construction sector.
- A Webinar with Ministry of Housing and Urban Development and Ministry of Civil Aviation was held to foster steel usage in Housing construction sector.
- A **Joint Working Group (JWG)** having members from Ministry of Housing and Urban Affairs, Ministry of Skill Development, Ministry of Steel, BIS, CPWD, Technical Institutions (IITs) and from Industry has also been setup for fostering steel usage in Housing and Construction sector. The major jobs assigned to the JWG are:
 - ❖ To develop standardized design and layouts of housing configurations with Steel structure with estimated cost, as adopted in Pradhan Mantri Awas Yojana (PMAY) houses and States Schemes for circulation to all States/UTs. A software in collaboration with IITs/NITs may be developed in this regard.
 - ❖ To promote Light Gauge Houses, Composite and Pre-Engineered Steel Building to enhance the quality and speed of construction in the various schemes such as PMAY, Smart Cities Development.
- The JWG held meeting on 10.08.2021 and 23.12.2021. The work for design of steel homes for PMAY was taken up.

II. Automobile sector:

Ministry of Steel has engaged in multiple conversations with Engineering Export Promotion Council of India (EEPC), multiple automobile players and Indian steel players to understand possibility of competitively priced domestic manufacturing and procurement of auto grade steel in India.

III. Railways and Defence sector:

Ministry of Steel organized a Workshop jointly with Ministry of Railways and Ministry of Defence in February, 2020 in New Delhi for fostering domestically manufactured steel in Railways and Defence sector. This resulted in identifying the issues and challenged which are hampering the usage of domestically manufactured steel in these sectors.



IV. Oil & Gas Sector:

Ministry of Steel organized a Webinar jointly with Ministry of PNG for fostering domestically manufactured steel in Oil and Gas sector. This resulted in identifying the issues and challenges which are hampering the usage of domestically manufactured steel in Oil and Gas sector. A Committee has been formed jointly with Ministry of PNG to prepare a roadmap for promoting domestically steel in Oil and Gas Sector in September, 2020. The Committee has submitted the final report in August, 2021.

V. Rural India:

Steel use in the rural areas has been much lower compared to the use of steel in urban areas. The rural per capita steel consumption in the country has been of the order of 21.3 kg in the year 2020-21 against the all-India average of 70 kg. Ministry of Steel is actively looking at avenues to enhance steel consumption in rural areas. Increase in agricultural implement penetration in rural India (tractors, combine harvesters etc.), creation of permanent houses under Pradhan Mantri Awas Yojana – Gramin along with an increase in steel silos for grain storage and greater rural vehicle penetration will enable a rise in steel use in rural India. A Webinar was organized on 20.10.2020 with Ministry of Rural Development, Ministry of Agriculture & Farmers Welfare, Department of Dairying & Animal Husbandry and Ministry of Food Processing.

9.5.3 Enabling Environment

Ministry of Steel has been engaging with various Ministries/Departments in the Government, for making necessary changes in policies/guidelines, which will facilitate promotion of usage of steel. Major initiatives include:

- **Modifications/addition of steel based construction design codes:** Ministry of Steel has taken up with Bureau of Indian Standards (BIS) Revision and updating to latest requirements of BIS Indian Standard codes for steel based construction such as IS:800 (Code for general construction in steel); IS:801 (Code for cold formed light gauge steel structural members in general building construction), IS:4000 (Code for High Strength Bolt use in steel structure) and IS 13174 (Code for the terminology and methodology for Life cycle cost analysis). BIS has informed that a Committee of Experts has already been formed having representatives from concerned Ministries/Departments, Industry, IITs, INSDAG, SAIL for addition/Modification of codes for steel intensive construction. The detailed study is being done by the Committee.
- **Inclusion of steel intensive construction items and work rates in the CPWD:** Steel intensive construction Plinth Area Rate (PAR) cost needs to be added to the CPWD Plinth Area Rate (PAR). This would improve the adoptability of steel intensive construction in the country. Ministry of Steel had taken up with CPWD through the JWG. CPWD has agreed for inclusion of Plinth Area Rate (PAR) in the CPWD-PAR for steel intensive building construction.

Also, Non-inclusion of steel structural construction and finishing item rates along with absence of steel structural work cost estimates in the Delhi Schedule of Rates (DSR) results in delayed approval for government construction projects. Ministry of Steel had also taken up with CPWD for inclusion of steel structural work rates and items in DSR. CPWD has agreed for the same.

- **Development of Design guides for steel intensive construction and bridges:** Ministry of Steel has also formed a Committee of experts from INSDAG, IITs, Ministry of Road Transport and Highways (MoRTH) and industry experts for development of designs for long span (30m, 35m and 40m) steel based Bridges. The development of 30 m bridge has been approved and final drawings submitted by the Committee on 04.01.2022.
- **Modification/addition in the existing guidelines and BIS codes for road and bridge construction:** Guidelines have been laid by MoRTH for proper implementation of crash barrier in Indian Road Congress guidelines (IRC-SP 84, IRC 87) for National and State Highways. This will enhance steel usage and greatly reduce the number of off-road accident fatalities in the country.
- **Development of Skilled Manpower:** Ministry of Steel has taken up with Ministry of Skill Development through JWG for promotion of Certified design, fabrication and welding courses etc.

- **Supporting Research and Development for steel structural design:** The development of steel-based designs for PMAY etc. is supported by Ministry of Steel through JWG.

9.6 Initiatives by CPSEs to Promote Steel Usage

9.6.1 SAIL

Various initiatives are being taken by SAIL in terms of identifying new markets and new segments to sell additional volumes of products. In order to introduce customers to the new product range offered by SAIL, dedicated Cross Functional Teams comprising representatives from Central Marketing Organization (CMO) and Plants have been formed. Seminars, Workshops and Focused meetings have been organized with end users, architects, structural designers and consultants, etc. in order to have better understanding about requirement of the Construction / Fabrication Industry and to share knowledge about products being manufactured by SAIL. In order to achieve a better mutual understanding of the requirements of end consumers on one hand and production capabilities on the other, interactive sessions have been organized between consumers and Plant collectives.

- To be able to meet the requirements of the customers in the dynamic market space more efficiently, SAIL has made marketing initiatives like Key Accounts Management (KAM), increased focus on Retail Segment by appointment of Tier -II & Tier-I Distributors.
- Some other initiatives taken by CMO during FY 2021-22 include promoting incentivization Scheme for MSMEs under Mission Purvodaya. SAIL launched its initiative to boost the industrial eco-system around its five integrated steel plants at Bhilai, Rourkela, Bokaro, Durgapur and Burnpur, named "IspatillakonkaVikas: SAIL ke Sath". The Scheme aims to contribute towards the overall socio-economic development of the districts in which the steel plants are located, boost commercial activities through nurturing and developing the local industries and act as a catalyst for employment generation. SAIL has also adopted to export parity prices for MSME members of EEPC.
- In order to help promote and build acceptance of steel usage in rural areas, SAIL has an on-going programme under "Gaon Ki Ore" (GKO) campaign for working with village level public decision makers, opinion makers, masons, builders, etc. The campaign 'Gaon Ki Ore' which was started in 2017-18 has been continuing since then. During the financial year 2019-20, total 179 such GKO workshops were held. During 2020-21, total 117 GKO workshops were conducted, number was less due to Covid-19 pandemic restrictions. During 2021-22, up to December, 2021, 52 GKO Workshops have been conducted with a target for 180 Workshops for entire year.
- In the current year till December, 2021, over 5,00,000 square feet of wall paintings have been done in current year to promote use of TMT and Galvanised steel sheets of SAIL.
- With regard to retail brand SAIL SeQR TMT, with active involvement of INSDAG as well, for disseminating knowledge on how to identify good steel and make proper usage of steel, Onsite and Virtual meetings have been conducted with Tier II distributors & Rural based groups of masons.
- SAIL has been engaged in various promotional activities while undertaking sales through its distributor/dealer network. Some such activities include wall paintings showcasing different products at various locations including non-urban areas, advertisements at railway stations, outdoor hoarding on highways, airports, important locations in cities, at traffic kiosks and newspapers, etc. Besides conducting meetings, seminars in engineering institutions, SAIL has been participating in fairs and exhibitions highlighting various products & usages of Steel.
- At SAIL, continuous efforts are being made to develop new products for meeting specific applications as required by customers for promoting steel usage. In the recent past, new products were developed for various applications like High Strength Steel for Pre-Engineered Buildings, Seismic grade TMT bars for construction of Buildings in Seismic Zones; Special steel plates for submarines in Defence, High Tensile Structural for Construction; High Tensile Plates with improved ductility for Defence etc. Various grades of API to cater to Oil & Gas pipeline; High Tensile grades for EME segment; IS 7904 High Carbon Wire rods, IS 2879 Electrode Quality MIG Wire Rods, Boron Grades for Wire drawing, etc. have been developed by SAIL and are being supplied to the industries.



- SAIL has supplied steel to a number of Iconic Structures and Projects of National importance, viz Regional Rapid Transport System, Delhi Meerut Expressway, Eastern Dedicated Freight Corridor Corporation, Western Dedicated Freight Corridor Corporation, Coastal Road Project Mumbai, NPCIL Fatehabad Harayana, HPCL Rajasthan Refinery limited Barmer, Bullet Train Project from Ahmedabad to Mumbai for National High Speed Railway Corporation Limited, Lower Subanshri Hydel Project Assam, Mahatma Gandhi Setu Bihar, Ganga Water Lift Bihar, Agartala-Akhaura Rail Link project at Tripura, Guwahati International Airport Assam, AIIMS Guwahati, 111 km long BG Extension project connecting Jiribam –Tupul – Imphal involving 52 tunnels & 149 bridges, recently inaugurated Purvanchal Expressway. SAIL was also one of the major suppliers of steel to Metro Rail Projects in 10 cities across our country.

9.6.2 Rashtriya Ispat Nigam Ltd. (RINL)

- RINL has always been visible by way of promotional and branding activities in its market and product mix. It is working towards empowering small steel consumer in rural areas of the country by making steel available through Rural Dealer Network (RDS).
- For providing fillip/boost to the steel consumption in rural India, pro-active campaign is made to highlight usage of RINL products & their advantages in the community infrastructure in rural & semi-urban areas. Rural Dealership Scheme at RINL has been improved by providing various incentives and expanded its operations to new areas. Rural Dealers who take up promotional activities like Hoardings, Wall Paintings, Newspaper / Cable TV Advertisement etc., are entitled for a reimbursement for promotional activities.
- RINL has appointed Market Research Contact Officers in 67 districts across India for extending RINL's outreach to the pockets of the untapped markets in rural areas.
- RINL appointed 297 numbers of Rural Dealers and supplied 13,162 MT of steel to them.
- RINL has held multiple promotion campaigns such as Architects, Builders & Construction Engineers meets (ABC Meets), Workshops on Good Construction Practices (Mason Meet), Special Steel Customers Meet & Meeting of Original Equipment manufacturers (OEMs) to increase steel consumption in semi-urban and rural areas.

The steps taken by RINL to encourage and enhance the steel consumption are as following:

- Implementation of Two-Tier distribution and Rural distributor policy by RINL for higher penetration into both urban and rural markets.
- RINL is envisaging stepping up its HE VAS production from current level of 23% to a level of 30% of Domestic sale Turnover during FY 2021-22.
- Finalize penetration plan considering opportunities for OEM registration and widen customer base for Automobile sector by improving supplies of niche products through OEMs / Tier-2 / Tier-3 vendors. This shall pave for newly introduced scheme of PLI scheme for specialty steels.
- Focused approach to enhance customer commitments by implementing KAM concept.
- A new Portal has been launched "E-Suvidha" to cater to remote areas of the country. Special focus on catering to rural areas through registered Rural dealers (RDS).
- Expanding Distributor/Dealer network by appointing Distributor/Dealer networks at 9 (Nine) more locations which is in addition to the presently operated distributors at two locations.
- MOUs with Domestic Customers for a quantity of around 3.85 million tonne (85% of the targeted sales to Domestic).
- To improve presence in N-E Region, Material movement by In-land waterways & Coastal shipment is under finalization.

- Make use of GeM Portal for supplying to Government customers.
- Continued supplies to major infrastructure project undertaken in the country like metros, irrigation projects, housing projects and other projects of national importance.
- Implementation of quality order for recycling of steel scrap.
- To have a focused approach, a cross-functional team is constituted to deal with various processes & understanding the requirement of OEMs and implementing the same at RINL. Also, special attention is being given to the requirement of SMEs.

Product Promotion activities

- Celebrity Endorsement with ACE Shuttler of India Ms PV Sindhu.
- Associating with All India Radio, Visakhapatnam as a branding exercise to celebrate 'Azadi Ka Amrit Mahotsav'.
- Promotion of Customers/Dealers meet and giving it a pan India face through Social Media platform like Twitter, Instagram etc.
- Brand building through participation in seminar/conferences/ virtual exhibition of various professional bodies.
- Advertisement with leading Steel Magazines of India.

Way Forward

- Advertisement at Visakhapatnam Railway Station.
- Hiring Digital Agency to meet marketing and communication needs of RINL.

9.6.3 MSTC Ltd.

MSTC, through the organized and transparent process of e-Auction of scrap, promotes recycling of steel and other materials. This saves energy and reduces carbon emissions and promotes sustainable development of the country.

MSTC through its subsidiary, Ferro Scrap Nigam Limited (FSNL), recycles slag for various major steel plants. In addition, through its joint venture (JV) company, Mahindra MSTC Recycling Private Limited (MMRPL), end-of-life vehicles (ELVs) are being dismantled in an eco-friendly way for recycling steel scrap.



CHAPTER-X

ENERGY, ENVIRONMENT MANAGEMENT AND CLIMATE CHANGE

10.0 Introduction

Environment management and energy efficiency constitute an important benchmark for evaluation of Iron & Steel Industry. The Ministry of Steel, through various schemes and regulations, is facilitating reduction in energy consumption and emission of environment pollution in steel plants. Some of the steps /initiatives being taken by the Ministry of Steel through various forums and mechanisms are as under:

10.1 Government Initiatives

10.1.1 National Action Plan on Climate Change (NAPCC)

National Action Plan on Climate Change (NAPCC) has been launched in 2008 to address the Challenge at the national level. NAPCC outlines 8 National Missions, one of them being the National Mission for Enhanced Energy Efficiency (NMEEE). Perform Achieve & Trade (PAT) is the flagship scheme under NMEEE. PAT is a market-based mechanism through certifications of energy savings that could be traded. PAT has become effective from April 2012. The threshold limit of 20,000 tonne of oil equivalent (TOE) has been marked as the cut-off limit criterion for any unit in the iron & steel sector to be identified as designated consumer.

Under the PAT scheme, 163 Iron & Steel plants have been notified who would be required to reduce the Specific Energy Consumption (SEC) from their baseline value. 67 of these Designated Consumers (DCs) have completed PAT I and entered the PAT II cycle along with 9 new DCs. Currently 71 DCs have participated in PAT 2 cycle, which has ended in March 2019. PAT III, PAT IV, PAT V and PAT VI cycle are also notified by BEE in 2017, 2018, 2019 & 2020 respectively with 29 new DCs in PAT cycle III, 35 new DCs in PAT cycle IV, 23 new DCs in PAT cycle V and 5 new DCs in PAT cycle-VI.

PAT Cycle-I Achievements: The total savings achieved by Iron & Steel sector by the designated consumers in PAT Cycle I was 2.10 Million TOE. For achieving this, DC's has invested Rs 5199 crore in various Energy Conservation Measures.

PAT Cycle-II Achievements: The total savings achieved by Iron & Steel sector by the designated consumers in PAT Cycle II was 2.913 Million TOE. For achieving this, DC's has invested Rs 4396 crore in various Energy Conservation Measures.

Iron & Steel Sector

Sr. No.	PAT Cycles	Number of Units	Total Production (MT)	Total Energy Consumption (million TOE)	Energy Saving Target (million TOE)	Savings (million TOE)
1	PAT Cycle-1	67	42.55	25.32	1.486	2.10 (Achieved)
2	PAT Cycle-2	71	64.49	40.44	2.37	2.913 (Achieved)
3	PAT Cycle-3	29	10.67	7.64	0.456	-
4	PAT Cycle-4	35	4.86	3.22	0.192	-
5	PAT Cycle-5	23	4.70	2.82	0.168	-
6	PAT Cycle-6	5	1.64	0.515	0.031	-

Source: BEE

Number of units indicated against PAT cycle-2 is inclusive of PAT cycle-1 units.

10.1.2 NEDO Model Projects for Energy Efficiency Improvement

Government of Japan through Ministry of Economy Trade & Industry provides funds i.e. as Overseas Development Aid (ODA) under its Green Aid Plan (GAP) through Department of Economic Affairs in GOI for setting up of energy efficient, environment friendly projects known as Model Projects in various sectors including steel. These projects are routed through and managed by NEDO (New Energy & industrial technology Development Organisation), Japan. Ministry of Steel is coordinating the projects undertaken in the iron & steel sector. So far, the projects commissioned and in progress are as follows:

- BF Stove Waste Heat Recovery: Completed at Tata Steel.
- Coke Dry Quenching: Completed at Tata Steel.
- Sinter Cooler Waste Heat Recovery: Completed at RINL.
- Energy Monitoring and Management System at ISP Burnpur, SAIL is in progress.

10.1.3 Iron & Steel Slag Utilization

The major wastes produced in integrated steel plants include BF Slag, Steel Melting Shop (SMS) Slag accounting for nearly more than half a tonne for each tonne of steel produced in ISPs. Most of the steel plants are utilizing 100% of the BF slag produced (mostly in cement making and some portion as aggregate, both of which are permitted in BIS or IRC Standards Specifications) while others are closer to reach the 100% utilization.

The utilization of SMS (particularly LD) slag is limited due to the following:

- Phosphorous content;
- High Free lime content; and
- Higher specific weight.

To resolve these issues, Ministry of Steel is funding research & development initiatives for finding ways & means for utilisation of steel slag:

- Development of Design Guidelines and Specifications for utilization of steel slag in road construction by CSIR-CRRI.
- A Novel Approach of Making Green Belite Cement from Electric Arc Furnace Steel Making Slag by IIT Kharagpur.
- Development of newer Cementitious Materials using Chemically Activated LD Slag by CSIR-CBRI.
- Development of Steel Slag based cost effective eco-friendly fertilizers for sustainable agriculture and inclusive growth by Indian Agriculture Research Institute (IARI) (Under consideration).

10.1.4 Initiatives for Deep Decarbonisation in the Steel Sector to support India's commitments made under the Paris Agreement to address climate change:

- Over the years the Indian steel industry has reduced its specific energy consumption substantially leading to the proportionate reduction in the emission intensity. The average CO₂ emission intensity of the Indian steel industry has reduced from 3.1 T/tcs in 2005 to around 2.6 T/tcs by 2020. With the widespread adoption of Best Available Technologies (BAT) and shifting more towards scrap-based steelmaking the Indian steel industry can further reduce the levels of Energy Consumption & Emission substantially to achieve beyond the projected target of 2.4 T/tcs by 2030.
- However, to achieve near net carbon neutrality by the second half of the century, radical changes are required in steel making technologies such as adoption of H₂ based iron & steel making technologies and presently, lot of research & development efforts are going on in this area globally.



- Large scale production of H₂ economically with low carbon footprint is a challenge. Presently, there are established process for H₂ production namely, Steam Methane Reforming (SMR), Coal Gasification (SynGas) etc. However, both the routes are emission intensive and need the CCS/CCUS to reduce the carbon footprint which are very capital intensive.
- H₂ produced from electrolysis of water through renewable electricity is not commercially viable at present. However, with declining costs of renewable power generation and electrolysers, production of green hydrogen is likely to become cost competitive in future.
- With the above background, the steel sector has been made an important stakeholder in the National Green Hydrogen Energy Mission to facilitate deployment of green hydrogen in the iron & steel making process. Under this initiative two Pilot Plants will be set up under the Public & Private Partnership for using green H₂ in DRI production.
- In pursuance to the above, Ministry of Steel after extensive consultation with the stakeholders have prepared a roadmap for deep decarbonisation of the steel sector has been prepared and shared with MNRE and MoEF&CC. The roadmap is given below:

DRI Route:

Phase 1: Upto 2030

- To increase generation/ utilization of grey/ brown Hydrogen from natural gas in the current gas based DRI plants to 70%.
- To set up pilot plants for infusing green hydrogen in the natural gas to meet the Green Hydrogen Consumption Obligations (GHCO).
- 2 pilot plants to be set up using NG – one by AMNS and the other by JSW, for blending 2% green hydrogen.

Phase 2: Beyond 2030

- Replication of successful technology which emerges after completion of the pilot projects, to ensure usage of natural gas blended with 2% green hydrogen by the NG based DRI industry.

BF Route:

Phase 1: Up to 2030

- Present BF Capacity is around 80 MTPA and the another 50 MTPA capacity is likely to be added by 2030.
- Presently, there is no proven technology for injection of Natural Gas/ Hydrogen Gas in the Blast Furnace process.
- However, to reduce GHG emission and also reduce the import dependency of coking coal, use of injection of PCI upto 200-220 kg per tonne of hot metal steel in all the Blast Furnaces shall be ensured. This measure will reduce the coke rate from 450 – 500 kg per tonne of hot metal to around 300-350 kg per tonne of hot metal, thereby reducing the CO₂ emissions by around 15%.

Phase 2: Beyond 2030

- Setting up of Pilot CCU plants in the blast furnaces to covert the CO₂ emission into ethanol/methanol by using hydrogen.
- If successful, the same shall be replicated by the entire industry and will result in reduction of approximately more than 50% CO₂ emission from the blast furnaces being emitted currently.

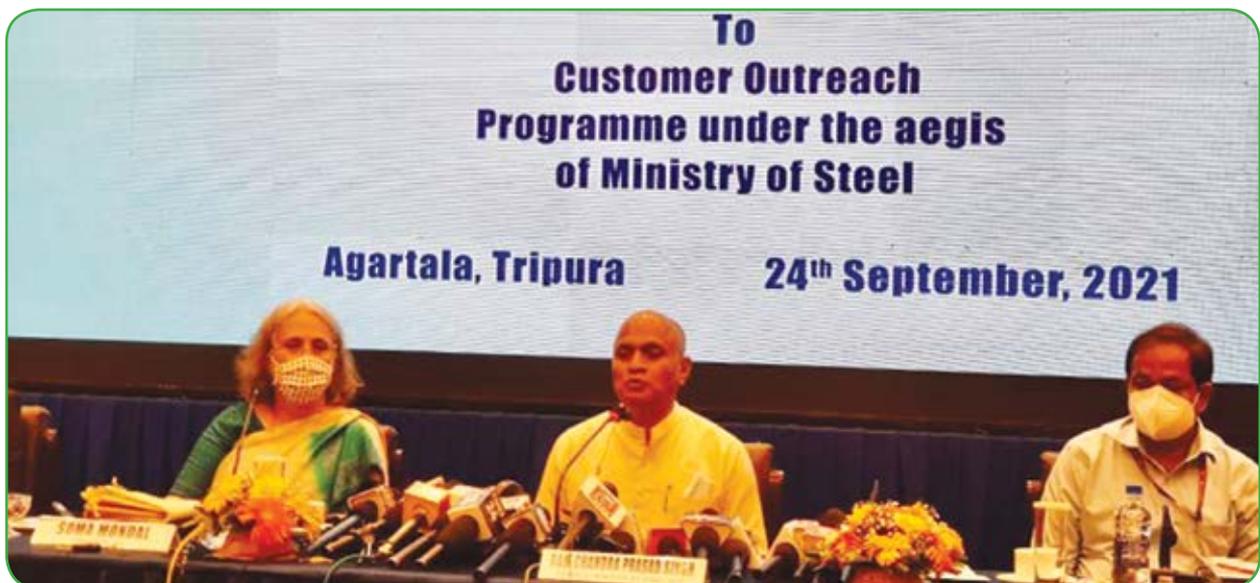
CHAPTER-XI

DEVELOPMENT OF NORTH-EASTERN REGION
AND JAMMU & KASHMIR

11.1 Introduction

The Ministry of Steel has been exempted from the requirement of earmarking 10% of its budgetary allocation/GBS for North-Eastern Region (NER).

11.2 Hon'ble Steel Minister (HSM) visited Agartala, Tripura, on 24th – 25th September, 2021. During the visit, HSM had interaction with Hon'ble Governor and Hon'ble Chief Minister of Tripura, Senior Officers from various departments of the State Government besides presiding over a Steel Consumer Meeting organized under the aegis of the Ministry of Steel. He discussed various issues pertaining to the State where Ministry of Steel can play a positive role.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during the Customer Outreach Programme at Agartala, Tripura.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh interacting with participants during the Customer Outreach Programme at Agartala, Tripura.

11.3 HSM visited Jammu on 7-8 October, 2021 as part of an outreach programme to Jammu & Kashmir. On 7th October, 2021, HSM had a public meeting at Government Higher Secondary School (Boys), Akhnoor where he inaugurated 3 developmental works: (i) Water Supply Scheme at Sungal Palyari Block, Akhnoor, (ii) Additional Block at Government Degree College, Akhnoor, and (iii) Panchayat Ghar at Panchayat Sungal, Lower-C Block, Akhnoor and also distributed Sanction Letters/Assistance to beneficiaries of various Government Schemes. SAIL organised Customer Meet at Jammu on 7th October, 2021. HSM took note of suggestions and issues highlighted by various customers of SAIL and by various Government Departments. On 8th October, 2021, HSM had detailed discussion with the public representatives and members of Chamber of Commerce & Industries, members of industrial Associations, members of Rural/Urban Local Bodies and with representatives of various Associations to understand the issues in details. Issues raised by various stakeholders have been taken up with Government of Jammu & Kashmir and other concerned Ministries/Departments of Government of India.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh at outreach programme during his visit to Jammu & Kashmir.

11.4 Initiatives by Steel CPSEs in North East

11.4.1 Steel Authority of India Ltd. (SAIL)

SAIL has an established marketing network in the North-Eastern Region (NER). It has a Branch Sales Office at Guwahati which looks after marketing of Steel products in whole of North Eastern Region. Apart from Branch Sales Office, there is a Consignment Handling Agency (CHA) at Guwahati and two Consignment Agency (CA) warehouses located at Silchar and Itanagar. During the current year, SAIL has sold more than 1.7 lakh tonne during the period April to December, 2021 in NE Region and is on a growth path over previous years.

In NE Region, SAIL has been catering to various infrastructure projects of national importance being executed by Indian Railways, NHPC, NHAI and Ministry of Defence. SAIL has been contributing in industrial growth of the region by supplying Steel to Cold Reducers, LPG manufacturer, Electrode Manufacturer, Wire Drawing and several other Industries.

Major projects of national importance wherein SAIL is a major supply stake holder are NHPC Subansiri Lower 2000 MW Hydroelectric Project at Geruka Mukh, Dhubri – Phoolbari four lane road bridge over river Brahmaputra which will be India's longest span river road bridge of 19 kms, 6 lane Extra Dose river bridge over river Brahmaputra



connecting North & South bank of Guwahati, Agartala-Akhaura Rail link project of 15.6 km connecting Bangladesh to Agartala, 750 Bedded AIIMS at Guwahati, 111 km long BG Extension project connecting Jiribam–Tupul–Imphal involving 52 tunnels & 149 bridges, Guwahati International Airport, Tinsukia Medical College & Hospital, Numaligarh refinery Expansion project etc.

Besides sales to Projects and Industries, SAIL has been focusing on meeting requirements of Medium & Small customers through the Single Tier Distributor located at Guwahati. Further, for retail requirements, SAIL has established a Two-Tier Distribution Retail Channel network consisting of Distributors and Dealers attached to the Distributor, covering a wide geographical area. The key objectives of the scheme is to reach out to the end customer in the retail through an efficient distribution channel and deliver higher value to the consumers / customers through value addition in products, delivery and services. The two-tier distributorships will help in delivering material to last mile shops and consumers in the hilly areas, which generally face logistical issues due to small volumes, difficult terrains and remote locations.

In its endeavour to take care of the requirement of steel in the hilly terrains of North east, the appointed Distributor at Guwahati and the Dealer network caters to States of Arunachal Pradesh, Mizoram, Manipur, Tripura, Nagaland, Meghalaya, in addition to the wide area of State of Assam. The Distributor appointed in the North Eastern Region at Guwahati is primarily responsible for Retail Sales of TMT and, up to December, 2021, the Distributor has 209 Dealers on the rolls and covers all the seven States of NE.

The Distributors have carried out several promotional activities in the form of rural awareness meets, Mason meets, wall paintings and other Brand promotion activities.

11.4.2 Rashtriya Ispat Nigam Ltd. (RINL)

North-Eastern Region is one of the focused regions with a potential for infrastructure development in terms of Hydro Power, Thermal Power stations, Coal & Natural Gas facilities as this region is abundant with the natural resources. RINL is mostly meeting the requirement of this region through material which is routed from RINL's stockyard at Kolkata. RINL is channelizing material supplies to this region through Rural Dealers located at Siliguri & Guwahati. In future, there is a possibility for extending the outreach to North-Eastern Region through 2-Tier Sales & Distribution system of RINL.

In order to improve the presence in the North-Eastern Region, RINL has tied up with IWAI (Inland Waterways Authority of India) for stockyard operation on their land at Guwahati. Handling contractor has been appointed and sales has commenced.

11.4.3 MSTC Ltd.

MSTC has set up a Branch Office at Guwahati for serving customers in the North Eastern Region. For the last few years, many activities for implementing e-Commerce in Agriculture and Horticulture sectors were undertaken to help improve the livelihood of the farmers. MSTC has also developed portal for sale of coal from Meghalaya in line with the decision of the Hon'ble Supreme Court.

CHAPTER-XII

INTERNATIONAL COOPERATION

12.1 OECD Steel Committee and India

International cooperation and collaboration are crucial for bringing the state-of-the-art technologies in the steel sector and for international trade development.

Organization for Economic Cooperation and Development (OECD) Steel Committee enables participants to jointly address the challenges faced by the global steel industry and identify solutions to promote open and transparent market for steel industry. It enables countries to gather information on topics pertaining to steel sector, inter alia, global steel market outlook, regional steel market developments, steel trade and policy developments, developments in steel-making capacity, subsidies and other forms of government support measures and their impact, policy interventions and steel and technological developments. It also publishes and circulates well-researched documents on the aforementioned topics and other topics related with the steel sector. World Steel Association also makes the sectoral presentation bi-annually at this forum.

India is a “participant” at OECD Steel Committee since 2000. As a participant, India is invited to attend all non-confidential agenda items at meetings of the Steel Committee and to contribute to its discussions.

India has been regularly participating in the OECD Steel Committee meeting to ensure that the interest of the Indian domestic steel industry is appropriately presented to the global community and no incorrect inference is drawn about the Indian steel industry and its growth story. The 90th Session of the Steel Committee was held virtually on September 22-24, 2021. The Committee’s 91st Session is scheduled for March 30-31, 2022.

12.2 The Ministry of Steel participated in following international meetings/seminars organized for development of iron and steel sector as per details given below:

- (i) Indian delegation participated in the 90th OECD Steel Committee Meeting held virtually on September 22-24, 2021.
- (ii) The first Joint Working Group meeting between India and Mongolia, on the possibility of procurement of Coking Coal from Mongolia, was held virtually on 25th March, 2021. The meeting was co-chaired jointly by Joint Secretary, Ministry of Steel, Govt. of India and Director General, Ministry of Mining and Heavy Industry (Mongolia) and was attended by Ambassador of Mongolia to India, Ambassador of India to Mongolia, officials from Ministry of Coal and MEA, India, Senior Executives of the Indian Steel Companies (public and private), the Mongolian coking coal suppliers and representative of Mongolian Coal Association.



Hon'ble Union Minister of Steel Shri Ram Chandra Prasad Singh during the meeting with Mongolian Delegation.

- (iii) A high-level delegation of visiting Mongolian Parliamentarians led by Chairman, Parliament of Mongolia met Hon'ble Steel Minister on 1st December, 2021. The discussions included cooperation in coal sector in order to explore the possibility of raw material securitization and price stability of coking coal, for creating alternate international sources of coking coal and to overcome supply constraints for Indian steel companies.

CHAPTER-XIII

DEVELOPMENT OF
INFORMATION TECHNOLOGY

13.1 Introduction

The Ministry of Steel and its PSUs constantly endeavours to be updated on matters relating to ICT infrastructure, services and application development.

- The Computer Centre in the Ministry consisting of high end servers, Client Systems, Local Area Network (LAN), Video Conferencing facility and Wi-Fi setup is operational to provide ICT services to the Minister of Steel, MOS, Secretary (Steel), Senior officers and staff in the Ministry of Steel.
- All the Web Applications and services of the Ministry are hosted in NIC Cloud using PaaS (Platform as a Service).
- A LAN of about 250 nodes with Gigabit Optical Fiber (OFC) backbone is operational in the Ministry.
- NICNET based Internet Connectivity with email facility under NIC/GOV domain has been provided to all the Officials/Divisions of the Ministry.

E-Governance Applications implemented in the Ministry for promoting the concept of paperless office in the Ministry

- As a part of the National e-governance Plan of DARPG, “e-office” software (a mission mode project of Government of India) with built in modules such as Electronic File Management System, Knowledge Management System, Leave Management System and **SPARROW (eAPAR)** have been implemented to achieve less-paper office initiative in the Ministry.
- A Ministry-wide Intranet portal is also operational in the Ministry.
- eRequisition, Stock & Inventory Management System is operational and accessible through Ministry’s Intranet Portal. The eRequisition, Stock & Inventory Management System has been developed for automating the requisition process, filing and its approval by Admin General section, and maintenance of the Stock & Inventory at backend.
- LAN in the Ministry is extensively used for email, file sharing, printing on network printers, internet, Video Conferencing, eOffice File Management, Tracking of Receipts, Files, VIP/PMO References, and Cabinet Notes etc. It is also used for Leave Management System, Knowledge Management and Information dissemination, collecting information/material for Annual Reports, Parliament Questions, Pendency, Tracking and Monitoring Applications (Court Cases, Audit Parars & Parliament Assurances etc.) from Divisions.
- High-Definition VC setup are operational in the chambers of Hon’ble Steel Minister, Hon’ble Minister of State and Secretary (Steel). Steel Conference Room is also equipped with a VC system. Monthly PRAGATI VC of Hon’ble Prime Minister and many other VCs at national and international level are conducted using these VC Systems. Around 1000 VC sessions have been conducted during the year.
- **As a part of eGovernance plan, the following Centralised Citizen Centric Web Based systems have also been implemented in the Ministry:**
 - ❖ Centralized Public Grievance Redressal & Monitoring System (CPGRAMS) for facilitating Public & Pensioners Grievances in the Ministry and its PSUs.
 - ❖ Right to Information Act - Management Information System (RTI-MIS) - facilitates monitoring of Requests and Appeals received under RTI Act 2005. The system is implemented in the Ministry and its PSUs.



- ❖ Public Financial Management System (PFMS), a financial management platform has been implemented in the Ministry.
- ❖ PRAGATI - Platform for Pro-Active Governance and Timely Implementation.
- ❖ Online Pension Sanction and Payment Tracking System 'BHAVISHYA' for timely payment of retirement dues and issue of Pension Payment Order (PPO).
- ❖ Legal Information Management & Briefing System (LIMBS).
- ❖ Anubhav - A platform for Retirees to share experience of working with the Government.
- ❖ Recruitment Rules Formulation, Amendment & Monitoring System (RRFAMS).
- ❖ CACMS, Representation of Reserved Categories in Posts and Services in GoI (RRCPS) Monitoring System.
- ❖ ACC Vacancy Monitoring System (AVMS).
- ❖ eVisitor Monitoring System (eVMS).
- ❖ eSamiksha portal Performance Appraisal Report Recording Online.
- ❖ SPARROW (Smart Performance Appraisal Report Recording Online Window) for online filing of APAR and Annual Property Returns have also been implemented.
- A Task Management system has been implemented in the Ministry of Steel for the monitoring of status of Senior Officers Meeting (SOM) record notes and pendency of tasks assigned by Hon'ble Steel Minister and Secretary (Steel) to other officers of the Ministry.
- NIC organized extensive virtual meetings at intra or inter-ministerial levels through Video Conferencing/web-based VC systems and provided VPN services to all officials of the Ministry for accessing eOffice and in facilitated Work from Home amid prevailing lockdown situations due to COVID-19 pandemic in the country.

Ministry's Official Website

- The bilingual web-site for Ministry of Steel (<https://steel.gov.in>), developed on content Management Framework (CMF) platform, providing the comprehensive details and functioning of Ministry of Steel and its other offices/PSUs is operational and updated on regular basis.

Awards Portal of the Ministry

- **Awards Portal:** Ministry of Steel launched an Awards Portal (<https://awards.steel.gov.in>) on 07.08.2021 to invite online applications for nomination of National Metallurgists Day. The online system for receiving and processing of Applications has been designed and developed by NIC. This Portal is a complete workflow-based system from receipt to Disposal. Applicants registered and applied online for one or more categories of the Awards on the Portal. All the applications are being processed online as per the criteria decided by the competent authority. Applicant can online track and review the status of the Application.

TC-QCO Portal of the Ministry

- **TC-QCO Portal:** An online system for Processing of Applications by importers for Clarification on Notified Steel Grades (<https://tc-qco.steel.gov.in/tc-qco>) has been designed and developed by NIC.

Monitoring Dashboards

- **Analytical Dashboard of the Ministry:** Steel Dashboard 2.0 of the Ministry of Steel was launched on 20.09.2021. The Dashboard is an interactive and dynamic online platform that captures the performance on various parameters related to steel sector such as steel capacity utilisation, production and consumption, prices, raw material production, trade, stocks and rail production etc. The Dashboard will help to monitor and analyse

the performance of steel Companies on real time basis for different KPIs of Steel sector. Steel Dashboard 2.0 (<https://analytics.steel.gov.in/>) is an Analytical dashboard on Steel Sector performance has been designed using specialized business intelligence (BI) tools. Salient features of the Analytical Dashboard are: -

- ❖ Monthly, Quarterly and Annual Analysis of Finished Steel, Crude Steel, Sponge Iron and Pig Iron Production, Monthly Trend Analysis, Public vs Private Sector Production Analysis, Category-wise, Producer-wise and Furnance-wise Production Analysis.
 - ❖ Monthly, Quarterly and Annual Analysis of Crude Steel, Sponge Iron and Pig Iron Capacity Utilisation, Monthly Trend of Utilisation, Public vs Private Sector and Producer-wise Capacity Utilisation Analysis.
 - ❖ Daily, Monthly, Quarterly and Annual Trend Analysis of Trade (Import & Export) and Trade balance Analysis, Top Importing and Exporting Countries, Category-wise and Sub Category-wise Analysis.
 - ❖ Monthly, Quarterly and Annual Analysis of Consumption analysis of Finished and Value-Added Steel, Category-wise and Sub Category-wise Analysis.
 - ❖ Prices of Steel Items at four metro cities in the country, Fortnighly Price Trend of Steel Items.
 - ❖ Producer-wise and Sector-wise Monthly Stock Analysis.
 - ❖ Daily Rail Production.
 - ❖ Status of Raw Material reserves and Daily evacuation quantity of raw material from CPSE mines.
 - ❖ Company View and both positive and negative alerts on CPSEs performance.
 - ❖ Last 10 years historical data analysis related to Crude Steel and Finished Steel Production, Capacity Utilisation and Trade.
- **PM Dashboard of Dashboard - KPIs Integration:** Integration of KPIs for Ministry of Steel in PM Dashboard of Dashboards PRAYAS: KPI's for Ministry of Steel have been successfully integrated with in PM Dashboard of Dashboards PRAYAS. Intuitive visualization has been developed on these KPI for the view of Hon'ble PM of India. Production, Consumption, Trade (Import & Exports) and data from SIMS KPIs have been integrated.
 - **Integration of Schemes with NGO Darpan portal of Niti Aayog:** Ministry of Steel has identified the Scheme 'Promotion of Research & Development in Iron & Steel Sector' for integration with NGO Darpan portal. The scheme has been integrated successfully with NGO Darpan portal of Niti Aayog.

13.2 Computerisation of Accounts

- **Compilation and Computerisation of Accounts :** Monthly accounts are compiled by PAO for the transactions carried out during the month by the PAO after incorporating the list of payment & receipts of the DDOs, if any, under its payment control in the PFMS developed by NIC.

On receipt of monthly accounts from PAO, Principal Accounts office compiles the accounts of the whole Ministry with the help of Public Financial Management System (PFMS). The monthly accounts so compiled is submitted to the C.G.A.'s office online on e-Lekha (<http://164.100.12.160/Elekha/elekhaHome.asp>).

- **e-LEKHA :** The daily Accounts abstract, online submission of e-DDG, Appropriation Accounts (Stage-I&II), SCT has been successfully uploaded during the year to the e-Lekha website (<http://164.100.12.160/Elekha/elekhaHome.asp>) for viewing expenditure and receipts of the Ministry at any time.
- **e-Payment :** The Office of the Controller General of Accounts has developed a system to effect payment in Pay & Accounts Office through electronic mode. This system of e-payment has been set-up on a share platform among Core Banking Solution (CBS) and PFMS (e-payment gateway). The e-payment system has also been implemented in the PAO, Ministry of Steel and all the payments are being made through e-payment system.
- **Public Financial Management System (PFMS) :** Public Financial Management System (PFMS) is a financial management platform for all plan schemes, a database of all recipient agencies, integration with core banking



solution of banks handling plan funds, integration with State Treasuries and efficient and effective tracking of fund flow to the lowest level of implementation for plan scheme of the Government. It provides information across all plan schemes/ implementation agencies in the country on fund utilization leading to better monitoring, review and decision support system to enhance public accountability in the implementation of plan schemes. PFMS has gradually improved administration and management programme, reduction of float in the system, direct payment to beneficiaries and greater transparency and accountability in the use of public funds. Thereafter, the application was expanded to include the following functionalities:

- ❖ Compilation of accounts.
- ❖ Budget module.
- ❖ Reconciliation of Accounts.
- ❖ Authorization of funds to agent Ministries/Departments for the supply of goods and services, execution of works etc. by the latter. Under the phased roll out plan, the expanded PFMS with the above functionalities has so far been implemented in all Civil Ministries/Departments.

All the payments under Plan scheme have to be made on-line through Public Financial Management System (<http://pfms.nic.in>). This is being done in the PAO of Ministry of Steel.

- **Non-Tax Receipt Portal (NTRP)** : The objective of the Non-Tax Receipts Portal (NTRP) is to provide a one stop window to citizens / corporates/ other users for making online deposits of Non-Tax receipts due to Government of India (GoI). NTRP uses the modality of Payment Gateway Aggregator (PGA). A depositor can therefore deposit online by using Credit Card, Debit Card or through Net Banking of any of the banks integrated with the PGA. At present, SBlePay is the PGA for NTRP. NTRP is integrated with the accredited banks of different Ministries. Therefore, any deposit made through it would also be captured in the accounts of the respective Pay and Accounts office (PAO). This portal shall serve all those GoI Departments/Ministries who do not have any existing solution for online collection of their receipts. The NTRP Portal has been formally launched by Hon'ble Finance Minister on 15 February, 2016. NTRP portal is being used by Ministry of Steel. In FY 2020-21, Rs. 1971.61 crore non-tax revenue was collected through NTRP transactions.
- **Expenditure Against Transfer (EAT Module)** : The objective of the EAT Module is to provide a keen eye on the fund transferred to agencies/PSUs by the Government of India. Utilized/Un-utilized fund is monitored through PFMS under EAT Module.

13.3 Steel Authority of India Ltd. (SAIL)

SAIL has embarked on the journey of digital transformation and adopting Industry 4.0 standards for streamlining business process and optimising cost. ERP has been implemented and stabilised at all its integrated steel plants, marketing set up and Corporate Office. The robust IT infrastructure has helped attaining transparency in operations, bring in efficiency, reduce operational costs and enhance customer satisfaction.

- IT Roadmap for SAIL has been formulated outlining IT vision for the organisation.
- One of the major Covid-19 initiatives was integration of despatch of liquid medical oxygen from plant with Oxygen Digital Tracking System (ODTS) portal of the central Government which facilitated in the online tracking of oxygen tankers.
- For improving decision making process and to monitor various KPIs, visually appealing web-based Dashboards have been developed for Top Management which provides 360-degree view of the organisation covering major functionalities.
- Costing Module of ERP was implemented in major Plants for capturing exact cost of production. This has enabled monitoring of cost of production on real time basis and to adopt measures to reduce and optimise the cost.

- As a step towards paperless office, implementation of Online Note sheet Approval System in various SAIL Plants/ Units reduced physical movement of files, resulted in faster decision making, confidentiality and easy traceability of proposals while facilitating in contactless working during Covid pandemic phase.
- Work-flow based digital Permanent Gate Pass system for contractual labours implemented in plants to reduce physical movement of persons and documents and faster issue of the Gate Passes with transparency and control.
- System integration done with Centre for Railway Information Systems (CRIS) for faster and accurate information exchange with Indian Railways.
- For achieving Level 2 automation in some of the key shops, MES system has been implemented covering various operations which has improved quality, increased productivity and reduced operational maintenance.
- Online Executive Performance Management System enhanced to incorporate new features and processes which has not only helped in making the process more transparent and faster but also improved the alignment of employee achievements with organisational goals.
- Online Legal Information Management system for digital monitoring of legal and arbitration cases of SAIL has been introduced and the facility has been extended to the Ministry of Steel.
- System Integration between ERP and M/s MJunction for transferring Auction details from SAIL Plants and receiving H1 bidder details from M/s MJunction.
- Development & Implementation of System & Interface with CMO System for Customer Order Tracking to enhance customer satisfaction.
- Implementation of Corporate Complaint Monitoring portal for Corporate Vigilance (SUVIDHA) across SAIL.

13.4 Rashtriya Ispat Nigam Ltd. (RINL)

RINL has been making continuous efforts in development of IT infrastructure and various IT systems / applications. Achievements are given below:

- SAP-Production Planning (PP) and Sales & Distribution (SD) module were implemented for Forged Wheel Plant at Raibareli, UP.
- In Mills area : Inspection module for rolled products in STM was implemented. An application to acquire process data in SBM including furnace and cooling and attach to a billet with unique Id and transfer to Central database and display on the SBM Production Portal was implemented. Yard Management Module in SBM for bundles was developed and implemented in Level 2 system.
- Application to track the analysis at SMS2 and display converter wise status of analysis in each production line/ section as per the tapping start time was implemented.
- A mobile app to scan QR Codes on tags of the products before dispatch from CDY, save on the device and upload to database, transfer data from the HHTs to the ERP Interface tables was implemented.
- Application to fetch data for Effluent Quality Monitoring System (EQMS) from ETP & TPP and transfer to EnMD server and display in ENVISION webpage was implemented.
- Fly Ash Swift Transit System (FAST) was developed and implemented to simplify the procedure, provide easy access to data and speed up dispatch process of fly ash.
- Yankee Auction system was implemented in SAP for procurements. Auctions for BSLC products were configured in SAP SRM module. Forward auctions for materials of Disposal Stores was configured and implemented on SRM platform. Integration of ERP system with GeM on SRM was made as per new specification.



- A SAP module was implemented for calculating and fixing inventory norm for fast moving items for ensuring better inventory control.
- E-Suvidha portal for receiving orders from customers was developed and implemented.
- Test Certificate (TC) generation for Collective Invoice case (Domestic rake to Port) was implemented.
- Capturing of Client details at each stage during log in process of EPMS was implemented.
- COVID vaccination module, Ward Management system, credit diagnostic approval and billing system, Income Tax Perks and Direct Savings sub modules and arrears module were developed and implemented.

13.5 NMDC Ltd.

Implementation of ERP (SAP) : ERP Project ‘Kalpataru’ has made NMDC the first CPSE in India to implement Enterprise Resource Planning on the SAP S/4 HANA platform. This Project was undertaken to address NMDC’s core business requirements through a strong ERP backbone, which will provide a fully integrated solution encompassing all the business functions of the organization. It is a transformational advancement in the digital journey of NMDC and will improve the overall business process of the company. This will also act as a lighthouse project for the mining sector leading into an era of automation and digitalization driven growth. Despite the challenges posed by Covid-19 Pandemic, the Solution went live in 21 months on 11th January, 2021 in a Big Bang approach and was deployed across all locations of the company. Post Go-Live all the legacy systems were completely shut down and all transactions started happening in SAP from day one.

ERP initiative has ushered in process transformation by adoption of the industry best practices, resulting in improved efficiency and greater transparency at NMDC. It provides competitive advantages to NMDC by embracing technologies and integrating solutions with IoT, Data Analytics, AI.

Other Initiatives:

- A Virtual Data Room (VDR) has been created for the Demerger of NISP, Nagarnar. This allows the various departments to upload various documents so that the stakeholders can view it.
- 500 Mbps Internet Leased Line with DDoS protection subscribed from 2 different Internet Service Providers.
- Reward Points Management System has been implemented at Bachel. This system aims to automate the work of contract labour manual food coupon issue/redemption. This has brought in transparency and ensured that intended person gets the benefit of scheme.
- A work order has been issued for implementation of facial biometric based attendance recording system. Implementation is in progress.

13.6 MOIL Ltd.

The Company has set-up a full-fledged Systems Department in order to ensure an effective Computerization of all the functional areas of the Company. In order to ensure an adequate IT infrastructure, steps taken by the System Department are as under:

- Installation of Computers and other IT equipments at all its offices and Mines/plants.
- Ethernet based Local Area Networks (LAN) on Windows and Linux platform is in place at Head Office, Nagpur and at all Mines of the Company.
- For effective sharing of Applications, databases/ information and other resources on regular basis, all the Mines and HO are connected through MPLS VPN and VPN over Leased line.
- For continuous knowledge acquisition, e-mailing and for inter unit data transfer facilities, all the concerned officials of Head Office have been provided with internet connection through internet leased line on OFC. All the Mines are provided with leased line internet connections on OFC.

- Procurement of goods and services through e-procurement portal of MSTC to bring transparency in procurement process.
- Implementation of ERP in the Company. In addition to core modules viz. FICO, MM, SD, PP, PM, HRM, of SAP the company has also implemented File Lifecycle Management, Document Management System and Employee Self Service Portal.
- State of the art Data center for ERP is designed and commissioned at Corporate office, Nagpur.
- Use of File Lifecycle Management (FLM) for effective file tracking and reduction in paper work.
- Implementation of Customer Portal, wherein customers will have access to various information regarding prices, availability at one place.
- Implementation of Vendor Invoice Tracking System, where vendors can upload their invoices online and track the status of the same.
- Scanning / digitizing all records and stores them with electronic index. This will free up office space and the record retrieval will be very efficient.
- Use of Video Conferencing for communication with Mines, Ministry and other agencies.

13.7 MECON Ltd.

Following digital initiatives have been undertaken in MECON at organisation level :

- Centralized Data center at Ranchi housing high end blade servers, SAN (Storage Area Network), NAS (Network Attached Storage), UTM (Unified Threat Management) and connected to internet through three different Internet Service Providers.
- High-end Personal Computers/ Laptops/Tablets are used for business operations. Work stations and large displays along with new edge engineering software used for the 2D/3D design and analysis.
- Campus wide networking in major engineering and site offices.
- HD Video conferencing system used in major engineering and site offices to conduct business and review meeting.
- In-house developed Software for seamless integration of all the services of departments like Personnel, HRD, Purchase, Corporate Finance, Marketing, Project Management and Project Finance, etc.
- The following services are also available in online web platform:
 - ❖ Performance Management system.
 - ❖ E-swasthya hospital management system.
 - ❖ Town Administration management system.
 - ❖ Estate management system.
 - ❖ Digitisation of hard copy document and drawing.
- **Digital Initiatives undertaken for Ease of Doing Business:** Over the years, MECON has tried to improve the Business environment and enacted measures to provide ease in doing business. Following are the new initiatives taken by MECON Limited towards "Ease of Doing Business" in the last few years:
 - ❖ A new Online Payment Gateway System has been implemented by MECON which provides an easy way for digital mode of payments by payee. It will ensure timely payments received and transparency between payee and MECON. Payment related to Vendor Registration, Recruitment and Tenders fees



etc. are received through Gateway. Online payment gateway facilitates secure transactions, expanded customer base, faster transaction processing and adds convenience of making payments at any hour.

- ❖ A new File Tracking System to ensure timely concurrence/approval and tracking of files. File Numbers are created in the system as per defined scheme, and supporting documents are uploaded. Workflow for file movement is configurable and same is moved as per defined workflow. This ensures enhanced security of documents, easier file retrieval and better collaboration between departments, which reduces overall time taken for concurrences and approvals needed. Delay at any point can be tracked and resolved.
- ❖ A new Online Requests for CSR Proposals System has been developed and implemented in MECON. Proposing parties can register and apply for CSR Activities through the portal and can upload relevant documents. These proposals are scrutinized and approved by MECON Officials through an Online System. Status of proposals may also be tracked by proposing parties. This online system has made the process of applying for CSR Activities transparent and easy. Information is now readily available at any time and implementation status can also be checked.
- ❖ Vendor Bill Tracking System has been implemented by MECON for tracking Suppliers and Contractor Bills. Vendors are able to track bills using Receipt Numbers sent via email, on MECON Corporate Website. Detailed payment information including Deductions is available to Suppliers and Contractor. It streamlines approval flows, reduces errors. A new provision to show the journey of a bill has been introduced. This ensures timely payments which helps to build relationships and creates transparency.
- ❖ Inspection Call Management Vendor Portal is an online platform to raise Inspection and Waiver calls from anywhere. In last one year, dependency on hardcopy submission has been eliminated by uploading documents in the system by Vendor. Presently the process of Inspection Call Management is paperless. Due to elimination of hardcopy, documents are now more organized and can be easily filed and retrieved by stakeholders. It has also ensured data security and faster communication.
- ❖ Vendor Registration Portal has been introduced by MECON, for providing an online system for Vendor registration where manufacturers from varied industries can register themselves for different items under Oil & Gas and Non-Oil & Gas category. They can track their application status online and can also apply for renewal of registration.
- **Ongoing New Digital Initiatives:-** Implementation of Enterprise Resource Planning (ERP) & Document Management System (DMS) System in MECON. The objective of ERP & DMS implementation in MECON will be to adopt best of the industry and business practices offered by ERP product. Project also includes implementation of DMS with tight integration to ERP solution. The DMS system will provide a paperless platform for Workflow/ Archival requirements for Documents/ Drawings/ Files at enterprise level.

13.8 MSTC Ltd.

- ISO 27001:2013 certification is in place and the same is under yearly surveillance audit by STQC, Kolkata and the certificate is valid up to 27-08-2023.
- ISO 9001:2015 certification is in place and the certificate is valid up to 09-12-2023.
- MSTC Systems Division is CMMi Level 3 appraised since 2013. The same has been renewed and is valid up to 18-09-2022.
- STQC Certification on GIGW (Guidelines for Indian Government Websites) for MSTC Corporate website <https://www.mstcindia.co.in> is valid till 4th February, 2022.
- MSTC has developed in-house and implemented many customised projects.
- MSTC has also developed in-house system of Dashboard, Project Tracking System, Air Ticket Management System, e-Office etc. along with improvements in other applications like ISTMS, PNA, Bill Tacking, Online Annual Performance Report etc.

- STQC Certification on e-Auction services for allocation of Mineral Blocks under MMDR Act 2015 is valid up to 20-12-2023.
- MSTC has relocated its Data Centre to its own building at New Town, Kolkata.

13.9 KIOCL Ltd.

The Information Technology is used in KIOCL across all the plants and offices. The following applications, where some are developed by inhouse team and some from external vendors, are working in Silos.

- Finance and accounting.
- Inventory system.
- IMIS application for Purchase Department.
- Decision Support System.
- Training Information Portal.
- Online ACR system.
- HRMIS system for Master database of Employees.

To have Integrated Information System, Implementation of ERP SAP 4 HANA hosting on cloud is under progress for the key modules like Finance (FICO), HR (HCM), Materials (MM), Plan Maintenance (PM), Production, Planning & Quality (PP & QM) and Project Systems (PS) along with other modules/functions.

13.10 Ferro Scrap Nigam Ltd. (FSNL)

Security Audit of applications (FAST, CAMMS, Payroll system, Executive Performance Management System, e-Procurement System, Employee Self Service Portal and Vendor Bill Tracking System) have been successfully completed by Cert-In empanelled company. E-Office and Human Resource Management System (HRMS) software packages are under implementation.

13.11 EIL, OMDC and BSLC

EIL, OMDC & BSLC have taken initiative to publish all tenders /EoI in Companies Corporate Website and Central Public Procurement Portal (CPP Portal). Processing of salaries is being done through customized payroll system. Tally based Accounting Package is being used for payment of vendor bills and different employee entitlements through RTGS and e-payment mode. Biometric based attendance has been installed at OMDC HO and Mines office. OMDC and BSLC is using GeM portal for procurement of materials. During the year, special initiatives were taken towards digitalization of land records and other vital documents and also introduced e-office for effective file tracking and storage.



CHAPTER-XIV

SAFETY

14.1 Background

The iron & steel industry involves a combination of complex processes and large-scale operations, which are hazardous in nature. There are potential dangers inherent in the industry's working environment to which its employees are exposed. The Iron & Steel industry needs to prevent injuries & accidents and provide a healthy working environment to its workforce.

14.2 Initiatives of Ministry of Steel

- Safety is an important aspect in functioning of any industry. It is important not only for its employees and workers but also for the environment and the nation. Iron and Steel production being a complex and hazardous activity, needs to take concerted efforts to prevent injuries and accidents, provide a healthy working environment.
- To make the Iron & Steel industry working environment safer, Ministry of Steel undertook extensive interactions with the stakeholders in identifying the hazards that prevails in the iron & steel making industry and measures that need to be adopted to eliminate accidents.
- As the outcome of the interactions with the stakeholders from the steel industry & its associations and academia of repute and also the efforts of the Working Group constituted for the purpose, a set of 25 common minimum Safety Guidelines for the Iron & Steel Sector was formulated.
- These Safety Guidelines are at par with the global standards. It is compliant with the requirements of the ILO Code of practice on safety in the Iron & Steel industry. Inputs have also been taken from the World Steel Association's guidance document on "Safety & Health Principles and Definitions".
- These guidelines were unveiled by the Hon'ble Steel Minister on 17th February, 2020 in the form of a book viz. "Safety Guidelines for the Iron & Steel Sector", and also uploaded in Ministry of Steel's website.
- The stakeholders from the Indian Steel Industry and its associations have been urged to adopt these guidelines wholeheartedly, to ensure a safe working environment for the workforce.
- Ministry of Labour & Employment has been requested to facilitate mandatory adoption of the Safety Guidelines by the Iron & Steel Industry. Ministry of Labour & Employment has informed that it is under consideration of the Expert Committee set up for framing standards under Section 18 of the Occupation Safety Health & Working Conditions (OSH&WC) Code 2020.

14.3 Steel Authority of India Ltd. (SAIL)

SAIL Management is committed to provide safe and healthy work environment to all its employees, contractors and all stakeholders / people associated in its operations including those living in the neighbourhood of its plants, mines and units and accords top most priority to this vital issue amidst other business function.

14.3.1 Management Commitment

SAIL has a comprehensive Safety Policy, which underlines the commitment of Top Management towards this vital issue concerning our most valuable resources i.e. Human Resource & Machineries. The various levels of safety engagement in the company for enabling structured monitoring of safety issues are as follows:

- **Board level:** Board Sub Committee (BSC) on Health, Safety & Environment (HSE) to review & monitor the compliances, performance, issue guidelines and apprise the Board.
- **Corporate level:** SAIL Safety Organisation (SSO) under Director (Technical, Projects and Raw Materials), SAIL to coordinate, monitor & facilitate the safety related activities of Plants/ Units and frame guidelines.

- **Plant Level :** Under Director I/cs / Head of Units to make strategies / facilitate implementation of safety measures including compliance to statutory requirements through Safety & Departmental Heads.

14.3.2 Safety measures and New Initiatives

A number of steps have been taken by Plants to lay thrust on systematic approach to safety management and promote safety awareness amongst all levels of employees including contractor workers with a view to control incidents. These include organising safety awareness drives & training programs, formulating safety standards / guidelines / procedures; conducting safety inspections and audits including external audits; enforcing usage of Personnel Protective Equipment (PPEs) & safety devices, incident investigation & analysis etc.

New Initiatives : Some of the new safety initiatives include engagement of reputed Safety consultants at Bhilai & Bokaro Steel Plants to improve the safety culture; launching of award schemes viz. 'Safety Excellence Award for Integrated Steel Plants (i-SEA)' and 'Survochh Suraksha Puraskar for promoting near miss reporting', dissemination of Safety Alert Messages (SAMs) & Good Safety Practices(G-SaPs), migration from OHSAS-18001: 2007 to ISO 45001: 2018, which is a new international standard for occupational health and safety management etc.

14.4 Rashtriya Ispat Nigam Ltd. (RINL)

Management Commitment

RINL has adopted an integrated policy that includes the Safety & Health Policy in line with National Safety Policy. Top Management of RINL strives to create an environment that encourages employee participation towards safety and wellbeing of its employees and workers. Several measures are being taken up to achieve zero accident and to improve Safety Culture in the company. CMD along with other Directors conducts monthly meeting for reviewing the Safety Performance.

Safety set up in RINL

The ISO45001:2018 system in RINL ensures Preventive Safety Management practices and to encourage employee's participation in Occupational Health and Safety Management, one Central Safety Committee and 31 Departmental Safety Committees exist with equal participation from recognized trade union representatives and management representatives.

Safety information system is in place for RINL, through which employees can report unsafe acts/conditions and near misses online.

14.5 NMDC Ltd.

NMDC has its training centers in all its projects. They are equipped with infrastructure as required under Mines Vocational Training Rules. These centers cater to the needs of basic training, refresher training and training for skilled workers and also for those injured on duty.

In each mining project of NMDC sufficient number of workmen inspectors are nominated / appointed for mining operations, mechanical and electrical installations as per statutory requirements.

Safety Committees have been constituted in every operating mine and safety meetings are held every month discussing the safety matters and corrective actions related to work atmosphere.

Mine Level Tripartite Safety Committee Meetings are being conducted at all Projects. This meeting is conducted once in a year at project level with senior officials, Union Representatives and DGMS Officials in which Safety Performance and its appraisal are made and the recommendations are implemented. Corporate Level Tripartite Safety Committee Meetings are being held regularly once in a year at Head Office.

Mandays lost per 1 lakh man days worked for the year 2021-22 up to December, 2021 is 1.06.

Safety Management System :

Safety Management system has been implemented in all mines and Risk Assessment Studies are being conducted regularly at all mines.

Internal Safety Audits of Projects are being conducted by Internal Audit team of Projects and the observations are submitted to the Projects for compliance and is being monitored by Internal Safety Organization.



14.6 MOIL Ltd.

Competent supervisors like Mine Mates, Mine Foremen and qualified Mining Engineers are regularly supervising all the working at mines. Workmen also carry out safety inspections during working shifts.

Inspector, Safety Officer, Mine Manager and Agents. Internal Safety organization headed by General Manager (Safety) at head office is coordinating with DGMS and inspects mines time to time.

Regular safety Committee Meetings are held at mines, where day-to-day safety aspects are discussed with the participation of workers' representatives. Unsafe acts and mine accidents are analysed in detail to avoid any recurrence.

14.7 MECON Ltd.

MECON has prepared Safety Policy Statement which is regularly communicated to the employees during orientation training. Some of the features of the Safety Policy Statement have been incorporated in the Conduct, Discipline and Appeals Rules of the Company so as to ensure proper compliance of Safety Rules. No reportable incidence of accident has occurred in MECON. MECON also has in place a well-documented Disaster Management Plan to take care of exigencies.

14.8 MSTC Ltd.

MSTC is an e-commerce organization and does not have any plant/ manufacturing unit. However, necessary safety measures against fire, natural calamity, pandemic, etc. are observed.

14.9 KIOCL Ltd.

KIOCL has well designed and comprehensive Safety Management System at its plants. KIOCL Pellet Plant and Blast Furnace Units are covered under Factories Act and all the safety parameters, standards are complied with as per the Rules and Regulations provided therein the Factories Act 1948 and its subsequent amendments.

KIOCL have been following SOPs and each Department in the Plant has its own standard operating procedures which are being followed. Based on the Departments involved in the production process at Pellet Plant a booklet has been prepared on "Code of Safety Practices" at Pellet Plant from the Safety Department to follow these safety practices meticulously by the concerned. More emphasis has been given on the safety aspects related to the equipments in use at our Pellet Plant.

KIOCL is also certified ISO Company and accredited with 45001-2018 certification for ensuring safety.

KIOCL has also formulated guidelines for safe working in Pellet Plants as per the advice of Ministry of Steel which is linked to standard safety codes uploaded by the Ministry.

14.10 Ferro Scrap Nigam Ltd. (FSNL)

Safety & security of human assets are accorded utmost importance by FSNL. Constant motivation of employees is done towards observance of safety precautions & safe working practices. Training schedules prepared for the whole year include training programmes for the employees on safety and related aspects, which are regularly monitored by the management to ensure proper training of employees on safety & allied topics, through the renowned agencies like National Safety Council etc.

14.11 EIL, OMDC and BSLC

Mining Companies i.e. OMDC and BSLC have taken proactive measures for compliance of safety precautions in accordance with the provisions of the Mines Act, 1952 and the Metaliferous Mines Regulations, 1961 in terms of Rules, Regulations and guidelines received from Director General of Mines Safety (DGMS) from time-to-time towards safety of employees engaged in mining and allied activities. Necessary safety devices, tools and implements have been provided to the concerned employees. Safe practices pertaining to different activities in mining operations are displayed through participation of workers in safety exhibitions locally as well as on regional basis. New practices are being adopted regularly by visiting similar mines. Basic and refresher trainings are imparted to the workers in the Vocational Training Centre & from different disciplines and operational activities in the mines.

CHAPTER-XV

WELFARE OF WEAKER
SECTIONS OF SOCIETY**15.1 Introduction**

The Ministry of Steel complies with the Government guidelines with regard to welfare of weaker sections of the society. Out of total manpower of 190 employees against sanctioned strength of 246 in the Ministry, as on 31.12.2021, 44 belonged to SC (23.15%), 7 belonged to ST (3.68%), 46 belonged to OBC (24.21%) and 1 belonged to EWS (0.53%). The posts belonging to Central Secretariat Services (CSS), Central Secretariat Clerical Services and Central Secretariat Stenographers Service are filled by Department of Personnel & Training and the posts belonging to Indian Enterprises Development Service (IEDS) are filled by Ministry of Micro, Small & Medium Enterprises.

15.2 Steel Authority of India Ltd. (SAIL)

SAIL follows Presidential Directives on Reservation for Scheduled Castes and Scheduled Tribes in the matter of recruitments & promotions. As on 1.01.2022, out of total manpower of 62960, 10,521 belong to SCs (16.71%), 9,776 belong to STs (15.53%) and 9,706 belongs to OBCs (15.42%). Reservation for OBCs came into force with effect from 08/09/1993 and candidates belonging to OBC who joined prior to that were recruited and are shown against the Unreserved (UR) category.

SAIL Plants and Units including Mines are situated in economically backward regions of the country with predominant SC/ST population. Therefore, SAIL has contributed to the overall development of civic, medical, educational and other facilities in these regions. Some of the contributions are:

- Recruitment of non-executive employees, which comprise close to 83% of the total employees, are carried out at Plant/unit level normally attracting candidates from a region and hence, a large number of SCs/STs and other weaker section of the society get benefit of employment in SAIL.
- Over the years, a large group of ancillary industries have also come up in the vicinity of Steel Plants. This has created opportunities for local unemployed persons for jobs and development of entrepreneurship.
- For jobs of temporary & intermittent nature, generally contractors deploy workmen from the local areas, which provide an opportunity for employment of local candidates of economically weaker section.
- Steel Townships developed by SAIL have the best of medical, education and civic facilities, benefits of which are being extended without any discrimination.
- SAIL has undertaken several initiatives for the socio-economic development of SCs/STs and other weaker sections of the society which are mainly as under:
- Special Schools have been started exclusively for poor, underprivileged children at five integrated Steel Plant locations. The facilities provided include free education, mid-day meals, uniforms including shoes, text books, stationary items, school bag, water bottles and transportation in some cases.
- No tuition fee is charged from SC/ST students (SAIL employees' wards or non-employees' wards) studying in the Company run schools.
- Free medical health centres for poor have been set up at Bhilai, Durgapur, Rourkela, Bokaro, Burnpur (Gutgutpara) providing free medical consultation, medicines, etc. to the peripheral population mainly comprising of SC/ST and weaker sections of society.
- SAIL plants have adopted tribal children. They are being provided free education, uniforms, textbooks, stationery, meals, boarding, lodging and medical facilities for their overall growth at residential hostels, such as Saranda



Suvan Chhatravas Kiriburu, Gyanodaya Hostel, Bhilai and an exclusive Gyan Jyoti Yojana for nearly extinct Birhor Tribe.

- For Skill Development and better employability, youths & women of peripheral villages have been provided vocational & specialised skill development training at various ITIs, Nursing and other vocational training institutes in the areas of Nursing, Physiotherapy, LMV Driving, Computers, Mobile repairing, Welder, Fitter & Electrician Training, Improved agriculture, Mushroom cultivation, Goatery, Poultry, Fishery, Piggery, Achar/Pappad/Agarbati/Candle making, Screen printing, Handicrafts, Sericulture, Yarn Weaving, Tailoring, Sewing & embroidery, Gloves, Spices, Towels, Gunny-bags, Low-cost-Sanitary Napkins, Sweet Box, Soap, Smokeless chullah making, etc.

Implementation of Presidential Directives on Reservation for SC/ST/OBC, etc

- Liaison Officers have been appointed as per Presidential Directives for due compliance of the orders and instructions pertaining to reservation for SCs/STs/OBCs/PWDs at Plants/Units of SAIL.
- The Liaison Officer along with his/her subordinate staff reporting to him/her takes care of interest of SC/ST/OBC and the function of SC/ST/OBC cell is being carried out by them. A member belonging to SC/ST community is associated in all DPCs/Selection Committees. A sufficiently senior level officer of SC/ST/OBC category is nominated in the Recruitment Board /Selection Committees.
- Internal workshops for Liaison Officers for SC/ST/OBC and other dealing officers of SAIL plants/units are conducted at regular intervals through an external expert to keep them updated on the reservation policy for SC/ST/OBCs and other related matters.
- Plants/Units of SAIL have SC/ST Employees' Welfare Associations which conduct regular meetings with Liaison Officers on implementation of reservation policy & other issues. In addition, an Apex level umbrella body namely SAIL SC/ST Employees Federation also exists in SAIL to represent the issues of SC/ST Employees in a coordinated manner.

15.3 Rashtriya Ispat Nigam Ltd. (RINL)

As on 31.12.2021, the total manpower of RINL is 15928 comprising of 2554 SCs (16.03%), 1195 STs (7.5%) and 3113 OBCs (19.54%).

“Grant under Dr B R Ambedkar Merit Recognition Scheme – SC and ST categories” - RINL Grants are meant exclusively for the children of an employee belonging to Scheduled Castes and Scheduled Tribes. Under this, an award of Rs. 1500/- per month for full duration of the course is given to those children who qualify 12th standard or intermediate exam and seek admission in Degree courses in Engineering / Architecture / Medical / Veterinary / Dentistry / Agricultural Sciences / Pharmacy/Law. A total of 8 such awards are given to children of SC employees and 4 such awards to children of ST employees.

15.4 NMDC Ltd.

The total number of employees in NMDC as on 31.12.2021 was 5464 out of which 825 belong to Scheduled Castes (15.10%), 1252 to Scheduled Tribes (22.91%) and 1099 to OBCs (20.11%).

As a policy, efforts are made to fill any backlog vacancy in the next year on a continuous basis and the Company has been able to fill the reserved vacancies so far. Liaison Officers have been appointed as per the Presidential Directives at Corporate Office and all the Projects. A member belonging to SC/ST is associated in all DPCs.

Regular workshops are being held for liaison officers of SC/ST and OBC, dealing officers of various Projects, SC/ST Welfare association representatives to keep them updated on the reservation policy for SC/ST and other related matters. Regular meetings are held with the SC/ST Welfare Associations of the units and their Apex body at corporate level.

15.5 MOIL Ltd.

The total manpower as on 31.12.2021 is 5802 (male 4980, female 822) out of which 1135 belong to Scheduled Castes (19.56%), 1463 to Scheduled Tribes (25.22%) and 2071 to OBCs (35.69%).

Welfare Activities

Some of the Welfare Schemes being implemented by MOIL for the benefit of the employees as well as people residing in the adjacent areas of Mines which are situated in the remote areas. Salient features of such schemes are as follows:-

- Residential quarters have been constructed and allotted to majority of the employees.
- Providing adequate supply of drinking water to the employees residing in the mine colonies.
- Provisions of electricity at concessional rate.
- Provision of Hospitals/Health Care Centres.
- Assistance to Primary Schools for imparting free education to wards of weaker sections. School buses are provided at all the Mines so as to take children to nearby areas for High School/College.
- Providing financial aid, stationery, books etc. to the school adjacent to the mining areas.
- Organizing training classes for self-employment scheme.
- Other welfare measures for the development and upliftment of tribal women such as conducting sewing classes, adult literacy classes, AIDS awareness programmes, propagating such other programmes by display of posters, notices and banners, leprosy awareness programmes etc.
- Covid campaigning has been conducted at all the units of MOIL Ltd.

15.6 MECON Ltd.

As on 01.12.2021, out of 1120 employees on the strength of the Company, 235 employees belong to SC (20.98%), 111 belong to ST (9.91%) and 143 belong to OBCs (12.77%). MECON is fully aware of its social responsibilities for development and welfare of weaker section of the Society. MECON has adopted adequate measures for safeguarding their interests and welfare. There is separate cell for redressal of grievances of SC/ST/OBC employees.

15.7 MSTC Ltd.

The total manpower as on 31.12.2021 is 318 out of which 50 belong to Scheduled Castes (15.72%), 19 to Scheduled Tribes (5.97%) and 82 to OBCs (25.78%) and 09 belong to Person with Disability (2.83%).

The Presidential Directives issued from time to time in regard to reservation, relaxation, concession, etc. for the SC/ST/OBC/PWD candidates pertaining to the policies and procedures of the Government are duly observed. The directives in matters concerning recruitment and promotion regarding the weaker sections are duly complied with. All Departmental Promotion Committees and Selection Committees (in case of recruitment) constituted during the year had representatives of SC/ST community.

During the year, 6 ST, 11 SC, 22 OBC and 5 PWD employee of the Company were sponsored for in-house and Institutional training programmes. In addition, all possible cooperation and assistance were provided to the MSTC SC/ST Employees' Council, which function primarily to safeguard the interest of the weaker section of employees of the Company.

15.8 KIOCL Ltd.

The total number of employees in KIOCL as on 31.12.2021 is 709, out of which 112 persons belong to Scheduled Caste (15.80%), 48 persons belong to Scheduled Tribe (6.77%), 95 persons belong to Other Backward Classes (13.40%) and 2 persons belong to EWS (0.28%). Besides, there are 23 Women (3.24%) and 11 Divyang Persons (1.55%).

The Company has setup full-fledged facilities at Kudremukh and Mangaluru by establishing a modern township, hospital, recreation facilities etc. 10% of type "A" and "B" quarters and 5% of "C" & "D" type quarters are reserved for SC/ST employees.

During the Financial Year 2021-22 (as on 31st December, 2021), 9 Graduate Engineering (Trainee) were recruited in the Group 'A'. However, there is no recruitment in any of the Groups 'B', 'C', 'D' & D(S) (Supervisors and Non-Executives).



During the Financial Year 2021-2022 (As on 31st December, 2021), 159 employees put together in all Groups 'A', 'B', 'C', 'D' & D(S) were promoted, out of which 22 employees belong to SC category and 04 employees belong to ST category.

There is a regular interaction with the Management and SC/ST Welfare Association at Kudremukh, Mangaluru and Bengaluru. The grievances of SC/ST employees are discussed and appropriate action is taken to redress their grievances. Due to COVID-19 guidelines by Central Government/State Government and on restrictions of gathering, celebration of Dr. B.R. Ambedkar Jayanti was minimized at all locations on 14th April, 2021.

During the Financial Year 2021-22, out of 709 employees (as on 31.12.2021), 454 employees i.e., 64% (2718 trained man-days) have been nominated for various online and offline training programmes, out of whom, 105 employees belong to SC/ST category, 63 employees belong to OBC category, 1 employee belongs to EWS and 285 employees belong to general category.

15.9 Ferro Scrap Nigam Ltd. (FSNL)

The total manpower of FSNL as on 31.12.2021 is 587 out of which 110 belong to Scheduled Castes (18.74%), 59 to Scheduled Tribes (10.05%). As a measure of upliftment of weaker section of the society, reservation of posts is provided in accordance with the guidelines/instructions issued by the Government from time to time, for the Scheduled Caste, Scheduled Tribe & Other Backward Class communities in direct recruitments, as & when made.

Through the Promotion Policy and various welfare measures adopted by the Company, adequate care of welfare of the employees belonging to weaker sections of SC/ST/OBC communities is taken care of.

15.10 EIL, OMDC and BSLC

The total manpower of OMDC as on 31.12.2021 is 257 out of which 29 belong to Scheduled Castes (11.28%), 53 belong to Scheduled Tribes (20.62%) and 62 belong to OBCs (24.12%).

The total manpower of BSLC as on 31.12.2021 is 513 out of which 122 belong to Scheduled Castes (23.78%), 251 belong to Scheduled Tribes (48.92%) and 52 belong to OBCs (10.13%).

EIL have only one manpower in its roll.

The guidelines issued by the Government of India from time to time with regard to reservation in services for SCs/STs/OBCs/ Physically Handicapped etc. are followed.

CHAPTER-XVI

VIGILANCE

16.1 Activities of Vigilance Division of the Ministry of Steel

The Vigilance Division of the Ministry is headed by a Chief Vigilance Officer (CVO) at the level of Joint Secretary appointed on the advice of the Central Vigilance Commission (CVC). The CVO with a Deputy Secretary, a Under Secretary and supporting staff, functions as the nodal point in the vigilance set-up of the Ministry under the administrative control of Secretary, Steel. The Vigilance Unit is, inter-alia, responsible for the following activities in respect of the Ministry of Steel and the CPSEs under its administrative control:

- Ensuring identification of 'sensitive' posts and rotation of officials/officers holding sensitive posts, as per CVC guidelines.
- Scrutiny of vigilance complaints and initiation of appropriate investigation measures.
- Furnishing comments / factual reports of the Ministry to the Central Vigilance Commission (CVC) on the enquiry/ investigation reports involving Board Level Officers, wherever required.
- Obtaining first and second stage advice of the CVC, wherever necessary.
- Appointment of CVOs in the CPSEs in consultation with Department of Personnel & Training (DoP&T) and CVC.
- Regular follow up with the CVOs of Steel CPSEs in relation to vigilance related issues, including preventive / systemic improvements measures.
- Obtaining Vigilance Clearance in respect of Board Level Officers for their appointment, confirmation, extension of service, etc.
- Sending periodical reports / returns to CVC/DoPT.

The Vigilance Departments in all CPSEs are headed by full time Chief Vigilance Officer appointed by the Government of India. The Vigilance Department in the Ministry of Steel monitors the incumbency position of CVOs and regularly update the same to DoPT to ensure that there is no vacancy in the post of CVO. Two new CVOs, one each in KIOCL and MOIL, were appointed during the year 2021.

The Ministry reviewed the vigilance activities in the Steel CPSEs through meetings and monthly checklist, periodic returns and statements sent by the CVOs. Besides, the Ministry also reviewed the cases and wherever necessary, held discussions with the CVOs of concerned CPSEs for early resolution of issues. Circulars containing instructions and guidelines on different aspects of vigilance management received from the CVC, etc. are also circulated to the CVOs of the CPSEs for compliance.

During the year 2021 (from 01.01.2021 to 31.12.2021), the Vigilance Division received 87 complaints from various sources. Out of the 87 complaints received, 67 complaints have been suitably disposed off and appropriate actions in respect of remaining 20 complaints/ references have been initiated. Factual reports / comments in 16 cases were furnished to the CVC. Besides, reports in 3 cases have been sent to Cabinet Secretariat. In pursuance with CVC's advice, disciplinary action in 2 cases involving Board Level Officers/Below Board Level Officers of two Steel CPSEs, have been initiated. Vigilance Clearance proposals in respect of 28 Board Level Officers were sent to the CVC during the year 2021.

This Ministry also observed Vigilance Awareness Week from 26.10.2021 to 01.11.2021. On this occasion, Integrity Pledge was administered by Secretary (Steel) to all the employees. Apart from displaying banners / posters at prominent locations in the office premise, a Speech Competition on the theme on "The Essence of Good Governance" and an Essay Writing Competition on a Topic "Role of Education in Combating Corruption" was organized. The CPSEs under the Ministry of Steel also observed Vigilance Awareness Week during the period.



16.2 Steel Authority of India Ltd. (SAIL)

SAIL Vigilance emphasizes on preventive vigilance through surprise checks, scrutiny of files, continuous examination / review of existing systems and suggests system improvements thereby increasing organizational effectiveness. There is a thrust on 'e-vigilance' and leveraging technology to enhance transparency in the organization. Following activities were undertaken by SAIL Vigilance :

Training Programmes: A total of 156 training/awareness programme/workshops involving 2104 participants were organized at various plants and units of SAIL, for enhancing awareness on System and Procedures followed in SAIL. A few significant training programmes organized by SAIL Vigilance are mentioned below:

- A 2 day Preventive Vigilance Module was included in Induction Programmes for new entrants and Mid-Career Training Programmes.
- Twenty-four dedicated two-day Preventive Vigilance training programs were conducted wherein a total of 1204 executives including 149 fresh entrants were covered.
- For FY 2021-22, SAIL planned to cover 800 mid-level executives / fresh entrants in such two-day Preventive Vigilance training programs being conducted in different SAIL Plants / Unit. Thirty-four such dedicated two-day Preventive Vigilance programs have been completed till December, 2021 wherein a total of 719 executives from SAIL including 98 Fresh entrants have been covered.

Vigilance Awareness Week 2021: Vigilance Awareness Week was observed in SAIL during 26th October, 2021 to 1st November, 2021. The week started with administering the Integrity Pledge and reading out of messages of dignitaries on 26th October, 2021 at SAIL Corporate Office as well as all Plants/Units of SAIL. During the week, workshops/sensitization programmes, customers meet, events like quiz, essay, slogan and drawing/poster, debate competition etc. were organized for SAIL employees. As outreach measures, various events like Speech/Oratory competition, Essay/Slogan competition etc were organized for School / College students in SAIL townships. The activities conducted during the week were posted on social media like Twitter handle and Facebook account of SAIL for wider publicity. During the week, employees, their families, students, customers, vendors etc were encouraged to take E-pledge.

Thrust Areas of SAIL Vigilance: The Thrust Areas of SAIL Vigilance for the year 2021 were:

- Scrutiny of procurement files within approving powers delegated to CGM & below level executives, with special thrust on powers delegated to dealing officers.
- Scrutiny of cases of final settlement of dues after superannuation as per extant guidelines / statutory provisions with special emphasis on adherence to prescribed timelines.
- Scrutiny of Repeat Orders and related quantity variation for orders valuing Rs. 50.00 Lakh and more.

Preventive Checks: A total of 2261 Preventive Checks including File Scrutiny and Joint Checks were conducted in vulnerable areas of different Plants / Units of SAIL, out of which 29 checks were taken up for detailed investigation while preventive / system improvement recommendations were made in 434 cases.

System Improvement Projects: A total of 13 System Improvement Projects (SIPs) were taken up at different Plants/units of SAIL after identifying concerned areas.

Intensive Examinations: A total of 14 cases were taken up for Intensive Examination at different Plants/Units. During Intensive Examination, high value procurement/contracts are scrutinized comprehensively and necessary recommendations are forwarded to concerned departments for implementing suggestions for improvement.

ACVOs Meet : As a part of maintaining regular interaction with Additional Chief Vigilance Officers (ACVOs) who head Vigilance Departments at Plant / Unit level, CVO conducted regular review meetings known as ACVO Meets. During the meetings, performance of SAIL Vigilance was reviewed. Presentations on Case Studies/other vigilance related matters were made by different Plants/ Units which would ensure adoption of good practices/procedures by all.

System Improvement arising from Vigilance Investigation : Based on the System Improvement advice tendered by Vigilance, Bhilai Steel Plant has developed a procedure for incorporation of Unique Document Identification Number

during registration of contractors and also in the terms & conditions of NITs. Unique Document Identification Number is a 18 digit system generated unique number for documents certified/attested by a practising Chartered Accountant. The UDIN related guidelines are being extended to other Plants/Units of SAIL.

Chairperson, SAIL administering Integrity Pledge to employees at SAIL Corporate Office during Vigilance Awareness Week 2021.

16.3 Rashtriya Ispat Nigam Ltd. (RINL)

Vigilance Department conducted system studies on the procedures being followed in procurements, sales and award of contracts including expansion area for improving existing procedure and systems, wherever required. Intensive examinations of contracts / purchase orders were conducted and audit paras / internal audit reports were perused. Identification and follow up w.r.t rotation of Sensitive Posts, conducting Surveillance Checks, random scrutiny of bills etc. were also undertaken. Besides, Special Vigilance Awareness drives were also undertaken to create awareness amongst the employees and other stakeholders on preventive vigilance, as a functional tool for Management to usher in Fairness and Equity. Information Technology was leveraged for bringing about greater transparency through e-initiatives like e-auction, e-reverse auction and 100% e-payment etc. The following activities were undertaken to promote Transparency and Integrity:

- Conducted 130 system surveillance checks which included 25 quality checks and 2 periodic surprise checks on medical services.
- Organized 7 physical sessions on preventive vigilance covering 290 employees, 5 hybrid sessions covering 319 employees and one online session covering 67 employees.
- 17 System studies for improving procedures, rules, policies, guidelines etc. were taken up and Vigilance observations/ recommendations were communicated to the concerned Departments.
- **Observance of Vigilance Awareness Week – 2021** was done vigorously with the theme “Independent India @ 75: Self Reliance with Integrity”. Several programmes viz; Pledge taking, display of posters, Essay writing, Quiz and Elocution Competitions etc., were organized involving the participation of employees, their dependents and other stake holders.
- Online and hybrid sessions were also conducted during “Vigilance Awareness Week” for awareness on preventive vigilance on the topics Ethical values in Governance, Transparency in business decisions, Operational Excellence towards self reliance India, Leveraging of technology for protection of Lands and prevention of encroachments -Digitization of the land records and Leveraging of technology for protection of Lands and prevention of encroachments - Geo referencing of Boundaries and digital mapping of the land parcels.

16.4 NMDC Ltd.

NMDC Vigilance Department has taken several initiatives during the year. Emphasis was laid on adequate checks and balances in the form of well-defined systems and procedures. Various programmes were conducted for awareness on vigilance matters for the employees of the Corporation. The vigilance functionaries at the projects have conducted regular training classes for the employees on the vigilance matters. Complaints received were taken up for investigation and necessary corrective measures / disciplinary action wherever required were recommended.

Inspections / Checks: A total of 42 surprise checks and 45 regular inspections were conducted by Vigilance Department during the year across the Production Projects/Head Office.

Complaint handling: Vigilance Deptt. has received 33 complaints on which necessary action was taken. Based on the investigation findings, 03 number of suggestions for corrective action/system improvements has been made to the concerned Department. The Complaint Handling Policy of NMDC effective from 01.01.2022 has been approved by the Competent Authority and has been uploaded on Company’s website for wider publicity and information of all the stakeholders.

ISO Certification for Vigilance department: NMDC Vigilance department has been conferred with ISO 9001:2015 certification. The periodical audit of the Quality Management System was conducted by M/s Vexil and based on the suggestions of the Quality Auditor, necessary improvements in the functioning of Vigilance department has been implemented.



Workshops / Conclaves: A three-day online training workshop from 14th – 16th December, 2021 on developing IOs / POs for conducting disciplinary proceedings was arranged through CBI Academy for 72 persons from NMDC.

Training Programmes arranged under Preventive Vigilance (PV) Module: As per the guidelines of CVC, NMDC is regularly arranging training programmes for creating awareness among its employees, as per the Action Plan drawn under the Preventive Vigilance Training Module. 02 number of training programmes, through Hybrid mode, under Preventive Vigilance was arranged for Induction level employees covering 56 employees and 32 number of training programmes were arranged for Mid-career level employees covering 365 employees. A total of 421 employees from all the Production Projects, Regional Offices & Head Office were covered for training under Preventive Vigilance.

Leveraging Technology: Implementation of Fleet Management System is under progress. This system will not only enhance operational efficiency but also captures the operational stats of equipment.

Implementation of Integrity Pact: NMDC has adopted implementation of Integrity Pact since November, 2007. As per the suggestions given by Vigilance Department, the threshold value has been decreased to Rs. 1.0 Crore w.e.f. 07.09.2018 for both Procurement and Contracts. All the contracts wherein the Integrity Pact was to be signed as per the threshold limit was adhered to and more than 92% of the total values of the contracts are covered under the Integrity Pact.

Quarterly Review Meeting of CVO with VOs: The Quarterly Review Meeting of NMDC Vigilance Officers were conducted regularly. Issues pertaining to Vigilance matters including routine and surprise inspections, CTE inspections and system improvements suggested for various operational and administrative processes were discussed/shared during these Quarterly meetings.

Vigilance Awareness Week (VAW): Vigilance Awareness Week 2021 was observed from 26th October, 2021 to 1st November, 2021 on the theme “Independent India @75:Self Reliance with Integrity” across all the Projects/ Regional Offices & Head office of NMDC. Integrity Pledge was administered by CMD to the employees of Corporate Office, and by Head of the Projects / RMs at Production Projects and Regional Offices of NMDC on the Inaugural day of the Week. During the week, a session on Corporate Governance, Leveraging Technology, and Whistle Blower Mechanism in PSUs was organized on 28.10.2021 at Head Office. Various Competitions/ Activities like Elocution, Essay writing, Quiz and Inter-departmental competition for Best House-keeping activities, skit on the VAW theme, Marathon/ Walkathon and other activities were conducted to bring awareness among the employees and other stakeholders. Various social media platforms were also utilized for propagating the VAW theme & creating awareness.

16.5 MOIL Ltd.

The functioning of Vigilance Department includes preventive vigilance having main thrust on systems improvement in the organization, with the objective to ensure that the management gets the maximum productivity. Some of the important activities of the Vigilance Department are as under: -

ISO 9001-2015 Certification: Vigilance Department has obtained ISO-9001:2015 certificate by the International Certification Services Pvt. Ltd., Mumbai accredited by Joint Accreditation System of Australia and New Zealand for Quality Management System to provide vigilance services to the management of MOIL Ltd.. Certificate issued by ICS is worldwide recognized by IAF (International Accreditation Forum). Surveillance audit was conducted by ICS on 14.12.2021.

Inspections: Routine/ Periodic and surprise inspections are being carried out regularly to ensure adherence to norms during execution of contract and to suggest improvements in the system. 11 periodic and 9 surprise inspections have been carried out. Based on the inspections 2 advisories have been issued to management.

Complaint handling: Vigilance Department has processed total 43 complaints including 12 complaints referred by Ministry. Out of which 9 reports have been submitted till 31st December, 2021.

Scrutiny of procedures and systems: Vigilance Department has studied the procedure related to purchase, bidding process etc. and on the basis of examination, 2 advisories have been issued to management for corrective action and system improvement.

Mobile App 'Vigilance MOIL': Mobile app Vigilance MOIL developed by MOIL vigilance with in-house team is available at Google App store for free downloading and making complaint from any place at any time.

Toll free number: A toll free number 18002333606 has been provided for giving vigilance related assistance to general public.

GeM-Procurement: GeM-Procurement is being done for purchases and service contracts available on GeM platform.

Structured Meeting with Management: As per the instructions of CVC and Ministry of Steel, 3 structured meetings of Vigilance Department with MOIL Management in presence of CMD MOIL have been done during the year 2021 in which issues related to GeM procurement, updating of Manuals, Biometric attendance system in Mine, award of contract on nomination basis, appointment of Estate Officer, digitization of record and other agenda items have been discussed.

Leveraging Technology: With reference to CVC's circular, Vigilance Department emphasized on the effective use of website and leveraging technology in discharge of regulatory, enforcement activities and dealing with complaints. The main thrust areas for leveraging technologies are procurement of goods and services. The status of bill payments to contractors/suppliers and tender are regularly posted on website. All promotion list, transfer list, notices and other pro-forma are posted on the MOIL intranet.

Updation of Manuals: Various manuals such as Purchase Manual, Work & Contract Manual, Personnel Manual, etc. have been prepared and put in practice. Purchase Manual and Work & Contract Manual, are available on the Company's website. Personnel manual is available on MOIL intranet. Marketing Manual and Accounts Manual are under preparation.

Training Programs: Vigilance Department conducted 1 training program, at Head Office on Ethics in Corporate Governance and one workshop on PIDPI resolution at the Munsar mine covering 90 employees.

Job Rotation: Sensitive posts have been identified for rotation of officials working on sensitive posts for more than 3 years and are pursued with the management. Out of 300 posts identified for rotation 253 transfers have been made so far.

System Improvement: As an outcome of investigations relating to complaints, study, inspection etc., advisories and suggestions were given to the management for system improvement in the following areas:

- In theft prone zone like O/C mine, construction of boundary walls and redeployment of security personnel.
- Biometric system for attendance at mines.
- SOP for documents verification of Selected Candidates in recruitment.
- Regular updation of personal file and service book of employees.
- Protection of information system i.e. ERP/SAP and Data recourses management controls. Third party audit of ERP.
- On line Bill tracking system of Vendors.
- Old record to be weeded out as per policy.
- Digitization of records.
- Appointment of Estate Officer.

Vigilance Awareness Week: Vigilance Awareness Week was observed from 26th October, 2021 to 2nd November, 2021 at all Mines/Offices of MOIL Limited in which following activities were done in accordance with CVC guidelines with the theme "Independent India @ 75: Self Reliance with Integrity". Vigilance awareness walkathon, Essay, Poem and Slogan writing and poster, cartoons drawing and painting competitions have also been organized. Public Interest Disclosure and Protection of Informers (PIDPI) resolution was conducted at Munsar Mine, posters on PIDPI were displayed at conspicuous locations at HO and Mines to make people aware about PIDPI complaints.



16.6 MECON Ltd.

The vigilance set up of MECON is presently functioning under Chief Vigilance Officer (CVO) stationed at Head Office, Ranchi. The Vigilance Department of MECON has taken a number of initiatives, briefly mentioned below:

- **Vigilance Awareness Week, 2021** was observed by MECON Limited in a befitting manner and with great enthusiasm from 26th October, 2021 to 1st November, 2021 in line with directive from Central Vigilance Commission with the theme “स्वतंत्र भारत@75: सत्यनिष्ठा से आत्मनिर्भरता” (Independent India @ 75: Self Reliance with Integrity). The observance of Vigilance Awareness Week (VAW) in MECON commenced with Pledge Ceremony on 26th October, 2021. To spread awareness and campaign about “Complaint under PIDPI (Public Interest Disclosure and Protection of Informers)” two posters as per of CVC circular were displayed at prominent places of various offices of MECON Ltd. and activities like Presentations, Talks and Panel Discussions. Competitions such as Essay, Slogan, and Painting competitions involving MECON employees and their wards (spouse and children) were also organized through online mode. An online quiz competition for the employees of MECON was also conducted. For dissemination of anti-corruption messages and stressing need for vigilant India as part of outreach activities, Bulk Push SMS service of BSNL was utilized during Vigilance Awareness Week.
- Preventive Measures are being taken such as surprise and routine check, scrutiny of files, scrutiny of Annual Property Returns, etc.
- Regular Structured Meeting of Vigilance with the Management is being conducted and issues related to Standardization of Bidding Documents, updation of organisation’s Procedures & Manuals, Asset Management/ Digitization of Land record, appointment of Retired Officers as Inquiry Officer (IO), Computerized File Tracking System (including SAP/ ERP implementation) etc. have been discussed.
- MECON has signed Integrity Pact (IP) with 250 suppliers/ contractors (Threshold value lowered for wider coverage : Rs. 1 crore & above for EPC Projects and Rs. 25 Lakh & above for Town Administration as well for in-house Procurement).

16.7 MSTC Ltd.

The Vigilance set up of MSTC is headed by a full time Chief Vigilance Officer (CVO). MSTC Vigilance emphasizes on systemic changes and leveraging technology for transparent system and procedures, thereby increasing organizational effectiveness. Complaints received are taken up for investigation wherever required and necessary suggestions for system improvement / disciplinary action are recommended to the management. Examinations of contract/purchase orders are conducted and audit paras are scrutinized. Identification of Sensitive Posts, conducting Surveillance Checks, random scrutiny of bills as well as property returns (>20%) is also undertaken. Some of the important activities undertaken by the Vigilance Department during the period January-December, 2021 are as follows:-

- 89 complaints received; 82 disposed of, 03 complaints taken up for detailed investigation and appropriate action recommended to Management in 03 cases.
- 16 contracts/files scrutinized; 01 resulting in investigation and 02 resulting in system improvement suggestion.
- 20 Surprise Checks and 7 inspections were conducted by Vigilance Department.
- 05 system studies were taken up on issues such as procedure of engaging retired Government officials on contractual/consultancy basis by organizations, on arbitrary cancellation of accepted lot by Sellers/ Principal, obtaining vigilance clearance/ status for executives (below Board level) and non-Executives during DPC/ promotion, efficacy of Vigil/ whistle-blower mechanism in CPSEs and on manual intervention checks in the e-auction system. Vigilance observations/recommendations has been implemented on issues such as Whistle Blower Mechanism/Vigil Policy of MSTC, vigilance clearance/status, CDA Rules, security aspects of the Bidder’s/Seller’s login in the scrap e-auction portal, HRMS Policy.

- Based on Vigilance scrutiny / studies several following recommendations were also made to the management:-
 - ❖ Assessment of executives under FR 56(j)/(i).
 - ❖ To levy fee in case of accepted lots being cancelled by Principal.
 - ❖ To levy participation fee for each e-auction, besides pre-bid EMD for discouraging non-serious bidders.
 - ❖ Policy for banning on business dealings, condemnation of assets, flat allotment etc.
 - ❖ Effectiveness, Control and Supervision initiatives for Vendor Bill Tracking System.
 - ❖ To publish results of auctions for better transparency.
 - ❖ Action against specific bidders suspected of indulging in cartalization.
- **Training Programs** : One Customer Grievance Redressal Meet was organized by Vigilance Department through online mode. 02 Vigilance Awareness Sessions on property return covering almost 150 employees of MSTC were conducted.

Vigilance Awareness Week: Vigilance Awareness Week - 2021 was observed with the theme “Independent India @ 75: Self Reliance with Integrity; स्वतंत्र भारत @ 75: सत्यनिष्ठा से आत्मनिर्भरता” in all offices of MSTC. Also, wide publicity was given to the Whistle Blower Mechanism & PIDPI initiative by displaying in the organization website as well as organising Walkathon & candle light vigil march. Skit Play on the theme was organized to spread awareness amongst the employees of Corporate Office and Eastern Regional Office. Competitions such as Essay, Slogan and Painting and Quiz competitions involving MSTC employees and their wards were also organized through online mode.

16.8 KIOCL Ltd.

Preventive vigilance has been the thrust area of Vigilance Department. A climate of preventive vigilance is generated to sensitize officials at all levels about the ill effects of corruption and malpractices. Regular structured meeting of Vigilance with the management is being conducted and issues related to e-governance, Leveraging Technology, Tender Management, Award of Works, Systemic Improvements, review of Conduct Rules, Discipline and Appeal Rules of the Company, rotation of officers holding sensitive posts, implementation of Integrity Pact etc., have been discussed.

- The Vigilance Department is certified for compliance to ISO certification 9001-2015 standards to ensure continuous improvement in Quality Management System.
- **Vigilance Awareness Week** was observed from 26th October, 2021 to 01st November, 2021 at all the locations/offices of KIOCL Limited. Workshops, Trainings, Guest Lectures and awareness programs were conducted during the week through web based/hybrid mode observing Covid-19 prevention guidelines. Essay, slogan writing and quiz competitions were conducted among the employees, school and college students.
- e-Procurement is in vogue and the threshold value for this is fixed at Rs 2 Lakh and above. All payments are being made through electronic mode.
- 150 work/purchase/sale orders have been issued incorporating Integrity Pact Clause, covering 98.58% of contracts by value. No complaints have been received under Integrity Pact.
- 53 Scrutiny, 27 inspections, 17 surprise checks and 6 CTE type inspections were carried out during the period and corrective actions, if any were suggested. Necessary action was taken as regards to the complaints received during the year.
- Vigilance Department conducted 3 training programs for employees through virtual/hybrid mode. Topics such as Personal Integrity, Cyber Crime and Public Procurement etc. were covered.
- Three training programs on Preventive Vigilance for Mid-Career level employees as per CVC PV training module were conducted through video conference / hybrid mode covering 920 manhours.

16.9 Ferro Scrap Nigam Ltd. (FSNL)

The Vigilance department of FSNL, headed by Chief Vigilance Officer (CVO), has been instrumental in institutionalizing the anti-corruption activities. FSNL Vigilance emphasizes on systemic changes & leveraging technology for transparent



system and procedures, thereby increasing organizational effectiveness. Examination of contracts/purchase orders was conducted and audit paras / internal audit reports were perused. Identification of Sensitive Posts, conducting Surprise Checks, random scrutiny of annual property return was also undertaken. Agreed List has been signed with respective local branch of CBI. Structured meeting of CVO with the Managing Director is being conducted on regular basis. Vigilance Department monitors implementation of Integrity Pact. Some of the important activities undertaken by the Vigilance Department are as under:-

- **Scrutiny of procedures and systems** : The Vigilance Department has studied the following procedure/policies/ rules and on the basis of examination, management has been suggested for system improvement in the following areas:
 - ❖ Contract / purchase order.
 - ❖ An innovative Preventive Study, PV-CHASE (Preventive Vigilance through Corruption Hazard Assessment and System Enhancement) study on “Procurement of Capital goods/items”.
 - ❖ CDA Rules of the company.
- **Leveraging Technology:**
 - ❖ Online portal for filing of Annual Property Return has been developed and made “Go live” from January 2021.
 - ❖ E-Office is under implementation.
- **Training Programs:** Preventive Vigilance training has been arranged for induction level and mid career level executives jointly through SAIL.
- **System Improvement:** As an outcome of study, inspection etc., advisories and suggestions given to the management for system improvement are implemented in the following areas:-
 - ❖ Modifying the existing CDA Rules of FSNL in line with the provisions of DoPT consolidated guidelines on Periodical review for ensuring Probity and efficacy among employees.
 - ❖ Based on PV-CHASE (Preventive Vigilance through Corruption Hazard Assessment and System Enhancement) study on “Procurement of Capital Goods/ Items”, recommendations given for suitable amendments in Store & Purchase Manual.
 - ❖ To ensure that tender enquiries are issued with correct email IDs and are received by vendors and to have a proof of dispatch through email in relevant file for further reference.
 - ❖ To follow the procedure of signing comparative statement jointly by MM and F&A officers, while processing of tender as per Store & Purchase Manual.

Vigilance Awareness Week : Vigilance Awareness Week was observed in the company from 26th October, 2021 to 1st November, 2021 on the theme “ स्वतंत्र भारत @75 : सत्यनिष्ठा से आत्मनिर्भरता Independent India @ 75 : Self Reliance with Integrity ”. Internal (housekeeping) activities as indicated in the CVC guidelines on the observance of VAW was taken up. During the week various activities like Slogan competition, Essay writing competition, Drawing/ Cartoon completion, pamphlet distribution in public places, taking pledge by the employees, vendors meet, workshop on preventive vigilance etc. were carried out to create vigilance awareness among the employees.

16.10 EIL, OMDC and BSLC

Vigilance policies are in place for OMDC and BSLC. The Vigilance Departments in the Companies are headed by the Chief Vigilance Officer (CVO) of RINL and assisted by one Vigilance Officer in Head Office, Bhubaneswar. In addition, Vigilance Officers (additional charge) are appointed at OMDC mines, Thakurani and BSLC mines, Birmitrapur. The functions of Vigilance department include both preventive and punitive actions for all the mines of the Company and for the Corporate Office at Bhubaneswar. Company’s Vigilance Department is continuing its efforts for systematic improvement to bring more transparency in working and conducted various training programme and interactive sessions for creating Vigilance Awareness among the employees. As per the directives of Central Vigilance Commission (CVC), the companies observe “Vigilance Awareness Week” every year.

CHAPTER-XVII

CENTRALISED PUBLIC GRIEVANCE REDRESS AND MONITORING SYSTEM AND SPECIAL CAMPAIGN FOR DISPOSAL OF PENDING MATTERS

17.1 Centralised Public Grievance Redress and Monitoring System (CPGRAMS) has been implemented for facilitating public grievances in the Ministry and its PSUs. The CPGRAMS is an online web-enabled system over NICNET developed by NIC in association with the Department of Administrative Reforms and Public Grievances (DARPG) with an objective of speedy redressal and effective monitoring of grievances by Ministries/Departments/Organisations of Government of India. The entire life cycle of the grievance redressal operation is (i) Lodging of the grievance by a citizen, (ii) Acknowledgement of acceptance of grievance by organization, (iii) Assessment of grievance regarding follow up action, (iv) Forwarding and transfer, (v) Reminders and clarification and (vi) Disposal of the case.

A revised Sevottam Compliant Citizens'/Clients' Charter has been finalized and implemented in the Ministry of Steel. Detailed status of adoption of 'Seven Step Model for Citizen Centric- Sevottam' in the Ministry and Steel PSUs is at Annexure XV.

The details of grievances dealt with in the CPGRAMS for the period from 01.01.2021 to 31.12.2021 is as under:

Ministry/CPSE	Outstanding as on 01.01.2021	Received during 01.01.2021 to 31.12.2021	Disposed off during 01.01.2021 to 31.12.2021	Pending on 31.12.2021
Ministry of Steel	136	2186	2289	33
SAIL	07	531	522	16
RINL	8	44	52	0
NMDC Ltd.	0	58	56	2
MECON Ltd.	0	49	49	0
MOIL Ltd.	0	10	10	0
KIOCL Ltd.	0	4	4	0
MSTC Ltd.	0	45	42	3
FSNL	0	4	4	0
OMDC	0	1	1	0

17.2 Steel Authority of India Ltd. (SAIL)

Effective internal grievances redressal machinery exists in SAIL plants and units, separately for executives and non-executives.

The grievances in SAIL plants/units are dealt in 3 stages and employees are given an opportunity to raise grievances at various stages relating to wage irregularities, working conditions, transfers, leave, work assignments and welfare amenities etc. Such issues are effectively settled through the time-tested system of grievance management. However, majority of grievances are redressed informally in view of the participative nature of environment existing in the steel plants. The system is comprehensive, simple and flexible and has proved effective in promoting harmonious relationship between employees and management.



17.3 Rashtriya Ispat Nigam Ltd. (RINL)

In RINL, structured Grievance Handling System is in place for redressal of grievances of Executive and Non-Executive employees. In the formal Grievance Redressal Procedure for non-executives, a workers' representative is present in the committee. Further, grievance handling system has a fixed time frame to redress the grievances. A senior officer at the level of General Manager is designated as Public Grievance Officer to deal with the public grievances. There is a separate Grievance Redressal Mechanism each for Executives and Non-Executives.

17.4 NMDC Ltd.

The grievance redressal machinery in NMDC is headed by a Chief General Manager in the Head Office who is also the nodal officer for monitoring the grievance redressal machinery and by Head of Projects in each of the four production Projects. The machinery is working satisfactorily. A link to the Government of India's portal for Public Grievances has been provided in the home page of NMDC's website for registering grievances. As and when any public grievance (including in the press) is received, the same is promptly attended to.

17.5 MOIL Ltd.

The redressal of grievance machinery in MOIL consists of one Grievance Officer nominated for at each Unit / Mine / Head Office. The Nodal Officer nominated at Head Office co-ordinates with the Grievance Officers at the Unit / Mine / Head Office for their effective performance. Monthly/quarterly grievances are reviewed and dealt by designated Public grievance officers at mines and corporate office and disposed off with stipulated period. The data related to grievances at the units are submitted by unit grievance Officers in monthly / quarterly returns to the Head Office.

17.6 MECON Ltd.

MECON has nominated Nodal Officer under Centralized Public Grievances Redressal and Monitoring System (CPGRAMS) for public grievances and the name of Nodal Officer is published in the website of Ministry of Personnel, Public Grievances. There is a three-tier grievance procedure for redressal of grievance of its employees. A Grievance Advisory Committee consisting of representative of Executive and Non-Executive employees is operative to examine grievances of employees and submit recommendation for redressal.

17.7 MSTC Ltd.

MSTC has Public Grievance Redressal Cells. There are total eight cells in Regions and Branches of the organisation and there is a Nodal Authority and a Public Grievance officer in the Head Office. There is facility of online registration for lodging grievance on the Company's website www.mstcindia.co.in. MSTC has also implemented Centralized Public Grievance Redress and Monitoring System (CPGRAMS) for online receipt and disposal of public grievances so that grievance can be sorted out immediately and action taken. Some grievances are also received by post. Action is taken to address and redress grievances received from outside and from staff of the organisation. Apart from the Cells, a Grievance Committee is also constituted at Head Office. The Grievance Committee makes recommendations after examination of the grievances and comments obtained from the concerned department/Region/Branch. The Grievance Committee meets at periodical intervals to review the cases. The Centralized Public Grievance Redress and Monitoring System (CPGRAMS) and Public Grievance site of the Company are monitored regularly by the Head Office.

17.8 KIOCL Ltd.

KIOCL has a well-structured and multilayered Public Grievances Redressal Mechanism including Dispute Resolution Mechanism. The Public Redressal set up in KIOCL has been introduced right from the Corporate Office at Bangalore to all the production units, project offices and liaison offices. Vendors & stakeholders having complaints or grievances can interact with the organization through the following for Public Grievance / Dispute settlements.

Public Grievance Officers are nominated at all locations. The development of Sevottam Compliant Citizen's Charter has been put in place in the corporate website: www.kioclltd.in. Company has provided a linkage in its website to the portal of Centralized Public Grievance Redress and Monitoring System (CPGRAMS) of Department of Administrative Reforms & Public Grievances for lodging and redressal of grievances.

17.9 Ferro Scrap Nigam Ltd. (FSNL)

The company ensures redressal of the grievances within the stipulated time. The company has formulated a scheme, viz., "Grievance Redressal scheme". Under this scheme, the grievances, if any, are redressed in a time-bound schedule, through a three-stage process. In case the applicant is not satisfied after the result of three Stage process he/she can make an appeal to the Managing Director of the company, who, in turn, re-examines the action taken in all the above 3 stages, analyzes the grievance and communicates his decision to the concerned employee/public, within 15 days' time from the date of receipt of the appeal.

17.10 EIL, OMDC and BSLC

Grievance Redressal Mechanism is in place in EIL, OMDC and BSLC at Unit Level and at Corporate Level. The system of Redressal of Public Grievance has been systematized by broadening its scope to include acceptance of complaints online as well. Nodal Officer has been notified for this purpose. Name & designation of the Officer have been posted in the Company's website i.e www.birdgroup.co.in. The Companies have initiated the system for on-line receipt of grievances and settlement as per the Sevottam model. Seven Step Model of "Sevottam" has been provided in the website i.e. www.birdgroup.co.in for online redressing of public grievances. Public grievances are frequently disposed of through CPGRAM portal.

17.11 Special Campaign for Disposal of Pending Matters (SCDPM)

- Department of Administrative Reforms and Public Grievances had initiated a Special Campaign for Disposal of Pending Matters during the period October 2, 2021- October 31, 2021.
- The focus area of special drive was on clearing pending references from Members of Parliaments, State Governments, References for Inter-Ministerial Consultations (IMCs), Parliamentary Assurances, Public Grievances, Appeals, Simplification of rules/compliance burden, etc. The drive also enjoins on the Ministry/ Departments to improve records management by reviewing old records including weeding out files, scrap disposal thereby freeing up office space and ensure overall cleanliness of Government Offices.
- A dedicated SCDPM portal to monitor progress on each of the above listed action points by Ministries/ Departments has been launched by Department of Administrative Reforms and Public Grievances. Data was to be uploaded on the said portal by various Ministries/Departments and thereafter, monitored on daily basis.
- Based on inputs made available by various Divisions/Wings under Ministry of Steel data uploaded on the portal as various parameters and achievements at the end of the drive is given below:

Action Point	Data uploaded	Disposal as on 31.10.2021		Pendency Position
1	2	3		4=(2-3)
References from MPs	62	62		0
Parliamentary Assurance	1	1		0
CPGRAMS	22	22		0
Record management	No. of files for Reviewed	No. of files identified for weeding	No. of files weeded out	Space Freed (in sq. ft)
	975	568	568	1000
Public Grievance Appeals	12	12		0

17.12 Implementation of Special Campaign in CPSEs

The special campaign to reduce pendency has also been implemented by the CPSEs under the Ministry of Steel. The status of reviewing/ weeding out of files, scrap disposal, swachhata campaigns implemented by the CPSEs is given below (as on November, 2021) :

i) Review/ Weeding out of files :-

S.No.	Name of the CPSE	No. of Files identified for Review	No. of Files Reviewed	No. of Files identified for weeding	No. of Files weeded out
1	SAIL	19609	19609	9455	9455
2	RINL	12002	8877	7381	7381
3	NMDC Ltd.	1020	1020	310	310
4	MOIL Ltd.	512	512	5	5
5	MECON Ltd.	10000	14190	13291	13291
6	KIOCL Ltd.	1985	1450	400	400
7	MSTC Ltd.	16005	14965	7205	7205
	TOTAL	61133	60623	38047	38047

ii) Scrap Disposal :-

S.No.	Name of the CPSE	Total Revenue Generated (Rs. in Lakh)	Space freed including through weeding out of files, etc. (in sq feet)
1.	SAIL	25715.61	89367
2.	RINL	1324.53	1234
3.	NMDC Ltd.	0.10065	70
4.	MOIL Ltd.	8.16	120
5.	KIOCL Ltd.	25.31	13500
6.	MSTC Ltd.	11.68108	10678
	Total	27085.39	114969

iii) Cleanliness Campaign :-

S.No.	Name of the CPSE	No. of Cleanliness Campaigns Planned	Campaigns conducted
1.	SAIL	130	145
2.	RINL	56	56
3.	NMDC Ltd.	44	44
4.	MOIL Ltd.	11	11
5.	MECON Ltd.	20	20
6.	KIOCL Ltd.	6	6
7.	MSTC Ltd.	2	2
	Total	269	284

As per subsequent directions from Department of Administrative Reforms and Public Grievances, uploading of the data on the SCDPM portal is to be continued and to be done on monthly basis and status is to be reviewed regularly by the Ministries/Departments.

CHAPTER-XVIII

DIVYANG AND STEEL

18.1 Ministry of Steel

The Ministry of Steel follows the Government's rules with regard to the implementation of The Rights of Persons with Disabilities Act, 2016 (RPwD Act). As on December 31, 2021, five persons [one hearing handicapped (HH), one visually handicapped (VH) and three orthopaedically handicapped (OH)] with disabilities are employed in the Ministry of Steel.

18.2 Steel Authority of India Ltd. (SAIL)

- Provisions related to reservation for Persons with Disabilities in terms of RPwD Act is followed at Plants/units of SAIL.
- Continuous efforts are/have been made for barrier free environment at work place for persons with disabilities.
- SAIL extends free medical facility even to non-entitled brother or sister of an employee, if they are disabled and dependent on the employee.
- Various facilities for sports and cultural activities are provided exclusively for the disabled persons at plant locations. Separate playgrounds have been earmarked for the handicapped at some of the plant locations.
- SAIL provides scholarship to the physically disabled children of its employees to support their education.
- Special relaxation is provided in allotment of quarters to disabled employees. Care is taken to allot ground floor to such employees.

18.3 Rashtriya Ispat Nigam Ltd. (RINL)

- RINL is earmarking stipulated percentage of posts in Group-A, B and C as per RPwD Act. As per the Act, RINL has been implementing reservation whenever recruitment is taken up. Concessions and relaxations are extended to PwDs like Upper Age Limit (10 years), Application fee Exemption, 10% relaxation in Qualification marks at par with SC/ST, 10% relaxation in marks in Selection Tests at par with SC/ST.
- Since the Act came into force, RINL has employed 214 persons with various disabilities (excluding 10 persons on merit).
- Facilities provided as per statute include identification of jobs, post recruitment, and pre-promotion training, providing aids/assistive devices, accessibility and barrier free environment at work place, preference in allotment of company's quarters, grievance redressal, Liaison Officer appointed for matters relating to Persons with Disabilities, Special Casual Leave and preference in transfer/posting.
- Providing Ramp Way, Auditory Signal in the lifts of the building, Provision of a wheel-chair at the Reception Centre are some of actions taken up for the convenience of the differently-abled persons at different offices at main administrative building / corporate office.

18.4 NMDC Ltd.

NMDC, being a mining organization, is governed by the provisions of the Mines Act and Rules and Regulations thereof. Considering the safety factor, it is not possible to employ PwDs in jobs involving working in the mines/plant. However, efforts are being made to induct PwDs in posts where field work is not involved and at present NMDC has 100 employees with disabilities in various posts.

NMDC has taken several steps for convenience of differently enabled persons visiting the Offices of the Company like providing ramp way, auditory signal in the lifts etc. Employees in the Projects who become disabled while in service are redeployed in identified posts.



18.5 MOIL Ltd.

At work place, employees have been provided welfare facilities for improving their service conditions, quality of life and social security.

Therefore, facilities in line with Persons with Disabilities Act 1995 i.e Lift/Elevators, Toilets, Drinking Water, Wheel Chair, Crutches, Range of reach, Path/Walk, Physically handicapped allowance etc. have been provided for the Divyang employees.

The manner of selection of persons with disabilities for various posts: Recruitment for identified posts for persons with disabilities is carried out Reservation, relaxation and concessions provided to persons with benchmark disability as per Govt. of India directives/ instructions, are followed.

Preference in Transfer and Posting: As far as possible, the persons with disabilities is exempted from the rotational transfer policy/transfer.

Preference in allotment of Residential accommodation/Guest House: MOIL gives preference to the person with disabilities for providing them accessible accommodation in company's township.

18.6 MECON Ltd.

MECON has implemented the provisions of RPwD Act. Total employment strength of MECON as on 31.12.2021 is 1138, out of which persons belonging to disabled / physically handicapped category in various posts is 10. In view of the Government's policy for 'Divyang' persons, the Company's website has been made user friendly for visually impaired by installing Screen Reader Technology. For the convenience of the Divyang persons, Ramp is provided for entering into the office premises.

18.7 MSTC Ltd.

As on 31st December, 2021, MSTC has 09 employees who are persons with Disabilities or Divyang.

18.8 KIOCL Ltd.

As on 31st December, 2021, KIOCL has 11 employees who are persons with Disabilities or Divyang.

18.9 Ferro Scrap Nigam Ltd. (FSNL)

FSNL is a service organization, rendering its specialized services to the customer plants in scrap management & allied jobs. FSNL carries out its operational activities in open area in all the seasons. The Heavy Earthmoving Equipments like Balling Cranes, Magnetic Separators, Dozers, Dumpers etc. are used by FSNL for carrying out the operational activities. Therefore, the atmosphere/working conditions of FSNL is not conducive for the persons with disabilities and hence their engagement for such field jobs is not safe for the Divyang persons. However, adhering to the Government directives, FSNL has identified three posts each in Executive & Non-executive categories for persons with disabilities, one each for Visually Handicapped (VH), Hearing Handicapped (HH) and Orthopaedically Handicapped (OH) under Group-A & Group-C categories. Besides, company's website has been made user friendly for visually impaired by installing Screen Reader Technology. Ramp and railings have been provided in office premises and specially modified/compatible toilets have been provided.

CHAPTER-XIX

PROGRESSIVE USE OF HINDI

19.1 Introduction

The Ministry of Steel has made considerable progress in the use of Hindi in official work during the year 2021-22 keeping in view the Annual Programme prepared and issued by the Department of Official Language (Ministry of Home Affairs) for implementation of the Official Language Policy of the Union.

19.1.1 Official Language Implementation Committee : There is one Official Language Implementation Committee working under the Chairmanship of Joint Secretary in the Ministry. This Committee reviews the progress made in the use of Hindi in the Ministry and its Public Sector Undertakings. Meetings of the Committee are held regularly. 3 meetings of the Committee have been organized during the period. The progress of Hindi is reviewed in these meetings and remedial measures are suggested to achieve targets set by Department of Official Language.

19.1.2 Hindi Salahakar Samiti: Hindi Salahakar Samiti works under the Chairmanship of the Union Minister of Steel with the main objective to advise the Ministry with regard to progressive use of Hindi in its official work. The Committee has been reconstituted and a resolution to this effect was issued on 11th October, 2021.

19.1.3 Implementation of Section 3(3) of the Official Language Act, 1963 : In pursuance of the Official Language Policy of the Government of India, all documents covered under Section 3[3] of the Official Language Act, 1963 are prepared both in Hindi and English. In order to ensure correspondence with Central Government Offices located in Region "A", "B" and "C", in Hindi, various check points have been established in the Ministry.

19.1.4 Hindi Divas/Hindi Fortnight : In order to encourage the officers/employees of the Ministry for using Hindi in official work, appeals were issued by the Hon'ble Minister of Steel and Hon'ble Minister of State for Steel on 14th September, 2021 on the occasion of the Hindi Day. Hindi Month was organized in the Ministry from 1st September to 30th September, 2021. During this period, five Hindi competitions were organized to create an atmosphere conducive to the use of Hindi in the official work. Along with Competitions, a 'Hindi Workshop' and a 'Hindi Sangoshthi' was also organized during the month. All these events were organized virtually. A total of 46 officials/officers took part in these competitions with great zeal.

19.1.5 Cash Award Scheme for writing original books in Hindi: Cash Award Scheme for writing original books in Hindi in the matters concerning steel and being dealt with by Ministry of Steel, is in operation comprising 1st, 2nd and 3rd prizes of 25,000/-, 20,000/- and 15,000/- respectively. The scheme is aimed at encouraging the writers to write original books in Hindi.

19.1.6 Official Language Inspections by the Officers of the Ministry/Parliamentary Committee on Official Language : On 15.04.2021, Parliamentary Committee on Official Language inspected RINL, Ghaziabad and Ministry had its representation in the meeting. Inspections of CPSEs under the administrative control of the Ministry to take stock of the progressive use of Official Language in those offices have been planned.

19.1.7 Hindi Workshops: Hindi Workshops are being organized in the Ministry at regular intervals. On 22.09.2021, a workshop was organized on 'Problems in using Kanthasth and their Solutions'. A good number of officials of Ministry and official language officials of CPSEs enthusiastically participated in this workshop.



19.2 Steel Authority of India Ltd. (SAIL)

- SAIL has continued its thrust on implementation of the Official Language Policy of the Government of India. Continuous efforts are being made by SAIL for the propagation of official language Hindi. Monthly Hindi incentive is being provided to SAIL employees to encourage and popularize its usage in day-to-day official work. “आज का शब्द” & “आज का विचार” is available on daily basis on SAIL Portal.
- SAIL’s computers are Unicode enabled and Hands on training is provided to employees from time to time to improve their skill for doing day to day official work in Hindi. During the year, Hindi workshops were organized to popularize Hindi amongst its employees.
- Rajbhasha Fortnight was organized by SAIL Corporate Office, New Delhi from 14th to 28th September, 2021. “Azadi Ka Amrit Mahotsav” was kept at the centre of various Hindi Competitions like Pictorial Expression, Memoir Writing, Poetry Recitation, Quiz competition, Dictation & Essay Writing, Workshop on “From Freedom Struggle to Modern India - Nature and Importance of Hindi”.

19.3 Rashtriya Ispat Nigam Ltd. (RINL)

Initiatives taken towards progressive use of Hindi and recognitions received are as follows:

- **Training & Workshops:** 163 employees were trained under Hindi Prabodh/Praveen/Pragya courses conducted by Hindi Teaching Scheme, Department of Official Language, Ministry of Home Affairs, Govt. of India. 57 employees were trained to work on computers in Hindi through Unicode. 471 employees were trained in Exercise Based Hindi Workshop conducted at HQ, Mines, Regional/Branch Sales Offices/Liaison Offices & Subsidiaries through online and offline.
- **Inspections:** 31 Departments at Head Quarters and 3 Regional Office/Branch Sales Offices, Patna, Hyderabad and RO (North), New Delhi were physically inspected and 13 BSOs namely, Bhubaneswar, Indore, Chandigarh, Kochi, Jaipur, Dehradun, Coimbatore, Ghaziabad, Faridabad, Kanpur, Ludhiana, Pune and Bangalore were inspected online during the said period. Branch Sales Office, Indore was inspected by Ministry of Steel; Branch Sales Office, Ghaziabad by 3rd Sub-committee of Parliament Committee on Official Language. Suggestions/recommendations received during inspections were complied with.
- **Publications:** Two issues of Quarterly Hindi In-House Magazine ‘Sugandh’ were published.

19.4 NMDC Ltd.

NMDC effectively continued its efforts to implement and comply with the Official Language Policy of the Government of India in its headquarters, projects and units.

- Parangat Hindi training continued through team’s app following all safety measures in view of the COVID-19 pandemic. Hindi workshops were organized online every quarter in headquarters and various projects during the year. Official Language Implementation Committee meetings were held online every quarter in headquarters as well as at projects.
- Hindi Fortnight was organized through digital mode at NMDC Headquarters. Online competitions were organized. Hindi week/fortnight/month functions were also organized in the projects.
- The official language house journal “Khanij Bharati” of the headquarters was published. Various Hindi/bilingual/trilingual magazines namely Baila Samachar, Bachel Samachar, Doni Samachar, Hira Samachar were also published from the projects. “Sarjana” and “Takaniki Kshitij” magazines were published from the Kirandul Project.
- Official Language Technical Seminars were organized at Bailadila Iron Ore Mine, Kirandul Complex, Bachel Complex, Diamond Mining Project, Panna and SIU, Paloncha.
- Diamond Mining Project, Panna organized various programmes for implementation of Official Language as convener of Town Official Language Implementation Committee.

19.5 MOIL Ltd.

- MOIL Bharti magazine of MOIL LIMITED awarded Rajbhasha Kirti Award by the Hon'ble Home Minister on the occasion of Hindi Pakhwada 2021.
- Maximum correspondence in MOIL Limited including all the mines is done in Hindi and 97% Unicode system has been implemented in all the processors. The company has installed software related to Hindi in all the computer systems.
- In order to encourage the provisions contained in the Official Language Act, 1963, various types of Hindi competitions are held on Dr. Baba Saheb Ambedkar Jayanti, Swachhta Campaign, Quami Ekta Diwas and Vigilance Awareness Week.
- Hindi Workshops, Kavya Goshti and Rajbhasha Seminars have been organized.

19.6 MECON Ltd.

MECON is effectively implementing the Official Language Policy of Govt. of India in its official work. It is also making all out efforts to achieve the targets fixed in the Annual Programme issued by Rajbhasha Vibhag, Ministry of Home Affairs, Govt. of India. For this purpose, there is an Official Language Implementation Committee under the Chairmanship of CMD. Hindi workshops are being organised regularly for the employees. MECON is an important member of Town Official Language Implementation Committee, Ranchi and actively participates in all the programmes.

19.7 MSTC Ltd.

The Official Language Monitoring Committee has been reconstituted. The internally developed e-Office software in the office has been designed in a bilingual form and provides adequate facility for issuing bilingual note sheet through PDF. A bilingual e-form has been developed internally for the Official Language Incentive Scheme, through which the work of providing official language incentives has been simplified. Official Language Monitoring Committee has been reconstituted in the financial year.

Efforts to promote Use of Official Language include :

- “E-Rajbhasha Trimas-2021” was organized online in all offices of MSTC. During this period, Hindi Typing, Noting and E-mail competitions and a workshop on the topic of Importance of Official language and Azadi Ka Amrit Mahotsav were organized in Head Office, Regional and Branch Offices.
- Nomination of employees for Prabodh, Praveen, Pragya and Parangat Training.
- The annual Vigilance Magazine 2021-22 has been published in Hindi.
- Rajbhasha Cell promoted use of Office 365 for use of Hindi in office work for all employees and distributed Devanagari keyboard along with induction training.

19.8 KIOCL Ltd.

Rajbhasha Department of KIOCL is entrusted with the responsibility of ensuring compliance of the Official Language Act, 1963 and Official Language Rule, 1976.

During the year, Rajbhasha Department scheduled Official Language Implementation Committee meetings, organised workshops & conducted Official Language inspections as per targets of the Annual Program, 2021-22 of Department of Official Language (Ministry of Home Affairs).

Rajbhasha Department organised various Hindi competitions through online mode as well as through offline mode by maintaining social distance during Hindi Pakhwada, 2021 in which all groups of employees participated. An online webinar was organised by Pellet Plant Unit of KIOCL Limited, Mangaluru in which participants from member offices of TOLIC, Mangaluru along with KIOCL employees made their presence. Incentive scheme for original work in Hindi has been implemented in the organisation and total 38 employees were rewarded with cash prizes this year.



The E-Magazine of KIOCL Limited 'Shrigandha' was published on quarterly basis and it was circulated through Email & WhatsApp. The link of the E-magazine was also provided on the website of the company and web-portal of Official Language Department (Ministry of Home Affairs) under E-Pustakalay segment.

During the year employees of Corporate Office, Bengaluru were nominated for regular classes conducted through online mode and employees of Pellet Plant Unit, Mangaluru were nominated for Correspondence courses of Hindi Teaching Scheme conducted by Central Hindi Training Institute, Department of Official Language, Ministry of Home Affairs.

19.9 Ferro Scrap Nigam Ltd. (FSNL)

Strict adherence of the Government directives issued from time to time with regard to implementation of Official Language policy is ensured. Some of the achievements in the field of Rajbhasha are as under:

- "Seva Sankalp Samman" program was organized for bureau chiefs of electronic media and print media.
- On 01st September, 2021, "Rajbhasha Month" commenced by administering "Rajbhasha Pledge" to the employees. Various programmes and competition were organized for the employees at Corporate Office as well as at its units.
- On 23rd September, 2021, "Official Language Technical" workshop was organized on production, productivity, safety, environment and quality. A seminar on role of Hindi language in freedom movement was also organized. Hindi beautiful handwriting competition was also organized for the participants.
- On 24th November, 2021, Telephone directory in Hindi, Trilingual directory and technical directory were inaugurated.
- On 26th November, 2021, Official Language Workshop on the occasion of Constitution Day was organized.

19.10 EIL, OMDC and BSLC

The Companies i.e. EIL, OMDC and BSLC are located in category 'C' area as per the Official Language Act. Companies have taken positive steps to enhance awareness and usage of Hindi among employees. Companies had observed "Hindi Pakhwada" by way of organizing competitions and distribution of prize on essay writing, Hindi poem recitation and Hindi Anubad, in which the employees took active participation. The Companies are ensuring steps under the directives of the Official Language Act to use and propagate use of Hindi. Bilingual Boards and advertisements are being issued. "Rajbhasha Shikshan Board" is put up at HO to apprise the employees with new words every day. "Prabin, Pragya & Parangat" exams have been conducted for the employees who attended classes and above 80% of employees have passed the related exam and accordingly Central Government has already notified OMDC & BSLC under sub-rule (4) of Rule 10 of the Official Language Act on 01.03.2017. OMDC & BSLC are already registered in Rajbhasha website and quarterly report are being sent regularly online. Company's website is already updated in Hindi.

CHAPTER-XX

EMPOWERMENT OF WOMEN

20.1 Ministry of Steel

The Supreme Court of India in its judgment in August, 1997 in the case of Visakha and others versus State of Rajasthan and others, recognized international conventions and norms of gender equality of women, in relation to work and held that sexual harassment at workplace, is against their dignity and is violative of Article 14, 15(1) and 21 of the Constitution of India. As per the guidelines laid down by the Supreme Court, all employers, whether in the public or private sector should take appropriate steps to prevent sexual harassment. As a part of the mechanism, a Complaint Committee (Sexual Harassment of Women at Work Place) with representatives from outside the organization was constituted.

As on December 31, 2021, 32 women are employed in the Ministry of Steel which constitute 16.84% of the total manpower.

In compliance of the guidelines of the Supreme Court, Ministry of Steel has constituted a five-member Committee to look into complaints made by women employees and to address them. The Committee did not receive any complaint during the period April 1, 2021 to December 31, 2021.

20.2 Steel Authority of India Ltd. (SAIL)

As on 01.01.22, SAIL has 3738 women employees in both technical and Non-technical areas. There are women in managerial, technical (engineers) capacity, in medical, para-medical services and in academics. The Company provides equal opportunities to both genders in selection, recruitment and placement or at promotion levels.

An equal career growth opportunity to all employees irrespective of the gender is the hallmark of SAIL's Policy towards professional development of its employees. The growing number of women in senior positions is an indication of this fact.

The Training Policy of the Company takes care of training and development needs of all its employees including the women employees through training needs analysis. Women employees are considered for specialized/technical/managerial training exposures in all areas in keeping with their career growth and job profiles.

Benefits to Women Employees : Separate toilets have been provided at all locations where women employees are posted /engaged both in technical as well as non technical areas. Washrooms, Canteens etc. for all employees in the Company's plants and units are available. Constant efforts are made for improving the hygiene conditions at workplace for all employees especially the women employees. The statutory compliance of the Company is also reflected in its Policies for women employees, such as, Maternity Leave, Child Care Leave benefits etc.

Prevention of Sexual Harassment: Internal Complaint Committees to prevent sexual harassment of women at workplace have been constituted at SAIL Plants/Units in terms of The Sexual Harassment of Women at Work Place (Prevention, Prohibition & Redressal) Act, 2013 and composition of the Committee has been uploaded on the existing Intranet/Web portal of the respective Plants/Units.

Welfare of Women : SAIL has also taken a number of steps in various spheres for the larger benefit of the women in society. The activities range from literacy programmes for girl child, awareness programmes on health care, family planning, ante-natal services, organizing health camps and informative programmes on AIDS Control. SAIL plants and units also have Mahila Samitis engaged in awareness initiatives on social issues, support to economically weaker women towards being self-reliant through self-employment, education, involvement in awareness programmes etc.

20.3 Rashtriya Ispat Nigam Ltd. (RINL)

In RINL, women employees constitute 3.35% of its total manpower. About 6.50% of the executives and 1.79% of the non-executives are women employees. Women employees are working in diverse and challenging areas like Operations and Projects besides the traditional functions in HR, Finance, Health Services, etc.



RINL facilitates the women workforce to be closely knit through the local cell of Forum of Women in Public Sector (WIPS), formed under the aegis of SCOPE. The Cell has been associating in a number of activities organized for the development of women employees which includes Programmes on Managerial Development, Networking and social skills including Gender Sensitivity for sensitizing its employees on issues relating to employment of women.

20.4 NMDC Ltd.

NMDC Limited employs 343 women employees which constitute about 6.3% of its total manpower of 5464 (as on 31.12.2021). The company provides equal opportunities for the sexes at all levels, be it selection, recruitment, placement or promotion. The number of women in senior positions is growing.

Facilities like separate wash rooms, rest rooms etc have been provided in the Head Office and Projects. NMDC has also been sponsoring women employees for training on awareness in healthcare, family planning etc. All statutory obligations of the Company are reflected in its policies for women employees.

WIPS Cells have been constituted in all the Projects.

20.5 MOIL Ltd.

MOIL has 822 women employees which constitute 14.16% of its total workforce of 5802 as on 31.12.2021.

As per the provisions of The Sexual Harassment of Women at Work Place (Prevention, Prohibition & Redressal) Act, 2013, a Sexual Harassment Committee has been set up in the Company to deal with the cases received under Sexual Harassment. The names of the Committee Members have been uploaded on Company's web site. i.e. www.moil.nic.in. Mahila Mandals are working effectively at all the Mines of the Company. Various cultural, social, educative and community activities, such as adult education, blood donation camps, eye camps, family planning etc. are being organized regularly, mostly for the benefit of women residing in the remote mine areas.

20.6 MECON Ltd.

There is an Internal Complaints Committee headed by a senior Lady Executive as Presiding Officer to look into the grievance or complaints of women employees in MECON. MECON also follows instructions/guidelines issued by the Ministry/Govt. of India from time to time with regard to empowerment of women. Besides, different programmes for training to women employees are conducted by HR Department from time to time. No. of women employees in MECON are 105 which is 9% of total employees.

20.7 MSTC Ltd.

MSTC is a Corporate Life Member of Forum of Women in Public Sector (WIPS). During the year, several women employees were nominated in the programmes organized by WIPS. Internal Complaints Committees constituted in all the offices of MSTC have been functioning successfully. Periodical meetings and complaint redressal, awareness programs, etc. are also duly conducted by the Company.

To provide a safe working environment and to improve participation of female employees, the Company has the policy for prevention, prohibition and redressal of such offensive acts. The policy was implemented with the requirements of The Sexual Harassment of Women at Work Place (Prevention, Prohibition & Redressal) Act, 2013. Internal Complaints Committee (ICC) has been set up to redress complaints received regarding sexual harassment. All employees (permanent, contractual, temporary, trainees) are covered under this policy.

20.8 KIOCL Ltd.

All necessary measures/statutory provisions for safeguarding the interests of women employees in matters like payment of wages, hours of work, health, safety and welfare aspects, maternity benefits etc. are being followed by the Company. Total number of women employees as on 31.12.2021 is 23.

In compliance to the provisions/requirements under The Sexual Harassment of Women at Work Place (Prevention, Prohibition & Redressal) Act, 2013, Internal Complaints Committees were constituted at Bengaluru, Mangaluru & Kudremukh units to deal with complaints made by victims of sexual harassment. The Complaints Committee comprises

of a Senior level women executive as Presiding Officer, one male employee and one female employee as Members and one women representative from Non-Governmental Organization (NGO) as third-party member.

A Women's Forum – Women in Public Sector (WIPS) is operating in KIOCL and most of the women employees are members of the said Forum. KIOCL is a life Member for WIPS.

20.9 Ferro Scrap Nigam Ltd. (FSNL)

Equal importance is given to the Women employees of FSNL in all activities, and recognition is accorded for their skills, abilities and success in various competitions. Representation of female employees in various committees, such as committee for prevention of Sexual harassment etc, is always ensured. The work culture of FSNL is quite conducive for the women employees. Total no. of women employees in the organization is 11 as on 31.12.2021, which is 1.87% of total employees.

20.10 EIL, OMDC and BSLC

OMDC & BSLC accord due importance to gender equality and the Companies are equal opportunity employers and do not differentiate in terms of gender. An internal complaints Committee is in place in accordance with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act, 2013. An awareness program was organized to sensitize employees of the provisions the Act.

The total manpower of OMDC as on 31.12.2021 is 257 out of which total women employees are 14(5.44%).

The total manpower of BSLC as on 31.12.2021 is 513 out of which total women employees are 46(8.96%).



CHAPTER-XXI

CORPORATE SOCIAL RESPONSIBILITY

21.1 Introduction

The broad framework for Corporate Social Responsibility (CSR) is provided under Section 135 of the Companies Act, 2013 (Act), Schedule VII of the Act and Companies (CSR Policy) Rules, 2014. Section 135 of the Act enumerates the provisions concerning CSR, Schedule VII of the Act indicates the eligible CSR activities to be undertaken by the Company and Companies (CSR Policy) Rules, 2014 prescribes the manner in which companies shall comply with CSR provisions of the Act.

Department of Public Enterprises has issued guidelines on 10.12.2018 to all administrative Ministries and Central Public Sector Enterprises (CPSEs) for adopting a theme based focused approach every year on CSR expenditure by CPSEs. These guidelines, inter-alia, provide that CPSEs exceeding the threshold limits as specified in the Companies Act, 2013 have to allocate at least 2% of their average net profits (PBT) of three immediately preceding years for CSR activities. CSR expenditure for such thematic programmes should be around 60% of annual CSR expenditure of CPSEs and the aspirational districts identified by NITI Aayog may be given preference.

Expenditure incurred on CSR by CPSEs under Ministry of Steel includes promotion of education, health, women empowerment, sustainable income generation through Self Help Groups, assistance to divyangs, access to water and sanitation facilities, village development, environment sustenance, sports coaching, promotion of traditional art and culture, etc. Department of Public Enterprises has issued guidelines on 12.05.2021 to all the administrative Ministries/ Departments and CPSEs approving “Health and Nutrition, with special focus on COVID related measures including setting up makeshift hospitals and temporary COVID Care Facilities” as common theme for undertaking CSR activities by CPSEs for the year 2021-22.

The details of allocation and expenditure of funds under CSR are at Annexure XIV.

21.2 Steel Authority of India Ltd. (SAIL)

SAIL CSR initiatives are implemented in conformity to the CSR provisions (Section 135) of Companies Act, 2013, its Schedule-VII, CSR Rules, 2014 and Companies (CSR Policy) Amendment Rules, 2021. SAIL carries out CSR projects mainly in periphery of steel townships and mines in the thrust areas falling in line with the Schedule-VII, namely, Promotion of Education and Health, Women Empowerment, Sustainable Income Generation through Self Help Groups, Assistance to Divyangs (People with Special Abilities), Access to Water and Sanitation facilities, Village Development, Environment Sustenance, Sports Coaching, Promotion of Traditional Art and Culture, etc.

SAIL CSR Initiatives:

Response to Covid-19: SAIL has supplied over One Lakh Metric Tonne of Liquid Medical Oxygen (LMO) to different States of the country in its endeavour to combat COVID-19 during second wave of pandemic.

SAIL's Hospitals at five integrated steel plant locations i.e. Bokaro, Rourkela, Bhilai, Durgapur and Burnpur were identified as CoVID Care facilities. Bokaro General Hospital was earmarked as dedicated COVID Hospital and treated COVID patients during second wave of pandemic. Almost 1000 beds dedicated for CoVID-19 with oxygen support and further 129 ICU beds with ventilator support in view of surge in cases.

Jumbo COVID Care facilities equipped with gaseous oxygen directly from Plants through dedicated pipelines at its integrated steel plant locations have been created :

The details of Jumbo COVID facilities established at Plants/Units are as under:

Steel Plants of SAIL	No. of Beds existing/established
Bhilai Steel Plant	114
Durgapur Steel Plant	200
Rourkela Steel Plant	100*
Bokaro Steel Plant	500
IISCO Steel Plant	200

*Provision of 400 Nos. of addl. Oxygen points established

Support was also extended to 500 Bedded COVID facility developed in the premises of Salem Steel Plant.

Testing Facilities: SAIL Hospitals have also developed Covid-19 testing facilities like RAT, RTPCR, TRU-NAT in coordination with respective State Governments where regular testing of peripheral population are being conducted.

Vaccination Drive: Vaccination Drives for employees and their dependents have been undertaken at designated centres by Plants/Units Hospitals in collaboration with State Authorities. SAIL Hospitals have also vaccinated HCWs, FLWs, CLs, etc.

In order to support the vulnerable sections of society, daily-wage earners/ labourers, poor peasants and their families, who were left with dwindled resources during the pandemic, SAIL Plants and Units, in close coordination with and support of district authorities, distributed dry ration packets (comprising of Rice, Dal, Salt, Condiments, wheat atta, soap, etc.), Milk packets, Milk powder, Khichdi, routine medicines, sanitary napkins for women, etc. Daily cooked meals to patients and healthcare workers were also served. SAIL Plants/Units were also transporting patients and health workers. CSR departments facilitated stitching of Face Masks, Gamachhas, Aprons, Gloves, etc. through SHGs and their distribution to peripheral areas, District Authorities, etc. Awareness campaigns and Sanitation/Cleanliness drives were also undertaken at rural locations under CSR.

SAIL contributed to the Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM CARES) Fund and to the Chief Minister's Relief Fund/CoVID-19 Fund for the States of Chhattisgarh, Jharkhand, Odisha and West Bengal.

SAIL supports various programs and centres under CSR at SAIL Plants like 'School for Blind, Deaf and Mentally Challenged Children', 'Home and Hope' Rourkela, 'Ashalata Kendra' Bokaro, 'Handicapped Oriented Education Program' and 'Durgapur Handicapped Happy Home', Durgapur and 'Cheshire Home' Burnpur

Healthcare: In order to deliver quality healthcare at the doorsteps of the needy, regular health camps in various villages on fixed days are being organized for the people living in the periphery of Plants/Units, Mines and far-flung areas. Health Camps and 5 Mobile Medical Units have benefitted approx. 40,600 villagers in FY 2021-22 (upto Q3) at their doorsteps. 24 Primary Health Centres at Plants exclusively provided free medical care and medicines to approx. 70,000 patients in FY 2021-22 (upto Q3).

Education: To develop the society through education, SAIL is supporting about 77 schools providing modern education to more than 40,000 children in the steel townships and is assisting over 600 Govt. schools in Bhilai and Rourkela with about 62,000 students by providing Mid-day meals and dry ration kits in association with Akshya Patra Foundation. 20 Special Schools (Kalyan and Mukul Vidyalayas) benefitting around 4478 BPL category students at integrated steel plant locations with facilities like free education, mid-day meals, uniform including shoes, text books, stationary items, school bags and water bottles, etc. are running under CSR.

More than 540 children from tribal and naxal-affected areas are getting free Education, Accommodation, Meals and Uniforms, textbooks, etc. at Saranda Suvan Chhatravas, Kiriburu; RTC Residential Public School, Manoharpur; Gyanodaya Chhatravas, BSP School Rajhara, Bhilai; Gyanjyoti Yojna, Bokaro etc.

Women Empowerment and Sustainable Income Generation: During 2021-22 (upto Q3), 63 youths and 642 women are undergoing skills trainings, in areas such as Nursing, Physiotherapy, LMV Driving, Computers, Mobile repairing, Welder, Fitter and Electrician Training Improved agriculture, Mushroom cultivation, Goatery, Poultry, Fishery, Achar/Pappad/Agarbati/Candle making, Screen printing, Handlooms, Sericulture, Yarn Weaving, Tailoring, Sewing and embroidery, Gloves, Spices, Towels, Gunny-bags, Low-cost-Sanitary Napkins, Sweet Box, Soap, Smokeless chullah



making etc. Approximately, 357 youths have been sponsored for ITI training at ITCs Bolani, Bargaon, Baliapur, Bokaro Pvt ITI and Rourkela etc. The ITIs at Bolani and Bursua have been adopted for upgradation and operation by SAIL.

Model Steel Villages (MSV): 79 villages were identified as “Model Steel Villages” across the country in eight States. The developmental activities undertaken in these villages include medical and health services, education, roads and connectivity, sanitation, community centres, livelihood generation, sports facilities, etc. The facilities developed at these MSVs are being run and maintained regularly.

21.3 Rashtriya Ispat Nigam Ltd. (RINL)

Some of the major CSR initiatives of RINL during 2021-22 are as follows:

Health & Nutrition

- Nutritional Support to combat classroom hunger by providing Mid-Day Meals to around 1200 school-going children belonging to BPL families.
- Infrastructural development of centralized kitchen of The Akshaya Patra Foundation situated in Vizag.
- Cancer preventive healthcare services to 160 Mother-Daughter pair is being provided with the support of Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) to mothers of students and female staff members of two schools.
- Awareness on Covid-19 Precautions in Aspirational Districts is taken up during Mobile Health Care camps in the surrounding villages of the Plant.
- Distribution of “Aayushi Kits” to school children through Visteel Mahila Samiti to boost immunity and prevent infections. Covid-prevention kits were also distributed to vegetable/ fruit vendors and Auto-drivers to prevent community level spread. Also donated much needed objects such as ceiling fans, refrigerator and washing machine to a welfare home and Home for abandoned physically/intellectually disabled children.

Education

- Education to the children belonging to BPL families (1600 students) has been provided in surrounding villages of Plant & Mines.
- Arunodaya Special School caters to the children with intellectual disabilities such as learning impairment, mental retardation, cerebral palsy, autism, hearing loss, Down syndrome, etc. with a view to promote special education, 115 students from surrounding villages of the Plant are being provided education, therapy and vocational training by the school.
- Job-oriented training on Basic Computer proficiency and Spoken English are being conducted at Nalanda, Bihar for youth from underprivileged background.



Job Oriented training to unemployed youth through Skill Development Institute.

- Special repairs for a Government Jr. College at V Madugula village of Visakhapatnam District has been taken up with AP Samagra Siksha Abhiyaan, Visakhapatnam.

Skill Development

- Skill Development Training Program conducted in trade Customer Care Executive (Relationship Centre) for the second batch of 30+ trainees.
- Skill Development of persons affected by Leprosy/Disability has taken up for one-year residential Skill Development training for 25 persons to support and empower them to earn a decent livelihood.
- Skill Development to women Artisans in Crafts is provided for 40 Female Artisans at Patna, Bihar to enhance the skills on new/innovative design patterns, develop market insight, improve sales and forge linkages for future transactions through Marketing Events.

Senior Citizen Care

- Manakosam Project has been taken up for installation of 90 CCTV cameras in 30 locations in the areas surrounding Steel Plant for Police to enhance the security of persons residing in these areas, especially the women.
- Adopted 30 abandoned and destitute elderly persons for a period of one year with essential care in the form of nutritious food, clothing, shelter, medical facilities at 'Guru Vishram Vridh Ashram' at Garhmukteshwar, UP.
- Adoption of 100 abandoned and destitute elderly residents for one year at the Old age home situated in Digha, Patna (Bihar) is done aiming for improving the life style of elderly people.

Peripheral/Rural Development

- Additional facilities are being provided to the Multi-Purpose Hall constructed in Jaggayyapeta municipality.

Swachh Bharat & Sanitation

- In addition to Safai Pakhwada activities, 321 Shram Daan activities involving 2344 employees were organized. Further in line with the directions of Govt of India, Safai Pakhwada, year long cleanliness drives, as per department wise calendar, were observed by 58 departments.

21.4 NMDC Ltd.

Response to Covid-19

- NMDC created Covid awareness through display of posters, banners & holdings in villages surrounding NMDC Project.
- Successfully arranged delivery of cold chain equipment to the State Govt. of Chhattisgarh & Telangana, for which procurement action was initiated in the previous financial year well in time for initiation of the covid vaccination programme.
- Provided financial assistance to the State Authorities of Chhattisgarh, Karnataka & Madhya Pradesh for acquisition of equipment for treatment of Covid19 in the districts of Bastar Division, Raipur & Durg in Chhattisgarh, Bellary in Karnataka, Panna & Dindori in MP.
- NMDC is setting up a dedicated temporary Covid19 care facility & Hospital at Raipur, Chhattisgarh.
- Partnering with the Govt. of MP in setting up of a temporary Covid-19 care facility at Panna.
- Setting up of four medical oxygen pressure swing absorption plants; two Plants each at Karnataka Institute of Medical Sciences, (KIMS) Hubli, Karnataka and dedicated Covid care Hospital at Raipur in Chhattisgarh.
- NMDC has contributed to PM CARES fund.

Education

- The Scholarship Scheme "NMDC Shiksha Sahayog Yojana" to motivate ST/SC students is in operation since 2008 and during the year 2021-22, up to 18000 scholarships are being awarded.



- Under NMDC Balika Shiksha Yojana, during the current academic year i.e., 2021-22, 40 girls have been sponsored in GNM & B.Sc. nursing courses at Apollo College /School of Nursing, Hyderabad. Till date 418 students have been sponsored by NMDC for pursuing nursing courses.
- The Residential School started at Nagarnar in 2010 is also running successfully with around 600 of students in class I to XII.
- Mid-day Meal programme covering 8000 rural school children in & around Donimalai Project in Karnataka is running successfully and NMDC is continuing its support to the initiative.

Health Care

- Free out-patient & in-patient treatment facility was extended to 38179 & 17877 local tribals respectively during the year 2021-22 (upto December).
- NMDC has partnered with Government of Karnataka for operation of 10 Mobile medical units providing healthcare facilities at the doorstep of people living in remote and vulnerable regions in Sandur and Hospet talukas covering 120 villages in Bellary District of Karnataka benefitting around 1.5 lakh people.

Skill Development & Sustainable Income Generation

- The ITI with Welder & Mason trades at Nagarnar with the intake of 28 students each year is being operated successfully.
- The ITI at Bhansi with 5 trades is being operated successfully with the intake of 179 students each year. ITI Bhansi has been ranked 1st amongst all the ITIs in the State of Chhattisgarh by CRISIL. 274 students have got placement offers in various Companies/organizations across the country through Campus selection mode.
- The Polytechnic College at Dantewada, established with two streams i.e., Electrical & Mechanical with an intake of 126 students is being operated successfully. It is the only Polytechnic College in Chhattisgarh which is totally operated by a PSU without any contribution from the Govt. of Chhattisgarh. Out of the 350 plus students passing out successfully from the Institution in last three years, 227 students have got placements offers in reputed Organization/Industries across the country through Campus selection mode.



Polytechnic College at Dantewada established and operated by NMDC within the premises of Education City.

Initiatives taken:

NMDC has initiated several new initiatives under its CSR, besides successfully implementing its existing flagship initiatives. Some of the noteworthy initiatives are as follows:

- NMDC has partnered with the Govt. of Chhattisgarh for installation of solar power-based electrification facility in health centers and providing solar maternity cum mother care kits in health centers of 6 Districts of Bastar division.

- Construction of Shelters and providing other necessary facilities for attendants in District Hospital Dantewada.
- Financial support to reduce the prevalence of Malnutrition & Anemia among children and Adolescent girls & women of reproductive age group in Bastar Division.
- Drilling and installation of 115 Handpumps in High API (Animal Parasite Index) 94 villages of Bijapur.
- NMDC has initiated a Skill development programme in Healthcare Sector Skills for 60 tribal youth residing around NMDC Projects wherein they will be trained skills relating to operation of equipment/OT/Dialysis/Blood Bank/EKG/EEG/Ward Technician etc.

21.5 MOIL Ltd.

The Company has framed a CSR policy, duly approved by the Board of Directors. Several schemes have been taken up and being implemented under CSR.

- MOIL is supporting schools viz. two each in Bhandara district of Maharashtra and Balaghat district of Madhya Pradesh, in its education and skill development initiative. Both the districts are backward districts of India. Schools are imparting quality education to children who are residents of the villages of the surrounding areas and mostly come from poor families.
- The Company has sponsored 15 Girls for pursuing Bachelor's Degree Course in Nursing and General Nursing and Mid Wife course. The project is being taken up in association with Apollo College of Nursing Hyderabad. All the students are from economically weaker sections.
- Company has taken up few initiatives under health and nutrition during the year, which includes Opening of COVID Care Facilities in four Districts in the State of Madhya Pradesh. Company also proposes to install two Oxygen Generation plants in Nagpur District of Maharashtra, under CSR. Similarly, medical equipment's are proposed to be provided to Government District Hospital, Balaghat (M.P) & Bhandara (Maharashtra).
- Company has taken up Community Development project in 22 identified villages including 11 villages in Balaghat District (M.P), 3 villages of Bhandara District & 8 villages in Nagpur District of Maharashtra.



Free food distribution by MOIL Ltd.



- Company has also taken up rural infrastructure projects which includes construction of Community Hall, Construction of School Building etc.

21.6 MECON Ltd.

The major developmental activities carried out by MECON are as follows:

- “Poshan Abhiyan” has been carried out for poor/down-trodden/needy children of Adopted Villages of MECON in Ranchi and Khunti districts of Jharkhand and for the Outreach Children of Township School, Ranchi.
- Free Health check-up camps organized in Mobile Ambulance Van with a team of doctors, paramedical staff etc., wherein Free Medicines were given to the poor & needy patients. Due to COVID-19 Pandemic, only 10 Health Camps could be carried out during the month of February, 2021 & March, 2021 wherein around 580 patients were covered.
- As per the request of District Administration, Ranchi, a CSR project – Providing Digital Ante Natal Kit consisting of Digital Haemoglobinometer, Digital BP Monitor Digital Weighing Machine (for Infant & Adult), Fetoscope to Public Health Centres / ANMs (Auxiliary Nurse & Midwives) in various Blocks of Ranchi district (Jharkhand) was taken-up; and was accordingly arranged for 68 Health Centers.
- Under Swachh Vidyalaya Abhiyan, Bio-Media Kit (Bacteria) was procured & distributed in MHRD Schools of Hazaribagh & Lohardaga districts in Jharkhand, for Annual Maintenance of 22 Pre-Fabricated Bio-Toilets.
- Running of 7 Community Education Centres for the under privileged children in proper & near Ranchi & Village-Rai of Khunti district of Jharkhand.
- Free Stitching Training is being provided to the under-privileged Womenfolk at 7 Stitching Training Centres, which are running in the slum area/backward area in and around Ranchi and in Adopted Village of Khunti district of Jharkhand. The number of students trained in these centres is around 50.
- 10 Youths (out of which one is Female), of Adopted Village- Sungi, Block- Karra, Dist.-Khunti (Jharkhand) sponsored for “6-Months Welding Technician Course” at Jharkhand Government Tool Room, Tatisilwai, Ranchi in August 2021.
- 7 Youths (out of which two are Female), of Adopted Village- Sungi, Block-Karra and Village- Rai, Panchayat-Fudi of Dist.- Khunti (Jharkhand) sponsored for “6-Months Machine Operator (Plastics Processing / Injection Moulding) Course” at ‘Central Institute of Petrochemicals Engineering & Technology’, Hehal, Ranchi in September 2021.
- Hostel building constructed at Orphanage-cum-Hostel at Adopted Village Sungi, Block- Karra, Dist.-Khunti (Jharkhand) and inaugurated in March 2021.
- MECON contributed to “Armed Forces Flag Day Fund” from its CSR fund towards the “Welfare and Rehabilitation of the Ex-servicemen Community and NOK of Martyrs”.
- For encouraging ‘Sports & Games activity’ in the Rural areas and as part of “Fit India Movement”, 2 sets of Hockey Kits and 2 sets of Football Kits were distributed to the Boys’ and Girls’ Team respectively of Adopted Village- Sungi, Block- Karra, Dist.- Khunti (Jharkhand).
- MECON contributed to “Jharkhand State Disaster Mitigation Fund” to combat COVID-19 Pandemic.
- Vaccination drives have been carried out in Ispat Hospital of MECON to ensure maximum employees are vaccinated.
- ‘Awareness programme & Cleanliness drive’ under “Swachhta Pakhwada” Campaign has been carried out in Adopted Village.

21.7 MSTC Ltd.

Due to losses incurred during FY 2018-19, the average net profit of last three financial years was negative resulting in zero CSR budget allocation. Although the Company is not mandatorily required to earmark any budget for the CSR for the FY 2021-22, yet to complete the pending projects undertaken by the Company in the financial year 2018-19, CSR Committee and Board of Directors have approved CSR budget for the FY 2021-22 which will be used only for the purpose of releasing payment of aforesaid projects.

21.8 KIOCL Ltd.

KIOCL under its CSR Program is taking up projects every year for upliftment of poor & weaker sections of the society especially people living in the vicinity of its projects. During COVID-19 pandemic, KIOCL has made sufficient contribution by providing Oxygen Generator Plant, Ambulance etc. Further, KIOCL has distributed face masks, hand sanitizers in large numbers to economically weaker section of the society on regular basis at Bengaluru & Mangaluru to help them to protect them from COVID-19 pandemic.

KIOCL is also constructing/renovating toilets, schools in backward villages for the benefit of students who belong to economically weaker section of the society.

21.9 Ferro Scrap Nigam Ltd. (FSNL)

The company has adopted the CSR & Sustainability policy and spends in each financial year, at least 2.0% of the average net profits of the company made during the three immediately preceding financial years. At least 75% of the CSR budget is earmarked for activities which shall be implemented in project mode, and maximum upto 20% is allocated for other activities. The CSR Committee (Board Level Committee) recommends to the Board the amount of expenditure which shall be spent on the CSR & Sustainability activities. The budgetary allocation is approved by the Board of Directors. All the CSR projects/activities are approved by the Board level Committee i.e. CSR Monitoring Committee and subsequently approved by the Board of Directors.

21.10 EIL, OMDC and BSLC

Since the average PBT for the last three years is (-)ve, no CSR budget was allocated by OMDC and BSLC for the year 2020-21. However, an amount of Rs. 12.95 lakh was carried forward by OMDC to perform the CSR activities during 2021-22.

Providing Hospital Facilities: OMDC runs two Hospitals-cum-Dispensary centres at mines locality at Thakurani and Roida. BSLC also runs one Hospital at its mines locality at Birmitrapur to provide treatment free of costs to all employees and to people residing in the nearby villages around its mining activities.

Drinking Water is supplied to the employees and to the villagers located in and around its mining activities by dug wells, tube wells etc. by OMDC & BSLC.

Occupational Health Surveillance Programmes: Programmes for malaria eradication, pulse polio etc. through the hospitals of OMDC and BSLC to all employees and to the villagers residing in nearby villages located around the mines is conducted by OMDC & BSLC from time-to-time.



CHAPTER-XXII

IMPLEMENTATION OF RIGHT TO INFORMATION ACT, 2005

22.1 Introduction

With a view to promote openness, transparency and accountability in the administration and good governance of the country, the Government of India enacted the Right to Information (RTI) Act, 2005 on June 15, 2005. The Act aims to protect the citizens' Right to Information to enable every citizen to secure access to the information from the public authorities.

22.2 Implementation of the RTI Act, 2005

A Nodal Officer has been nominated to process the applications and appeals under RTI Act and to centrally monitor their progress in the Ministry. The Nodal Officer is assisted by Section Officer. Also, the officers of the level of Under Secretary/Assistant Director (OL)/Assistant Industrial Advisor or equivalent level Officer of the Ministry of Steel have been designated as Central Public Information Officer (CPIO) and Officers of the level of Director / Deputy Secretary/ Joint Director (OL)/ Deputy Industrial Advisor or equivalent Officer of Ministry of Steel have been designated as Appellate Authority, respectively. All Public Authorities under the administrative control of the Ministry of Steel have also nominated their respective Public Information Officers / Assistant Public Information Officers and Appellate Authorities. Web portal for online filling of RTI application has been launched by Department of Personnel & Training (DoPT) and the Ministry of Steel has been a part of RTI online web portal w.e.f 25.06.2013. During the year 2021 (from 1st January 2021 to 31st December, 2021), Ministry of Steel has received 104 RTI applications/appeals through offline mode and 220 RTI applications/appeals received through online mode, which were duly disposed off. Besides, in compliance with RTI provisions, as communicated by Central Information Commission on 12.01.2021, Third Party Audit of proactive disclosure package of the Ministry of Steel was got conducted through National Institute of Secondary Steel Technology (NISST).

The details of applications under RTI Act received during the period from 01.01.2021 to 31.12.2021 are as under:

Name of the CPSE	Application Received during 01.01.2021 to 31.12.2021	Application Disposed off during 01.01.2021 to 31.12.2021	Application Pending on 31.12.2021
Ministry of Steel	324	324	Nil
SAIL	3465	3122	343
RINL	572	542	30
NMDC Ltd.	157	148	9
MOIL Ltd.	114	93	21
MECON Ltd.	108	100	8
KIOCL Ltd.	25	25	0
MSTC Ltd.	107	96	11
FSNL	54	49	5
OMDC	32	30	2

22.3 Steel Authority of India Ltd. (SAIL)

SAIL has appointed Public Information Officer (PIO)/Asst. Public Information Officers, Appellate Authorities and Transparency Officer under Sections 5 and 19(1) of the Act in each Plant and Unit for speedy redressal of the queries

received under the Act. All the officers/line managers responsible for providing information to the PIO are called Deemed PIO, and are equally responsible as PIO towards timely submission of information to the applicant.

An exclusive RTI Portal for SAIL has been developed with link available on the website of the Company. All the Plants/ Units have listed 17 manuals and details of Authorities under the Act are uploaded on the website of the Company. Quarterly Returns and Annual Returns on implementation of the Act are being submitted online through CIC Portal. Implementation of online requests has already been introduced from 1st May, 2015. A compilation of Record Retention Policy of various functions of Corporate Office has also been uploaded on the website of the Company.

22.4 Rashtriya Ispat Nigam Ltd. (RINL)

Information available in the 17 manuals of the RTI has been updated on Company's website in accordance with the requirement of Section-4(1) (b) of Right to Information Act, 2005. Quarterly Returns and Annual Returns on implementation of RTI Act, 2005 are being submitted regularly in the CIC portal.

22.5 NMDC Ltd.

NMDC has published on its website, www.nmdc.co.in, information under Section 4(1)(b) of the RTI Act 2005. Details of Public Information Officer and Appellate Authority are being updated regularly for the information of the public. Annual reports of the Company which gives lot of information on its working are widely circulated and also available in NMDC's website. Further information is disseminated through press conference, press handouts etc. NMDC maintains all its records in a transparent manner. Information is given to the maximum extent in the form in which it is asked for and in the local language as well, when needed.

22.6 MOIL Ltd.

MOIL has appointed CPIOs at the Corporate Office and PIOs / APIOs have also been appointed in all its Mines. Executive Director (Personnel) had been appointed/designated as Appellate Authority under the Act. The names of all the PIOs / APIOs and the Appellate Authority have also been hosted in Company's website www.moil.nic.in. The information in respect of company, its employees etc. has been prepared under 17 heads as prescribed in Section 4(1) (b) of the RTI Act, and the same been hosted in Company's portal. MOIL has been submitting necessary information and returns to the prescribed authorities and updating the same regularly.

The Company has also hosted/updated in Company's website as much information suo-moto at regular intervals for the public, so that public has minimum resort to use the various provisions under the RTI Act to obtain information. For the awareness of employees at large, seminars have been organised to make them understand the importance of RTI Act in the present scenario and highlighted the provisions of the Act.

22.7 MECON Ltd.

All the relevant manuals pertaining to RTI Act, 2005 have been hosted on MECON's Website www.meconlimited.co.in. A Central Public Information Officer (PIO) and the 1st Appellate Authority have been nominated by MECON at its Headquarters and Assistant Public Information Officers (APIOs) have been nominated at various Regional and Site Offices. The queries coming to MECON from the public are being attended to by these nominated officials and replied back by the Central Public Information Officer within the stipulated time period. Chief General Manager (HR) has been nominated as the Transparency Officer of MECON Limited.

22.8 MSTC Ltd.

Provisions of RTI Act 2005 were complied with for processing the RTI applications and appeals received in all offices of MSTC. There are one Transparency Officer, one First Appellate Authority, one CPIO and one Acting CPIO, one Nodal Officer in MSTC, Head office and every Region/Branch has one PIO for effectively processing the RTI applications received at various locations of the Company. All quarterly reports have been submitted on-line and have been uploaded on CIC site.



22.9 KIOCL Ltd.

KIOCL has appointed PIOs at the Corporate Office and PIOs/APIOs have also been appointed in all its Plants/other Units. Executives at the Top levels has been appointed/ designated as Appellate Authority under the Act. KIOCL has created the User Id and Password for Nodal Officer, Public Information Officers, Appellate Authorities for all Units to receive and reply the applications online. The names of all the PIOs/APIOs and the Appellate Authority has also been hosted on KIOCL's website: www.kiocltd.in. The obligation of the preparation of the manual prescribed in clause (b) subsection (1) Section (4) has been complied with and these have also been hosted on KIOCL's portal within the stipulated time frame given under the Act and the same is being reviewed and updated at regular intervals. Quarterly returns are submitted to CIC.

22.10 Ferro Scrap Nigam Ltd. (FSNL)

In compliance with the provisions of the RTI Act, FSNL has appointed a Public Information Officer (PIO) at Corporate Office and one APIO each at its units. CGM (F&A), FSNL is the first appellate authority under RTI Act 2005. The company has compiled the information under 17 different templates/ manuals for voluntary /Suo-moto disclosures required under section 4 (1)(b) of the Act and hosted the same on the company's website "fsnl.nic.in" and the information so published are being regularly updated.

Quarterly reports are submitted to the CIC regularly. All requests for information are dealt with as per the prescribed guidelines of the RTI Act, 2005.

22.11 EIL, OMDC and BSLC

EIL, OMDC and BSLC are complying with the norms of Right to Information Act-2005. For receipt and replying to the RTI queries, PIO and APIO have been nominated in OMDC and BSLC. The queries received are replied within time. RTI queries are regularly disposed of through online portal.

ANNEXURE - I

**MINISTRY OF STEEL
(ISPAT MANTRALAYA)¹**

1. Planning, development and facilitation of setting up of iron and steel production facilities including Electric Arc Furnace (EAF) units, Induction Furnace (IF) units, processing facilities like re-rollers, flat products (hot/cold rolling units), coating units, wire drawing units and steel scrap processing.²
2. Development of iron ore mines in the public sector and other ore mines (manganese ore, chrome ore, limestone, sillimanite, kyanite and other minerals used in the iron and steel industry but excluding mining lease or matters related thereto).
3. Production, distribution, prices, imports and exports of iron and steel and ferro-alloys.
4. Matters relating to the following undertakings including their subsidiaries, namely³
 - i. Steel Authority of India Limited (SAIL);
 - ii. Rashtriya Ispat Nigam Limited (RINL);
 - iii. Kudremukh Iron Ore Company Limited (KIOCL);
 - iv. Manganese Ore (India) Limited (MOIL);
 - v. National Mineral Development Corporation Limited (NMDC);
 - vi. Metallurgical and Engineering Consultants (India) Limited (MECON);
 - vii. Sponge Iron India Limited (SIIL);
 - viii. **OMITTED.**⁴
 - ix. Bharat Refractories Limited (BRL);
 - x. Metal Scrap Trade Corporation (MSTC);
 - xi. Ferro Scrap Nigam Limited; and
 - xii. Bird Group of Companies.

^{1.} Modified vide Amendment series no. 238 dated 23.05.1998 and 243 dated 15.10.1999

^{2.} Modified vide Amendment series no.306 dated 31.07.2014 (earlier modified vide Amendment series no. 281 dated 01.09.2005).

^{3.} Modified vide Amendment series no.286 dated 01.06.2006.

^{4.} Omitted vide Amendment series no.337 dated 06.12.2017.

ANNEXURE - II

MINISTER IN CHARGE AND OFFICER IN THE MINISTRY OF STEEL

(Down to Deputy Secretary level)
(As on December 31, 2021)

Minister of Steel	Shri Ram Chandra Prasad Singh
Minister of State for Steel	Shri Faggan Singh Kulaste
Secretary	Shri Sanjay Kumar Singh
Additional Secretary & Financial Adviser	Smt. Sukriti Likhi
Additional Secretary	Smt. Rasika Chaube Smt. Ruchika Chaudhry Govil
Joint Secretaries	Shri Puneet Kansal Shri T Srinivas
Chief Controller of Accounts	Shri Sakesh Prasad Singh
Economic Adviser	Shri Awadhesh Kumar Choudhary
Deputy Director General (Statistics)	Smt. Swapna Bhattacharya
Directors	Shri Neeraj Agrawal Shri Girraj Prasad Meena Shri Pankaj Vithal Shri Arun Kumar Kailoo
Additional Industrial Adviser	Shri Parmjeet Singh
Deputy Secretary	Shri Gopalakrishnan Ganesan Shri Devidatta Satapathy Shri Ashish Sharma Shri S K Mohanty
Joint Industrial Adviser	Shri Manoj Kumar Saraswat Shri Inderjeet Yadav

ANNEXURE - III
PRODUCTION OF ISP AND OTHER PRODUCERS

('000 tonne)

SL. NO.	ITEM / PRODUCER	2017	2018	2019	2020	2021(P)
PRODUCTION						
I.	CRUDE STEEL:					
	SAIL, TSL Group, RINL, AM/NS, JSWL, JSPL					
	Oxygen Route	41,298	46,059	46,764	42,878	50,892
	E.A.F. Units	17,048	20,513	21,889	21,190	22,165
	Other Producers					
	Oxygen Route	4,811	2,949	1,909	1,774	2,041
	E.A.F. Units (incl.Corex & MBF/EOF)	9,840	7,773	6,741	6,974	9,715
	Induction Furnaces	28,457	31,955	34,041	27,439	33,322
	TOTAL (Crude Steel)	1,01,455	1,09,250	1,11,344	1,00,256	1,18,134
	% share of Other Producers	42.5	39.1	38.3	36.1	38.2
II.	PIG IRON :					
	SAIL, TSL Group, RINL, AM/NS, JSWL, JSPL	724	1,358	1,435	1,250	1,582
	Other Producers	6,164	4,891	4,548	3,298	4,294
	TOTAL (Pig Iron)	6,888	6,249	5,983	4,548	5,876
	% share of Other Producers	89.5	78.3	76.0	72.5	73.1
III.	SPONGE IRON :					
	Gas Based	6,223	7,052	6,699	6,074	8,402
	Coal Based	23,282	27,161	30,120	27,519	30,606
	TOTAL (Sponge Iron)	29,505	34,213	36,819	33,593	39,008
	% share by Process (Coal Based)	78.9	79.4	81.8	81.9	78.5
IV.	FINISHED STEEL (Production) (Alloy/Non-Alloy) :					
	SAIL, TSL Group, RINL, AM/NS, JSWL, JSPL	51,915	59,154	61,450	54,659	63,957
	Other Producers	41,823	41,420	42,612	37,571	47,901
	TOTAL (Finished steel)	93,737	1,00,574	1,04,062	92,231	1,11,858
	% share of Other Producers	44.6	41.2	40.9	40.7	42.8

P stands for Provisional figure (January-December, 2021); Source: JPC

ANNEXURE - IV PRODUCTION OF CRUDE STEEL FOR CY 2021

('000 tonne)

Sl. No.	Producer	2017			2018			2019			2020			2021(P)		
		Working Capacity	Production	% Utilisation												
A. Public Sector Unit																
1	SAIL	17,519	14,804	85	19,132	15,933	83	19,632	16,181	82	19,632	14,970	76	20,632	17,323	84
2	RINL	6,300	4,411	70	6,300	5,258	83	6,300	4,833	77	6,300	3,979	63	6,300	5,526	88
	Total Public Sector	23,819	19,215	81	25,432	21,191	83	25,932	21,014	81	25,932	18,948	73	26,932	22,849	85
B. Pvt. Sector Unit																
3	Tata Steel Ltd.	13,000	12,616	97	-	3,053	-	-	-	-	-	-	-	-	-	-
4	TSL Group		19,400	13,617	70	19,400	18,478	95	19,400	17,287	89	19,400	18,911	97		
5	AM/NS(Essar Steel Ltd.)	10,000	6,478	65	10,000	6,793	68	10,000	7,138	71	10,000	6,616	66	9,600	7,389	77
6	JINDAL STEEL AND POWER LTD.	8,600	3,667	43	8,600	5,005	58	8,600	5,936	69	8,600	6,493	75	8,100	7,336	91
7	JSW Steel Ltd.	18,000	16,370	91	18,000	16,914	94	18,000	16,086	89	18,000	14,725	82	25,300	16,572	66
8	OTHER BOF	7,682	4,811	63	4,077	2,949	72	4,077	1,909	47	4,077	1,774	44	3,177	2,041	64
9	OTHER EAF	14,408	9,840	68	12,750	7,773	61	11,794	6,741	57	11,640	6,974	60	11,914	9,715	82
10	OTHER IF	42,466	28,457	67	43,977	31,955	73	44,496	34,041	77	46,266	27,439	59	49,846	33,322	67
	Total Private Sector	1,14,156	82,240	72	1,16,804	88,059	75	1,16,367	90,330	78	1,17,982	81,308	69	1,27,337	95,286	75
	Total (Public Sector + Private Sector)	1,37,975	1,01,455	74	1,42,236	1,09,250	77	1,42,299	1,11,344	78	1,43,914	1,00,256	70	1,54,269	1,18,134	77
	Share of Public Sector (%)	17.3	18.9		17.9	19.4		18.2	18.9		18.0	18.9		17.5	19.3	

Note:

- TSL Group includes Bhushan Steel Limited, Tata Steel Long Products Limited & BMW- Gamharia(Jharkhand) along with TSL plants in Jamshedpur & Kalinganagar. The change from Tata Steel Ltd. To TSL Group was done from April 2018 onward for statistical purposes.
- P stands for Provisional figure (January-December, 2021); Source: JPC

ANNEXURE - V
PRODUCTION OF CRUDE STEEL
(BY Route)

('000 tonne)

PROCESS ROUTE	2017	2018	2019	2020	2021(P)
OXYGEN ROUTE					
SAIL	14,622	15,719	15,948	14,839	17,117
RINL	4,411	5,258	4,833	3,979	5,526
Tata Steel Ltd.	12,616				
TSL Group		14,928	16,305	15,235	16,669
JSW Steel Ltd.	9,649	10,154	9,678	8,826	9,742
Jindal Steel & Power Ltd.					1,838
Other Oxygen Route	4,811	2,949	1,909	1,774	2,041
TOTAL OXYGEN ROUTE : (A)	46,110	49,008	48,673	44,653	52,933
ELECTRIC ROUTE					
ELECTRIC ARC FURNACE					
SAIL	182	214	233	130	206
TSL Group		1,742	2,174	2,051	2,242
AM/NS (Essar Steel Ltd.)	6,478	6,793	7,138	6,616	7,389
JSW Steel Ltd.	6,721	6,760	6,408	5,900	6,830
Jindal Steel & Power Ltd.	3,667	5,005	5,936	6,493	5,497
Lloyds Steel Ltd.	560	518	332	489	641
Jindal Stainless Ltd.	1,476	1,542	1,593	1,223	1,822
Bhushan Steel Ltd.	2,248	242			
Bhushan Power & Steel Ltd.	2,240	2,677	2,798	3,439	4,429
Other Electric Arc Furnace	3,317	2,794	2,018	1,824	2,824
TOTAL ELECTRIC ARC FURNACE : (B)	26,888	28,287	28,630	28,164	31,879
ELECTRIC INDUCTION FURNACE (C)	28,457	31,955	34,041	27,439	33,322
TOTAL ELECTRIC ROUTE : D=(B+C)	55,345	60,242	62,671	55,603	65,201
GRAND TOTAL : A+D	1,01,455	1,09,250	1,11,344	1,00,256	1,18,134

Note:

1. TSL Group includes Bhushan Steel Limited, Tata Steel Long Products Limited & BMW- Gamharia(Jharkhand) along with TSL plants in Jamshedpur & Kalinganagar.
2. P stands for Provisional figure (January-December, 2021); Source: JPC



ANNEXURE - VI

PRODUCTION OF HOT METAL

('000 tonne)

PLANTS	2017	2018	2019	2020	2021(P)
STEEL AUTHORITY OF INDIA LTD.	15,803	17,080	17,509	16,203	18,793
RASHTRIYA ISPAT NIGAM LTD.	4,464	5,773	5,278	4,364	6,061
TATA STEEL LTD.	14,098	3,274			
TSL Group		14,232	18,946	17,726	19,460
AM/NS (Essar Steel Ltd.)	3,031	3,102	3,620	3,334	3,460
JSW STEEL LTD.	14,827	15,549	15,363	14,220	15,816
JINDAL STEEL AND POWER LTD.	2,641	4,408	5,721	5,509	6,020
(A) SUB TOTAL	54,864	63,418	66,437	61,356	69,610
(B) OTHER PRODUCERS	11,945	9,192	7,720	6,426	8,183
TOTAL (A+B)	66,809	72,610	74,157	67,782	77,793
% SHARE OF OTHER PRODUCERS	17.9	12.7	10.4	9.5	10.5

1. TSL Group includes Bhushan Steel Limited, Tata Steel Long Products Limited & BMW-Gamharia (Jharkhand) along with TSL plants in Jamshedpur & Kalinganagar.
2. P stands for Provisional figure (January-December, 2021); Source: JPC

ANNEXURE - VII
PRODUCTION OF PIG IRON

('000 tonne)

Public Sector Unit	2017	2018	2019	2020	2021(P)
STEEL AUTHORITY OF INDIA LTD.	270	410	591	535	635
RASHTRIYA ISPAT NIGAM LTD.	119	120	58	38	91
Total Public Sector (A)	389	530	649	573	726
Pvt. Sector Unit					
TSL Group		518	332	176	136
JINDAL STEEL AND POWER LTD.	180	111	129	235	464
JSW STEEL LTD.	155	199	325	266	256
Other Pvt. Unit	6,164	4,891	4,548	3,298	4,294
Total Private Sector (B)	6,499	5,719	5,334	3,975	5,150
Total production (A+B)	6,888	6,249	5,983	4,548	5,876

Note:

1. TSL Group includes Bhushan Steel Limited, Tata Steel Long Products Limited & BMW- Gamharia (Jharkhand) along with TSL plants in Jamshedpur & Kalinganagar.
2. P stands for Provisional figure (January-December, 2021); Source: JPC



ANNEXURE - VIII

PRODUCTION OF FINISHED STEEL

(Non-Alloy and Alloy Steel)

('000 tonne)

PLANTS	2017	2018	2019	2020	2021 (P)
STEEL AUTHORITY OF INDIA LTD.	12,253	12,546	12,437	11,024	13,428
RASHTRIYA ISPAT NIGAM LTD.	3,739	4,242	3,740	2,522	3,884
TATA STEEL LTD.	12,265	2,985			
TSL GROUP		13,544	18,479	16,723	18,587
AM/NS (ESSAR STEEL LTD.)	6,081	6,614	7,061	6,524	7,314
JSW STEEL LTD.	14,956	15,617	15,245	13,836	15,604
JINDAL STEEL AND POWER LTD.	2,620	3,606	4,488	4,030	5,140
SUB TOTAL (A) :	51,915	59,154	61,450	54,659	63,957
OTHER PRODUCERS (B)	41,823	41,420	42,612	37,571	47,901
TOTAL PRODUCTION (A+B)	93,737	1,00,574	1,04,062	92,231	1,11,858
% SHARE OF OTHERS	44.6	41.2	40.9	40.7	42.8

Note:

P stands for Provisional figure (January-December, 2021); Source: JPC

ANNEXURE - IX
CATEGORYWISE PRODUCTION OF FINISHED STEEL

(‘000 tonne)

CATEGORY	2017			2018			2019			2020			2021 (P)		
	SAIL, RINL, TSL Group, AM/NS, JSWL, JSPL	OTHERS	TOTAL	SAIL, RINL, TSL Group, AM/NS, JSWL, JSPL	OTHERS	TOTAL	SAIL, RINL, TSL Group, AM/NS, JSWL, JSPL	OTHERS	TOTAL	SAIL, RINL, TSL Group, AM/NS, JSWL, JSPL	OTHERS	TOTAL	SAIL, RINL, TSL Group, AM/NS, JSWL, JSPL	OTHERS	TOTAL
FINISHED STEEL (Non-Alloy)															
BARS & RODS	12,434	22,813	35,247	13,978	24,456	38,434	14,175	27,601	41,776	11,292	22,990	34,282	15,044	30,025	45,069
STRUCTURALS	1,841	5,629	7,470	2,366	5,552	7,918	2,244	5,358	7,601	1,662	4,768	6,430	2,129	5,042	7,171
RLY. MATERIALS	1,230	27	1,257	1,322	57	1,379	1,724	45	1,769	1,592	25	1,617	1,321	16	1,336
TOTAL (NON-FLAT)	15,505	28,469	43,974	17,666	30,065	47,731	18,143	33,004	51,145	14,546	27,783	42,329	18,494	35,083	53,576
PM PLATES	4,183	0	4,183	4,643	74	4,717	4,607	157	4,764	3,992	116	4,108	5,152	109	5,261
HR COIL/STRIP	31,538	6,634	38,173	35,514	5,685	41,199	37,632	5,085	42,717	35,048	5,767	40,816	38,978	7,003	45,981
TOTAL (FLAT)	35,721	6,634	42,356	40,157	5,759	45,916	42,239	5,242	47,480	39,040	5,883	44,924	44,130	7,112	51,242
TOTAL (Non-Alloy)	51,226	35,103	86,330	57,823	35,824	93,647	60,382	38,246	98,626	53,586	33,666	87,253	62,624	42,195	1,04,818
FINISHED STEEL (Alloy)															
NON-FLAT	533	3,634	4,167	1,161	2,612	3,773	945	1,716	2,661	747	1,874	2,621	1,072	2,812	3,884
FLAT	71	433	504	94	203	297	52	195	247	165	136	302	78	297	375
TOTAL (Alloy)	604	4,067	4,671	1,255	2,815	4,070	997	1,911	2,908	912	2,010	2,923	1,150	3,109	4,259
FINISHED STEEL (Stainless)															
NON-FLAT	0	1,212	1,212	0	1,027	1,027	0	676	676	0	517	517	0	720	720
FLAT	83	1,441	1,524	77	1,753	1,830	72	1,780	1,852	160	1,378	1,538	185	1,877	2,062
TOTAL (Stainless)	83	2,653	2,736	77	2,780	2,857	72	2,456	2,528	160	1,895	2,055	185	2,597	2,782
FINISHED STEEL (Non-Alloy + Alloy + Stainless)															
TOTAL (NON-FLAT)	16,038	33,314	49,353	18,826	33,704	52,530	19,088	35,395	54,482	15,294	30,173	45,467	19,565	38,614	58,180
TOTAL (FLAT)	35,876	8,508	44,385	40,328	7,716	48,044	42,363	7,217	49,580	39,366	7,398	46,764	44,392	9,286	53,678
TOTAL Finished Steel	51,914	41,822	93,738	59,154	41,420	1,00,574	61,449	42,612	1,04,062	54,660	37,571	92,231	63,957	47,900	1,11,858

P stands for Provisional figure (January-December, 2021); Source: JPC



ANNEXURE - X

CATEGORY-WISE IMPORT OF IRON AND STEEL

('000 tonne)

SI.No.	CATEGORY	2017	2018	2019	2020	2021 (P)
I	Semi-finished Steel(Non-Alloy)					
	Semis	410	390	164	134	31
	Re-rollable Scrap	411	429	287	147	123
	TOTAL	821	819	451	281	154
II	Finished Steel(Non-Alloy)					
	Non-Flat					
	Bars & Rods	312	286	317	134	117
	Structurals	50	44	36	35	17
	Rly.Materials	26	42	68	54	80
	TOTAL Non-Flat	388	372	421	223	214
	Flat					
	Plates	660	478	344	371	233
	HR Sheets	16	12	6	1	0
	HR Coils/Skelp/Strips	1,875	1,750	1,913	804	855
	CR Coils/Sheets	705	478	465	201	295
	GP/GC Sheets	1,058	1,232	949	726	798
	Elec.Sheets	540	654	621	421	513
	TMBP	1	8	0	0	0
	Tin Plates	207	181	197	123	103
	Tin Free Steel	58	74	79	50	23
	Pipes	377	315	354	194	156
	TOTAL Flat	5,497	5,182	4,928	2,891	2,976
	TOTAL Fin. Steel (Non-Alloy)	5,885	5,554	5,349	3,114	3,190
	TOTAL STEEL (Non-Alloy)	6,706	6,373	5,800	3,395	3,344
	Alloy/Stainless Steel					
	Non-Flat	445	554	427	287	295
	Flat	1,499	1,190	1,664	1,062	1,516
	Semi-finished	56	176	61	20	49
	TOTAL Fin. STEEL (Alloy/Stainless)	1,944	1,744	2,091	1,349	1,811
	TOTAL STEEL (Alloy/Stainless)	2,000	1,920	2,152	1,369	1,860
	TOTAL Fin. STEEL (Alloy+ Non-Alloy)	7,829	7,298	7,440	4,463	5,001
	TOTAL Steel (Non-Alloy + Alloy)	8,706	8,293	7,952	4,764	5,204
III	Other Steel Items					
	Fittings	245	193	163	119	136
	Misc. Steel Items	1,504	1,377	369	214	346
	Steel Scrap	4,894	5,974	6,763	5,649	5,015
IV	Iron					
	Pig Iron	16	67	13	7	15
	Sponge Iron	58	58	44	44	47
V	Ferro-Alloys	554	576	642	545	707
	GRAND TOTAL	15,977	16,538	15,946	11,342	11,470

P stands for Provisional figure (January-December, 2021); Source: JPC

ANNEXURE - XI
CATEGORY-WISE EXPORT OF IRON AND STEEL

('000 tonne)

CATEGORY	2017	2018	2019	2020	2021 (P)
SEMIS (Non-Alloy)	1,530	2,259	2,660	6,087	5,236
FINISHED STEEL (Non-alloy)					
Non-Flat					
Bars & Rods	1,972	615	529	767	1,966
Structurals	194	196	167	120	179
Railway Materials	84	4	1	23	2
Total Non-Flat	2,250	815	697	910	2,147
Flat					
Plates	459	462	291	521	756
H R Coils/Sheets	3,766	2,479	4,603	6,467	5,814
C R Sheets/Coils	1,390	748	636	470	1,007
GP/GC Sheets	1,270	1,025	930	814	1,769
Elec. Sheets	72	79	35	46	38
Tinplates	46	39	27	16	35
Tin Free Steel	2	2	2	2	2
Pipes	646	426	253	136	130
Total Flat	7,651	5,260	6,777	8,472	9,551
Total Fin. Steel (Non-Alloy)	9,901	6,075	7,474	9,382	11,698
Total Steel (Non-Alloy)	11,431	8,334	10,134	15,469	16,934
Non-Flat Alloy/Stainless	530	289	268	254	604
Flat Alloy/Stainless	441	327	462	514	496
Total Finished Steel (Alloy/Stainless)	971	616	730	768	1,100
Semi-Finished (Alloy/Stainless)	29	35	9	46	12
Total Steel (Alloy/Stainless)	1,000	651	739	814	1,112
Total Fin. Steel (Non-Alloy + Alloy)	10,872	6,691	8,204	10,150	12,798
Total Steel (Non-Alloy + Alloy)	12,431	8,985	10,873	16,283	18,046
PIG IRON	668	335	421	823	1,407
SPONGE IRON	269	558	819	584	666

P stands for Provisional figure (January-December, 2021); Source: JPC



ANNEXURE - XII

COMPARATIVE PBT (PROFIT BEFORE TAX) OF STEEL PSUs

(Rs. in crore)

S. No.	PSU/Company	2017-18	2018-19	2019-20	2020-21	2021-22*
1.	SAIL	(-)758.94	3337.89	3170.66	2270.57	12829
2.	RINL	(-)1911.45	(-)306.89	(-)4287.51	(-)1035.96	946.20
3.	NMDC Ltd.	6179	7198	6122	8902	10101 ^
4.	MOIL Ltd.	647.92	719.75	340.49	240.11	282.46
5.	MECON Ltd.	44.02	9.97	87.03	19.11	(-)82.27
6.	MSTC Ltd.	111.6	(-)269.21	129.49	114.68	131.34
7.	KIOCL Ltd.	86.09	184.12	63.68	410.23	102.64
8.	FSNL	13.04	41.09	46.02	32.06	42.39
9.	EIL	0.67	0.20	0.72	0.46	0.42
10.	OMDC	(-)258.17	(-) 638.11	(-)48.36	(-)52.41	17.55
11.	BSLC	(-)10.52	(-)28.02	(-)10.27	6.91	5.95

*Provisional April-December, 2021

^ Actual upto December, 2021

ANNEXURE - XII A
COMPARATIVE PAT (PROFIT AFTER TAX) OF STEEL PSUs

(Rs. in crore)

S. No.	PSU/COMPANY	2017-18	2018-19	2019-20	2020-21	2021-22*
1.	SAIL	(-)481.71	2178.82	2021.54	406.22	9597
2.	RINL	(-)1369	96.71	(-)3910.17	(-)789.10	789.93
3.	NMDC Ltd.	3806	4642	3610	6253	7583 ^
4.	MOIL Ltd.	421.99	473.89	248.22	176.63	211.37
5.	MECON Ltd.	58.02	13.74	69.00	6.24	(-)82.27
6.	MSTC Ltd.	76.63	(-)324.47	75.20	101.07	85.39
7.	KIOCL Ltd.	81.48	111.86	43.48	301.17	76.81
8.	FSNL Ltd.	8.07	26.69	30.58	22.75	31.72
9.	EIL	0.35	(-)0.25	(-)0.56	0.79	0.33
10.	OMDC	(-)252.95	(-)451.63	(-)76.69	(-)39.64	14.05
11.	BSLC	(-)10.52	(-)28.02	(-)10.27	6.91	5.80

*Provisional April-December, 2021

^ Actual upto December, 2021



ANNEXURE - XIII

CONTRIBUTION MADE TO THE CENTRAL GOVERNMENT AND GOVERNMENT INSURANCE COMPANIES BY THE STEEL PSUs

(Rs. in crore)

Sl. No.	PSU/COMPANY	2017-18	2018-19	2019-20	2020-21	2021-22*
1.	SAIL	6894	10916	8094	6074	11806
2.	RINL	1810.32	2518.12	2119.53	1888.05	2170.34
3.	NMDC Ltd.	4435	5376	5300	6269	5607 ^
4.	MOIL Ltd.	262.07	381.15	188.61	95.17	44.83
5.	MECON Ltd.	87.15	112.98	98.81	108.64	69.24
6.	MSTC Ltd.	80.00	91.26	73.20	73.72	289.35
7.	KIOCL Ltd.	71.68	53.60	84.91	148.54	71.75
8.	FSNL	38.67	36.31	33.79	34.84	29.01
9.	OMDC	1.46	3.00	2.03	1.82	5.5
10.	BSLC	0.76	0.89	0.78	1.93	1.66

* Provisional April-December, 2021

^ Actual upto December, 2021

ANNEXURE - XIII A
CONTRIBUTION MADE TO THE STATE GOVERNMENT BY THE STEEL PSUs

(Rs. in crore)

S. No.	PSU/COMPANY	2017-18	2018-19	2019-20	2020-21	2021-22*
1	SAIL	2402.00	2604	3250	2084	5008
2	RINL	584.66	767.37	587.91	322.26	331.98
3	NMDC Ltd.	2381	1726	2997	2809	7029 ^
4	MOIL Ltd.	148.50	123.43	111.07	90.49	73.46
7	MECON Ltd.	5.87	6.74	13.25	12.06	9.34
5	MSTC Ltd.	28.00	24.43	16.26	8.67	15.17
8	KIOCL Ltd.	0.07	1.11	2.56	3.02	3.35
6	FSNL	11.30	18.83	21.46	18.26	16.51
9	OMDC	40.34	550.21	2.81	2.50	32.02
10	BSLC	7.17	6.40	6.59	13.75	7.61

* Provisional April-December, 2021

^ Actual upto December, 2021



ANNEXURE - XIV

BUDGET AND EXPENDITURE ON CSR BY STEEL PSUs

(Rs. in Lakh)

S. No.	PSU/ Company	2017-18		2018-19		2019-20		2020-21		2021-22*	
		Budgeted	Exp	Budgeted	Exp	Budgeted	Exp	Budgeted	Exp	Budgeted	Exp
1.	SAIL	2600	2570	3000	3118	3300	2756	5000	4718	8186	1520
2.	RINL	778	960	850	1030	850	796	861	1011	1136	921
3.	NMDC Ltd.	19516	16937	20000	16724	20000	19999	16450	15862	12600	4095 ^
4.	MOIL Ltd.	922.00	961.63	925	929.48	1250	1274.22	1250	1318.12	1350.00	627.14
5.	MECON Ltd.	203.12	49.12	544.03	16.92	547.03	330.52	310.50	44.68	343.20	97.60
6.	MSTC Ltd.	214	215	200	200	Nil	54	Nil	Nil	23.98	5.90
7.	KIOCL Ltd.	15.98	15.98	39.64	32.51	208.08	331.42	871.77	884.66	438.70	133.58
8.	FSNL	63.36	63.48	65	66.81	62.78	63.07	67.00	67.00	80\$	80\$

* Provisional April-December, 2021

\$ FSNL has contributed an amount of Rs. 500.00 lakh to PM Cares Fund under CSR obligation. This contribution will be offset against the CSR obligation arising in the subsequent years w.e.f. 2020-21.

^ Actual upto December, 2021

ANNEXURE - XV

**ADOPTION OF 'SEVEN STEP MODEL FOR CITIZEN CENTRIC-SEVOTTAM',
AS PER RECOMMENDATION OF THE 2ND ADMINISTRATIVE
REFORMS COMMISSION**

The Second Administrative Reforms Commission in its 12th report "Citizens Centric Administration - the Heart of Governance" in paragraph 4.6.2 recommended for making organization transparent, accountable and citizen friendly through making citizen's charter more effective and mandatory. The Department of Administrative Reforms and Public Grievances (AR and PG) has developed a model for benchmarking Excellence in Public Service Delivery (Sevottam). The model provides the framework to organizations to assess and improve the quality-of-service delivery for the citizens. It involves the identification of the services delivered to the citizens, quality of service, its objective, improvement of quality, by using innovative methods for developing business process more informative with the help of information technology.

The Ministry of Steel has brought out its 'Citizen's Charter' and this is periodically updated in tune with the changing requirements and expectations from the stakeholders. The Charter is placed on the Ministry website www.steel.nic.in. The Central Public Sector Enterprises under the Ministry have also got their Citizen Charter uploaded on their respective websites.



ANNEXURE - XVI

Release of Grants under the R&D Scheme

SI No	Title of the R&D project	In Rs Lakh					
		2020-21			2021-22 (upto Dec 2021)		
		Total	Capital	Revenue	Total	Capital	Revenue
1	Fundamental process engineering to minimize re-oxidation of steel during teeming via a ladle shroud leading to improved castability and cleanliness by IIT Kanpur	9.19		9.19			
2	Conversion of emitted CO ₂ to chemical fuels by IMMT	12.65		12.65			
3	Waste Management of Generated Sludge from Indian Steel and Steel Related Plants: A Sustainable Business Model by BITS Pilani	0.00			3.75		3.75
4	Indigenous development of Austempered Ductile Iron technology for use in automobile & agricultural industries in India by PEC Chandigarh	0.00			17.00		17.00
5	Simultaneous removal of CO ₂ , SOx & NOx from flue gas and their catalytic conversion into fuels and value added fertilizers by IMMT Bhubaneswar	19.0136		19.0136			
6	Bench Scale Production and Cost Estimation of Silicon Carbide Powder Obtained by Plasma Processing of Rice Husk by IMMT Bhubaneswar	13.10	2.00	11.10			
7	Development of Steel Slag based cost effective eco-friendly fertilizers for sustainable agriculture and inclusive growth by Indian Agriculture Research Institute (IARI) in association with SAIL, JSW & Tata Steel				67.22		67.22
	Total	53.95	2.00	51.95	87.97	0.00	87.97

ANNEXURE - XVII

REPORTS OF CAG

Energy Management

Rashtriya Ispat Nigam Limited, Visakhapatnam (RINL) has a Thermal Power Plant (TPP) with five Turbo Generators (TGs) and Auxiliary Power Generating Units with an overall installed capacity of 542.48 MW as of 31st March, 2019. Audit of Energy Management in RINL revealed that:

- Plant Load Factor achieved by the Main TPP was less than the norm prescribed by CERC. Even assuming the operation of TPP at PLF of 80 per cent, savings to the extent of Rs. 85.48 crore would have accrued to the company towards the cost of power imported from Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL).
- RINL curtailed TPP generation due to shortage of boiler coal and blended high cost Medium Coking Coal (MCC) with boiler coal without envisaging for alternate source of procurement of boiler coal leading to increased cost of power generation. Savings to the extent of Rs. 145.21 crore were lost by the Company due to improper blending of MCC with indigenous boiler coal.
- The utilisation of Auxiliary Power Generation units was poor due to faulty design/insufficient heat recovery from Sinter Machine/ insufficient top gas pressure resulting in shortfall in generation of power with consequential purchase of power from APEPDCL.
- Auxiliary Power Consumption, beyond the norms prescribed by CERC, resulted in avoidable expenditure of Rs. 230.56 crore.
- The excess consumption of steam during 2014-15 to 2018-19, beyond the stipulated norms, accounted for 29.91 lakh tonne of steam which when converted to monetary terms valued Rs. 382.48 crore.

Performance of Captive Mines of SAIL

Audit examined records of all captive mines of SAIL for the period 2014-19 to assess the management of captive mines and compliance with safety and environmental laws. It was noted that SAIL neither applied technical due diligence nor conducted techno-commercial viability study to assess viability before the allotment of Parbatpur and Sitanala Coal Blocks, which had to be surrendered subsequently. The amount spent on development of these coal mines thus became infructuous. Production lower than the planned levels at Dalli, Rajhara and Barsua mines, led to transfer of iron ore from distantly located mines by Bhilai Steel Plant and Rourkela Steel Plant with extra expenditure on freight differential. At Barsua mines, the non-compliance of Forest Conservation Act, 1980, on account of use of forest land for non-forest purpose, without approval led to payment of penal Net Present Value and Compensatory Afforestation. Non-compliance with Odisha Minerals Rule, 2007 by Bolani mines led to additional expenditure on differential royalty. Additional royalty payments were made at Manoharpur mine, as Iron ore was graded at the highest grade and at Nandini mines on rejected limestone chips that were not suitable for iron making. Government of Odisha and Government of Jharkhand demanded compensation on account of mining beyond quantity permitted under Environmental Clearance/ Consent to operate by the Iron ore and Limestone mines under Raw Material Division. Delay in surrender of excess Railway land at Bolani at Meghahatuburu mines led to avoidable expenditure. There was 41 per cent shortfall in statutory manpower against the requirement in mines.

Safety and Environment Management in SAIL

Audit examined records relating to safety policy and environment management of SAIL for the period 2014-19 to assess the compliance to stipulated Act/ Rules/ Regulations and Standard Operating Practices (SOP) and whether social responsibilities related to environmental and pollution control, safety standards and application of the best industrial practices was followed. It was noted that SAIL Safety Organisation did not develop any plan or frame timeline



to implement its recommendations. Out of 686 recommendations, 258 were yet to be complied. Rupture in pipelines in Pump House at Bhilai Steel Plant (BSP) led to fall in water pressure and Blast Furnace Gas spread into Pump House causing death of six persons. Laxity in taking safety measures and unsafe practice of doing De-Blanking job of CO Gas Line on charged pipelines caused accident at BSP where 14 people died. There were less number of Safety Officers posted in plants than the statutory requirement. Non-disposal of fly ash and slag dump and non-setting up of sewage treatment plant led to delay in issue of EC in absence of which work for Sinter Plant and SMS-I packages at Bokaro Steel Plant was stopped. CO₂ emission in SAIL was higher than international standards as well as TATA Steel. Delay in completion of air pollution control system led to flaring up of gases in the environment. Average Specific Energy Consumption in SAIL was more than the world average as well as Tata Steel and RINL.

Report No. 05 of 2019-Union Government included in Annual Report 2019-2020

Sl.No.	Para No. & Report No.	Division	Subject	Status
1.	2.1.3 and 2.1.4, 2.3.1, 2.3.2 and 2.33, 2.4.1, 2.4.2, 3.1, 3.2, 3.3, 3.6, 4.1, 4.4, 4.5, 5.1 Report No.13 of 2019	NMDC	Operational Performance of NMDC Ltd.	Yet to be settled.

Report No. 13 of 2019-Union Government included in Annual Report 2019-2020

Sl. No.	Para No. & Report No.	Division	Subject	Status
1.	10.7	SAIL	Idle investment of Rs. 366 crore On plant and machinery and land & building.	Yet to be settled.
2.	10.1	BSLC	Operational and Financial performance of BSLC.	Yet to be settled.
3.	10.2	OMDC	Operational and Financial performance of OMDC.	Yet to be settled.
4.	10.5	SAIL	Implementation of Addition, Modification and Replacement Projects.	Yet to be settled.
5.	10.6	SAIL	Follow up audit of Modernisation and Expansion Plan including contact closure.	Yet to be settled.
6.	10.4	SAIL	It Systems in Steel Authority of India Ltd.	Yet to be settled.

Report No. 09 of 2017-Union Government included in Annual Report 2017-2018

Sl. No.	Para No. & Report No.	Division	Subject	Status
1.	15.4 Report No.09 of 2017	SAIL	The Management failed to install weigh bridges at MIOM and KIOM and incurred avoidable expenditure on payment of penalty/ idle freight to Railways, amounting to Rs. 101.97 crore (during the period 2011-12 to 2015-16).	Yet to be settled.
2	15.5 Report No.09 of 2017		Deficient project management led to delay of six years in completion of Cold Rolling Mill project which could not be fully commissioned (December 2016) even after spending Rs. 1,655 crore.	Settled.
3.	15.8 Report No.09 of 2017	SAIL	Deficient production planning led to accumulation of slab stock causing avoidable stock carrying cost of Rs. 391 Crore.	Settled.
4.	10.5	SAIL	Implementation of Addition, Modification and Replacement Projects.	Yet to be settled.
5.	10.6	SAIL	Follow up audit of Modernisation and Expansion Plan including contact closure.	Yet to be settled.
6.	10.4	SAIL	It Systems in Steel Authority of India Ltd.	Yet to be settled.

Report No.15 of 2016-Union Government included in Annual Report 2016-2017

Sl. No.	Para No. & Report No.	Division	Subject	Status
1.	5.1 Report No.15 of 2016		Execution of jobs.	Transfer of the Administrative control of HSCL from M/o Steel to M/o Housing and urban affairs vide order dated 26.12.2017.
2.	5.2 Report No.15 of 2016	SAIL	Marketing Activities.	Settled.
3.	5.3 Report No.15 of 2016*	SAIL	Idle investment at SPU Bettiah Project of SAIL.	Yet to be settled.
4	5.4 Report No.15 of 2016*	SAIL	Avoidable Expenditure of Rs.14.35.	Settled.
5.	10.6	SAIL	Follow up audit of Modernisation and Expansion Plan including contact closure.	Yet to be settled.
6.	10.4	SAIL	It Systems in Steel Authority of India Ltd.	Yet to be settled.



Report No. 21 of 2015, Union Government included in Annual Report 2015-2016

Sl. No.	Para No. & Report No.	Division	Subject	Status
1	5.1 Report No. 21 of 2015	SAIL	Investment of SAIL in Joint Ventures.	Settled.
2.	5.2 Report No. 21 of 2015	SAIL	33 Coke Oven Batteries in the five integrated steel plant.	Settled
4	5.4 Report No. 15 of 2016*	SAIL	Avoidable Expenditure of Rs.14.35.	Settled.
5.	10.6	SAIL	Follow up audit of Modernisation and Expansion Plan including contact closure.	Yet to be settled.
6.	10.4	SAIL	It Systems in Steel Authority of India Ltd.	Yet to be settled.



Pellet Plant, KIOCL



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