

MANAGEMENT DISCUSSION AND ANALYSIS REPORT

The Management of Steel Authority of India Limited (SAIL) presents its Analysis Report covering the performance and outlook of the Company.

A. INDUSTRY STRUCTURE & DEVELOPMENTS

World Economic Environment

Global economic output grew by 2.9% in 2019, as estimated by IMF in its June 2020 World Economic Outlook update. The Global Economy continued to expand, with growth in Advanced Economies (estimated 1.7% growth in 2019) as well as in Emerging Market and Developing Economies (estimated 3.7% growth in 2019). Overview of World Economic Outlook Projections is as under:

World Economic Outlook Projections (Percentage Change)

	Year Over Year		
	Estimate	Projections	
	2019	2020	2021
World Output	2.9	-4.9	5.4
Advanced Economies	1.7	-8.0	4.8
United States	2.3	-8.0	4.5
Euro Area	1.3	-10.2	6.0
Japan	0.7	-5.8	2.4
Emerging Market and Developing Economies	3.7	-3.0	5.9
China	6.1	1.0	8.2
India	4.2	-4.5	6.0
Brazil	1.1	-9.1	3.6
Russia	1.3	-6.6	4.1

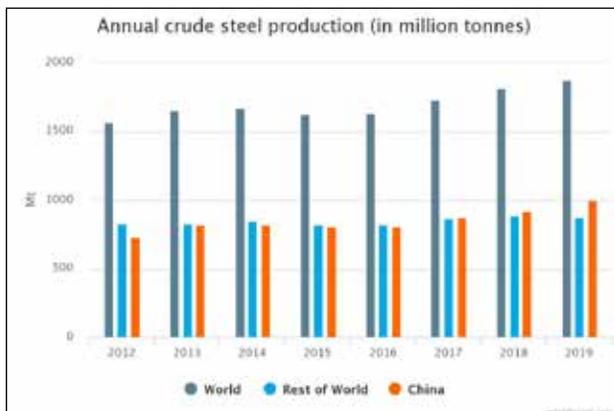
Source: IMF World Economic Outlook Update, June 2020

However, during the year 2020, the COVID-19 pandemic is inflicting high and increasing human costs worldwide. As a result of the pandemic, the Global Economy is projected to contract sharply by 4.9% in 2020. In a baseline scenario, which assumes that the pandemic fades in the second half of 2020 and containment efforts can be gradually unwound, the Global Economy is projected to grow by 5.4 percent in 2021 as economic activity normalizes, helped by policy support.

World Steel Scenario

In 2019, Global Crude Steel production as reported by World Steel Association, increased by 3.4% to reach 1869.9 million tonnes (MT) compared to 2018. Crude Steel production contracted in all regions in 2019 except in Asia and the Middle East.

Asia accounted for 1341.6 MT of Crude Steel production in 2019, an increase of 5.7% compared to 2018. China continued to dominate World Crude Steel production with an output of 996.3 MT, with a growth of 8.3% over 2018. In 2019, China's share of Global Crude Steel production increased to 53.3% compared to 50.9% in 2018. China's share in the world steel production has been constantly increasing as shown below:



India's Crude Steel production in 2019 increased by 1.8% over 2018 to reach 111.2 MT.

Japan produced 99.3 MT in 2019, a decline of 4.8% compared to 2018. South Korea's Output of Crude Steel stood at 71.4 MT in 2019, lower by 1.4% over 2018. While EU saw a reduction in Crude Steel output by 4.9% to 158.8 MT in 2019 over

2018, the production in US increased by 1.38% to reach 87.8 MT in 2019.

Top 10 Steel Producing Countries

Rank	Country	2019 (MT)	2018 (MT)	% Change
1	China	996.3	920.0	8.3
2	India	111.2	109.3	1.8
3	Japan	99.3	104.3	-4.8
4	United States	87.9	86.6	1.5
5	Russia*	71.6	72.0	-0.7
6	South Korea	71.4	72.5	-1.4
7	Germany*	39.7	42.4	-6.5
8	Turkey	33.7	37.3	-9.6
9	Brazil	32.2	35.4	-9.0
10	Iran*	31.9	24.5	30.1

Source: World Steel Association

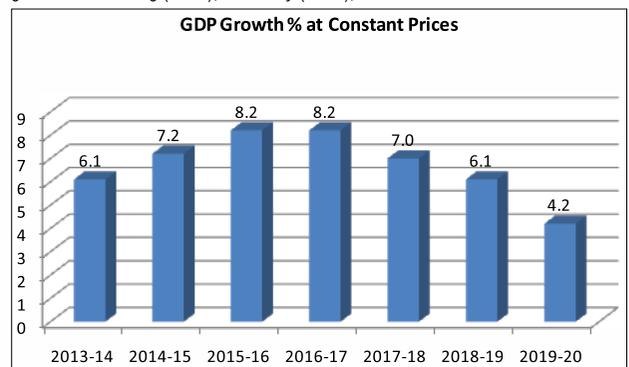
*Estimated

Outlook for Steel Industry

World Steel Association has forecast that Global steel demand is likely to shrink by 6.4% in 2020 to 1653.9 MT from 1766.5 MT in 2019. Steel demand in China is expected to be higher by 1% in 2020. Steel demand is likely to come down by 20% in North America (USA and NAFTA countries), 15.8% in EU, 10.3% in CIS countries, 17.3% in South America, 9.4% in Africa and 17.4% in Middle East. However, Global Steel Demand is expected to bounce back by 3.8% in the year 2021.

Indian Economic Environment

GDP growth for the Financial Year 2019-20 has been estimated at 4.2% at constant prices as per the provisional estimates of National Income by the Central Statistics Office (CSO), compared to 6.1% in Financial Year 2018-19. The sectors that recorded growth were Mining (1.6%), Electricity (1.0%), etc.



The Index of Industrial Production declined by 0.7% for the period April to March 2019-20 as compared to growth of 3.8% in the previous year. IIP growth rates for Mining and Electricity sectors for the period April-March 2019-20 were 1.7%, 1.1% respectively. During the same period, while primary goods registered a growth of 0.8%, Manufacturing, Capital Goods, Infrastructure/Construction goods and Consumer Durables declined by 1.3%, 13.7%, 4.0% and 8.4% respectively. Steel index increased by 4.2% during the Financial Year 2019-20.

In view of the outbreak of Covid-19 and the resulting lockdowns, restrictions, etc., while IMF has estimated that India's GDP growth in the year 2020 will be -4.5%, followed by recovery of 6.0% in 2021.

Indian Steel Scenario

As per Joint Plant Committee (JPC), production of Crude Steel during fiscal 2019-20 stood at 109.25 million tonne (MT) against 110.92 MT in 2018-19. Finished Steel production registered a growth of 0.8% to reach 102.06 MT during 2019-20, compared to previous year. While Exports of total Finished Steel increased substantially by 31.4% to 8.36 MT during 2019-20 over previous year, imports declined by 13.6% to 6.77MT.

India's consumption of total finished steel saw a growth of 1.4% in 2019-20 over same period last year. Demand for Finished Steel in India is expected to shrink by 18% in 2020 due to outbreak of Covid-19, followed by rebound by 15% in 2021, as projected by World Steel Association. However, the revival is expected to be faster due to fiscal package announced by Government of India.

B. OPPORTUNITIES & THREATS FOR SAIL

Opportunities

- With an accelerated push from the policies proposed by the new Government regarding steel intensive segments such as infrastructure, capital goods and construction, India is all set to become the 2nd largest steel consumer in the world in the immediate future.
- The newly commissioned mills are oriented towards products required to cater to the infrastructure development.
- Ministry of Mines vide Order dated 16th September, 2019 has entrusted SAIL with the responsibility to make available 25 percent of its total mineral production in the previous year in the open market. The permission shall be valid for a period of two years w.e.f. 16th September, 2019. Further, in another separate order dated 16th September, 2019, Ministry of Mines, has allowed SAIL to dispose of the old stock of 70 million tonnes (MT) of low grade iron fines and ores (including slime) lying dumped across different captive mines of the Company. For selling of iron ore, efforts are being made to obtain approval of respective State Governments and concerned statutory authorities to sell about 5 MT of fresh iron ore and 7 MT of iron ore dump from its mines in open market during the Financial Year 2020-21.
- High export potential for markets of Middle East and South East Asia.
- Potential for improving product quality and reducing cost through operational efficiency and utilization of the new and modernized units.

Threats

- Cheap import of steel.
- Volatility in coal prices and exchange rate.
- Arrangement of alternate sources for Low Silica Limestone due to stoppage of supply from M/s. Rajasthan State Mines & Minerals Limited, Jaisalmer and Bhutan due to lockdown on account of Covid-19 pandemic.

C. RISKS AND CONCERNS

- Internally, there have been deficiencies in the form of delays in the ramping up of production, due to initial stabilization of the new mills. Further, higher capital related charges on account of incremental Depreciation and Interest on new facilities have also increased expenses.
- Loss of market for Wheels & Axles, resulting in lower profitability.
- Impact on Chiria Iron Ore Leases being in No-Mining Zone:

Chiria Mine leases (except already broken up area in Dhobil lease) have been proposed to be "No Mining Zone" in Management Plan for Sustainable Mining (MPSM) in Saranda forest, approved by MoEFCC. Out of the available iron ore resource of about 3.5 billion tonnes (BT) with SAIL, about 42% i.e. 1.5 BT is available at a single location viz. the Chiria Mine in Saranda forest in Jharkhand, which is not only critical for future expansion but will also take care of ongoing expansion in view of depleting resources at SAIL's other Operating Mines.

In line with National Steel Policy 2017, SAIL has prepared a roadmap "Vision 2030", to enhance its Crude Steel capacity to around 50 MT in two phases. In this regard, huge expenditure envisaged for expansion plan may be viable only if there is adequate security of iron ore for about 50 years. On overall basis, SAIL's requirement will be of the order of about 4800 MT of iron ore for its 50 year needs against the total available iron ore resources of about 3500 MT only i.e. a deficit of about 1300 MT.

Further, except Chiria Mine, all other iron ore mines of SAIL in Jharkhand are going to be depleted during the period from 2026 to 2040. In order to bridge the gap between the iron ore production capacity and its requirement, SAIL has a plan to develop phase wise expansions of Chiria Mine from 7 MTPA to 45 MTPA from 2019-20 to 2040. Beyond 2040, Chiria will be the only iron ore resource left with SAIL in Jharkhand, which will cater to most of its iron ore requirement of Eastern Sector Steel Plants of the Company.

Therefore, early development of Chiria Mine is not only required to meet the demand of Steel Plants for which expansion has already been made but also for expansion projects of SAIL planned as per National Steel Policy 2017 and SAIL Vision 2030.

On intervention of Ministry of Steel, MoEFC has now constituted the Reassessment Committee comprising members of ICFRE, Forest Survey of India, MoEFCC, IIT (ISM) Dhanbad, IIT Kharagpur, Ministry of Mines, Ministry of Coal, Ministry of Steel, and Government of Jharkhand to suggest modifications/ amendments in MPSM.

On account of being part of "No Mining Zone" declared under MPSM approved by MoEFCC, Jharkhand Government is not considering extension of lease period of Chiria leases beyond 31st March, 2020. Since process of modification of MPSM is under process, SAIL and Ministry of Steel, are pursuing vigorously with Government of Jharkhand for extension of lease period of Chiria leases beyond 31st March, 2020 at the earliest.

- Delay in Grant of Stage-II Forest Clearance by MoEFCC

Stage-I Forest Clearance (FC) for development of new mining pits at South and Central blocks of Kiriburu and Meghahatuburu mines, development of mechanized iron ore mine covering four leases of Chiria and Capacity Expansion of Gua mine were granted during the period October, 2010 to March, 2014 and Compliance Report for these mines was forwarded by Government of Jharkhand for approval of MoEFCC during July, 2015 to April, 2016. But later on MoEFCC has linked the grant of Forest Clearance for mines in Saranda forest with finalisation of Management Plan for Sustainable Mining (MPSM) for Saranda Forest.

On approval of MPSM by MoEFCC in June, 2018, Gua and Kiriburu-Meghahatuburu mining leases became part of Mining Zone, whereas, Chiria leases (except already broken up area of Dhobil lease) were put under No Mining Zone. Thereafter, in June/July, 2018 MoEFCC made requests to Government of Jharkhand to provide information regarding FC proposals of South-Central Blocks of Kiriburu-Meghahatuburu and Duargaiburu lease of Gua mine.

Though, during last one and half years, Jharkhand State Government had submitted the desired information pertaining to Gua and Kiriburu-Meghahatuburu FC proposals to MoEFCC, the FC proposals have been returned twice on account of non-suitability of identified Compensatory Afforestation land. Subsequently, after lot of persuasion, conditions of both the FC proposals have been complied with and the FC proposals are pending with PCCF (Nodal), Jharkhand since March, 2020. On account of ongoing Covid-19 pandemic, the FC proposals are yet to be processed at PCCF (Nodal) Jharkhand office.

- Impact of Hon'ble Supreme Court judgment in Common Cause matter on Captive Mines in Jharkhand, Odisha and Chhattisgarh.

Consequent to the judgement dated 2nd August, 2017 of the Hon'ble Supreme Court in the matter of Common Cause, State Governments of Odisha and Jharkhand have issued Demand Notices of ₹204.58 crore and ₹1759.02 crore respectively and State Government of Chhattisgarh has issued Show Cause Notices (SCN) amounting to ₹8,349.09 crore for payment of compensation under section 21(5) of the MMDR Act and for EC violations related to iron ore, flux & coal mines, till date.

In case of demand notices received from Odisha and Jharkhand State Governments for Iron Ore and Flux mines, SAIL has challenged in respective High Courts, whereas, in case of Coal Mines, the matter is challenged before Revisionary Authority, Ministry of Coal.

In case of three SCN issued by Government of Chhattisgarh, replies for the two SCN (₹2,712.93 crore for Dalli Forest Range iron ore lease and ₹122.81 crore for Nandini Limestone Mine) were submitted to the concerned authorities, whereas, in case of third SCN (₹5,513.35 crore for Pandridalli & Rajhara Pahar iron ore lease), the SCN was challenged before Hon'ble Chhattisgarh High Court on 4th May, 2019. Hon'ble High Court vide Order dated 17th May, 2019 had directed that no coercive steps shall be taken till the next date of hearing. The matter is sub-judice.

- Impact of demand for payment under the MMGC Rules, 2015 raised by District Mining Officer (DMO), Chaibasa, Jharkhand in respect of Duargaiburu lease of Gua, amalgamated leases of Kiriburu-Meghahatuburu and Dhobil lease of Chiria.

Vide demand notices dated 18th November, 2019 and 21st November, 2019, District Mining Officer (DMO), Chaibasa, asked SAIL for payment of amount equivalent to Royalty under Rule 5 of MMGC Rules, 2015 for Duargaiburu lease of Gua, Amalgamated leases of Kiriburu-Meghahatuburu and Dhobil lease of Chiria, over and above the normal payment of Royalty, within 15 days of the issue of notices. The failure to pay would attract an interest of 24% per annum on the demand amount under the provisions of Rule 49 of MCR, 2016. The collective demand was for about ₹2,980 crore. SAIL has challenged these demand notices by filing Writ Petitions in Hon'ble High Court of Jharkhand on 9th/10th December, 2019. Hon'ble Jharkhand Court vide Order dated 18th December, 2019/17th March, 2020 has stayed the operations of demand notices till next date of hearing, which was scheduled for 11th May, 2020. However, due to out break of Covid-19 pandemic, the hearing is yet to take place.

- Renewal/Extension of Tasra Coking Coal mining lease beyond 30th April, 2022.

After extensive persuasion with Jharkhand Government and Ministry of Coal, lease period of the Tasra Coal Block for an area of 450 ha got renewed for the period of 20 years upto 30th April, 2022 and lease deed in this regard was executed on 11th February, 2020.

For deployment of 4 MTPA (ROM) coking coal mine at Tasra mining lease, SAIL is in the process of appointing a Mine Developer cum Operator for developing the mine and extracting coking coal. As per the approved Mine Plan, Tasra coal block has extractable reserves of 96 MT in a period of 24 years. Therefore, lease period of Tasra coal block may be required for a further period of about 26 years or so, beyond existing lease validity upto 30th April, 2022.

Under the extant provisions of MMDR Act/MCR 1960, there are no special provisions for further renewal (2nd or subsequent) of coal mining leases of

Government Companies. Perusal of Section 8 of MMDR Act and Rule 24A of MCR, 1960 does not provide clarity on second and subsequent renewals of the coal mining lease.

Based on experienced from the first renewal of Tasra Mining lease, efforts are being made to seek legal opinion of Attorney General of India (AGI) on second and subsequent renewals under the extant provisions. Accordingly, based on the AGI's opinion, further action on second renewal of Tasra Mining Lease will be decided.

- Delay in Grant of Environment Clearance for Kalwar-Nagur Iron Ore Mining Lease of Bhilai Steel Plant.

The issue of grant of Environment Clearance(EC) for development of 1MTPA iron ore mine at Kalwar-Nagur lease of Bhilai Steel Plant remains unresolved as MoEFCC was of the view that SAIL has to deposit the NPV of the entire forest land in the lease amounting to ₹96 crore before grant of EC. Whereas, SAIL, being a Government Company, has challenged the matter regarding payment of NPV for entire forest land in a mining lease under Section 2(iii) of Forest Conservation Act before Jharkhand and Chhattisgarh High Courts.

Hon'ble Chhattisgarh High Court pronouncing the judgment on 5th September, 2019 did not decide the legal issues raised in the writ petition and directed SAIL to take a decision about retaining the extent of lease area for future use and deposit the NPV accordingly. Therefore, to protect lease rights for the entire lease area and also to protect the legal basis for non-payment of NPV for entire forest land in a mining lease, SAIL decided to deposit the NPV under protest and challenge the High Court Order dated 5th September, 2019 before the Hon'ble Supreme Court on 25th September, 2019. Consequently, NPV of the entire forest land (938.059 ha) under Kalwar-Nagur mining lease amounting to ₹96.06 crore was paid in CAMPA account on 4th October, 2019. Further, vide letters dated 4th November, 2019 and 30th November, 2019, BSP made requests to Joint Secretary (NCL), MoEFCC for issuance of formal order for grant of Environment Clearance (EC) in terms of the direction issued by Hon'ble Chhattisgarh High Court.

After vigorous efforts, in meetings held with Joint Secretary (NCL) on 2nd January, 2020 and 3rd February, 2020, SAIL was assured of early grant of EC. Further, to expedite grant of EC, matter was taken up with Joint Secretary, MoEFCC and Secretary, MoEFCC vide letters dated 8th May, 2020 and 11th May, 2020, respectively.

Subsequently, with reference to the letter dated 30th November, 2019 by BSP, Director, MoEFCC (NCM) vide letter dated 11th May, 2020 suggested to seek forest clearance for balance un-diverted forest land under the lease before processing of EC proposals for the entire area of lease by MoEFCC. The matter was examined and it was found that Director, MoEFCC suggestion to seek diversion of entire forest land under the mining lease before grant of EC is not reasonable. Therefore, vide letter dated 15th May, 2020, Director, MoEFCC was requested to issue the formal order expeditiously for grant of EC for Kalwar-Nagur in terms of Hon'ble Chhattisgarh High Court direction dated 5th September, 2019 with a mention that mining activities will be confined within diverted forest area of 17 ha under lease area of 938.059 ha.

- Delay in Allocation of Suitable Coking Coal Blocks in lieu of surrendered Sitanala and Parbatpur Coking Coal Blocks

In order to reduce its dependability on imported coking coal, with the intervention of Ministry of Steel, two Coking Coal blocks namely Sitanala and Parbatpur were allotted to SAIL through allotment route on 31st August, 2015 and 23rd March, 2016 respectively. However, due to decrease in the Coal Mining Lease areas for both the coal blocks, the proposals to return the Parbatpur and Sitanala Coal Blocks to Ministry of Coal (MoC) were approved by SAIL Board on 1st March, 2018 and vide letters dated 8th March, 2018 and 12th March, 2018, Nominated Authority, Ministry of Coal, Government of India was intimated about returning of Parbatpur and Sitanala coal blocks respectively, with a request to refund the amount paid including Bank Guarantee submitted by SAIL at the time of allocation of blocks. SAIL had also requested MoC for allotment of potential coking coal blocks in lieu of Parbatpur and Sitanala Coal Blocks in line with NITI Aayog's recommendation.

On account of indigenous coking coal of required quality not being available in sufficient quantity, SAIL is mainly depending on imported Coking Coal and is pursuing the matter through Ministry of Steel for taking up with Ministry of Coal for allocation of suitable coking coal blocks under Government Dispensation route in lieu of surrendered coal blocks.

Meanwhile, allocations of both the coal blocks i.e. Sitanala and Parbatpur have been terminated by Ministry of Coal vide Orders dated 4th October, 2018 and 5th December, 2019 and advised concerned banks to invoke the Bank Guarantees(BGs). In both the matters, SAIL has preferred Writ Petitions before the High Court of Delhi to challenge the respective Orders.

In the matter of Sitanala Coal Block, Hon'ble Delhi High Court declined to pass any interim order. However, Hon'ble Court clarified that if the petitioner prevails in this petition, the consequential direction for refund of the amount collected by invoking the BG will be passed. The matter is sub-judice. However, in the matter

of Parbatpur Coal Block, Hon'ble Delhi High Court directed for maintaining status quo in respect of the BG till the next date of hearing..

On account of the outbreak of Covid-19 pandemic and consequential lockdown, the matter in respect of both the cases could not be placed on scheduled dates and next date of hearing is yet to be informed.

- Delay in reservation of area for Sand Leases at Dungrihat, Het-Kandra ghat, Chasnalla and Tasraghat of river Damodar, district Dhanbad for sand for stowing in captive underground mines.

In the past, captive coal mines had lifted the sand for ongoing stowing activities based on temporary permission granted by the Government of Jharkhand. However, after discontinuation of the same in 2013, the mines had to depend upon private sand leases where supply was irregular. Therefore, to maintain consistency of coal production as well as safety of workmen in underground mines, a request was made on 13th December, 2015 to District Mining Officer, Dhanbad for reservation of sand mining areas at Dungrí Ghat, Het Kandra Ghat, Chasnalla Ghat and Tasra Ghat on the bank of river Damodar for sand stowing of underground mines of Chasnalla and Jitpur which were earlier used by SAIL coal mines.

Consequently, on 25th May, 2017, Government of Jharkhand forwarded the SAIL's proposal for approval of Ministry of Coal(MoC). Further, in response to the query dated 13th November, 2017, information was forwarded by Jharkhand State Government to Ministry of Coal on 27th August, 2018. Since then, the matter is being followed with MoC for early reservation of areas for sand for stowing in favour of SAIL.

- Delay in extension of lease period of Tulsidamar Dolomite Lease by Government of Jharkhand.

Tulsidamar Dolomite Mining Lease was granted on 30th October, 1969 with validity upto 31st March, 2020. SAIL had applied on 29th March, 2019 to Jharkhand Government for extension of lease period beyond 31st March, 2020. Further, vide letters dated 20th May, 2019, 29th July, 2019 and 21st August, 2019, repeated requests were made to extend the lease period under Jharkhand Minor Mineral Rules by incorporating provision of extension of lease period of the mining leases of Government Companies, as done by other State Governments. However, till date no such provisions have been made in Jharkhand Minor Mineral Rules by Jharkhand Government. The mining operations in Tulsidamar Dolomite Lease have been suspended for want of statutory clearances including validity of the leases, which have expired since 1st April, 2020.

- Proposed changes in the Mining Policy with respect to Captive Mines with Steel Manufacturing Companies.

With reference to the news article published in Economic Times dated 4th May, 2020 regarding proposed changes in the mining policy with respect to captive mines with steel manufacturing companies, it was gathered that Ministry of Mines has forwarded a proposal to Prime Minister's Office (PMO) for inter-alia taking back the mines non-operational for more than three years, granted to Public Sector Companies. If the proposal is accepted, it will have far reaching consequences on SAIL, which has thirteen iron ore leases being non-operational for more than three years on account of delay in grant of various statutory clearances. Any such move will not just have far reaching consequences on current operations of the Company, it may also jeopardise the expansion plan to 50 MTPA.

These thirteen leases include five mining leases of Manoharpur Iron Ore Mine (Chiria) and one lease of Rowghat Mine and about 52% of the total iron ore resources available with SAIL, are mainly from these two large mines.

Accordingly, vide letter dated 6th May, 2020, Secretary, Ministry of Steel has been requested for taking up the matter with Ministry of Mines for not considering the proposal to take back the leases non-operational for more than three years, granted to Public Sector Companies.

D. OUTLOOK

The Financial Year 2019-20 ended with outbreak of Covid-19 Pandemic across the Globe, severally affecting economies and industries, with steel industry being no exception to it, and compelling the Governments to enforce nation-wide lockdowns, thereby bringing the economic activities to almost stand still. The IMF has warned that impact of Covid-19 may result into global recession. In this scenario of uncertainty, the steel demand is expected to contract significantly in the Financial Year 2020-21, resulting into production cuts of crude steel. However, with various Governments announcing enormous stimulus packages, it is expected to lead to increase in steel consumption through investment in infrastructure, etc.

With regard to India, subdued demand and oversupply is likely to witness a decline in capacity utilization as well as steel prices in near future. Further, with the consumers deferring their expenditure, the demand from the sectors like white goods, automobile, capital goods, etc., is expected to reduce substantially in first half of Financial Year 2020-21.

E. STRENGTHS and WEAKNESSES

Strengths

- SAIL continues to be among the leading steel producers of the Nation.
- Multi located production units give SAIL an edge over other domestic steel players.
- A large number of new and modernised units after completion of the on-going modernisation and expansion.
- Well established nationwide marketing and distribution network helps in enhancing the reach of SAIL products across the Country.
- Most diversified product range offered by any domestic steel company.
- Availability of land bank at existing Plant/Unit locations for future brown-field expansion.
- Input security - 100 per cent integration in iron-ore.
- Highly qualified professionals with experience in steel making.

Weaknesses

- Dependence on external sources for key input i.e. coking coal leads to exposure of the Company to the market risk.
- Ageing employee mix along with a high manpower cost and relatively low manpower productivity.

F. REVIEW OF FINANCIAL PERFORMANCE

1. FINANCIAL OVERVIEW OF SAIL

SAIL achieved sales turnover of ₹61,024.88 crore during the Financial Year (FY) 2019-20, lower by 7.91% as compared to ₹66,267.30 crore during corresponding period of last year (CPLY). During the FY 2019-20, the Profit before Tax and after Tax is ₹3,170.66 crore and ₹2,021.54 crore as compared to CPLY profit before Tax of ₹3,337.89 crore and Profit after Tax of ₹2,178.82 crore. Although no provision for income tax has been made, the Company has created deferred tax liability of ₹1,073.73 crore. The comparative performance of major financial parameters during the FYs 2019-20 and 2018-19 is given below:

(₹ crore)

Particulars	2019-20	2018-19
Sales Turnover	61024.88	66267.30
Profit before interest, depreciation, exceptional/abnormal items and tax (EBIDTA)	11199.01	10282.87
Less: Interest and Finance Charges	3486.76	3154.92
Less: Depreciation	3755.05	3384.72
Profit after interest, depreciation, but before exceptional/abnormal items and tax	3957.20	3743.23
Abnormal item	-14.78	-15.94
Exceptional items	-771.76	-389.40
Profit(+)/ Loss(-) before tax	3170.66	3337.89
Less: Provision for taxation	1149.12	1159.07
Profit(+)/Loss(-) after Tax	2021.54	2178.82
Other Comprehensive Income	-115.71	259.08
Total Comprehensive Income (+)/Loss(-)	1905.83	2437.90
Net Worth	39777	38152
EBIDTA to Net sales (%)	18.35	15.52
Return (PAT) on Net worth (%)	5.08	5.71
EBIDTA to average capital employed (%)	14.19	15.33
Earnings per share of Rupee 10/- each	4.89	5.27
Debt Equity Ratio	1.36:10	1.18:10
Current Ratio	1.85:10	1.36:10
Debtors' Turnover Ratio (Days)	53	25
Inventory Turnover Ratio (Days)	16.10	6.4
Interest Coverage Ratio(No. of times)	1.83	1.79
Operating Profit Margin(%)	18.35	15.52

As compared to last year, the performance in the FY 2019-20 has declined on account of decrease in Net Sales Realisation of Saleable Steel of 5 Integrated Steel Plants (12%), adverse stock valuation rate impact of ₹800 crore (approx.), adverse techno economic parameters like specific usage of coal/other raw materials, lower CDI rate, higher usage of power, increase in foreign exchange loss, higher stores & spares expenses, repair & maintenance, security expenses, depreciation and interest charges, etc. However, the same has been partially offset by decrease in prices of

imported coking coal, lower salary & wages, decrease in royalty rate of iron ore, improvement in BF productivity, positive impact of rail price settlement for FY 2015-16 to FY 2018-19. Further, there has been one-time gain on valuation of BSP slime, embedded scrap in slag dump at different Plants and sub grade Iron Ore Fines lying at various mines locations.

As compared to CPLY, the increase in number of days in Debtors' Turnover Ratio was mostly on account of increase in dues from Indian Railways owing to budget constraints. The inventory levels have increased mainly due to market slowdown during the first seven months of the financial year and impact of Covid-19 lockdown in March, 2020. Increase in Current Ratio is mainly on account of increase in debtors and inventory levels. Increase in borrowings has led to higher debt equity ratio in FY 2019-20.

1.2 Initiatives Taken by the SAIL Management

1.2.1 Turnaround Plan

In order to meet the challenges of adverse business environment, a Company-wide turnaround exercise named 'SAIL Uday' was initiated during 2016-17. As a part of the 'SAIL Uday' exercise, SAIL engaged M/s. Boston Consulting Group, a leading global Management Consultant, to study the health of the Company, suggest suitable measures for its turnaround and provide hand holding support and assistance to SAIL for implementation of approved road map for turnaround. The study phase of 'SAIL Uday' culminated in October, 2017 with the submission of the 'Comprehensive Turnaround Roadmap' Report by M/s. Boston Consulting Group. The Roadmap contains recommendations encompassing various functional areas of the Company including Raw Materials, Production, Sales & Marketing, Supply Chain & Logistics, Manpower & Productivity, etc. SAIL is presently in the process of implementation of the recommendations which are expected to contribute towards improvement in the Company's performance.

1.2.2 Cost Control Measures

- Renewed focus on cost reduction and productivity improvement continued during the year through process improvement and R&D efforts. Besides, strong awareness was created at all levels of operations to control cost in all areas of operation.
- Continuous monitoring of procurement of high value items, maximizing use of available indigenous coal, maximising use of in-house engineering shops, sale of idle assets, reduction in ocean freight and optimising procurement through centrally purchased items, including negotiations with suppliers for price reduction, were pursued throughout the financial year 2019-20.
- Coal blend optimisation and improvement in operational parameters such as BF productivity, Specific Energy Consumption, Concast Production have contributed to cost savings during the year.
- The Company introduced the Voluntary Retirement Scheme (VRS) from 1st July, 2020 to 31st July, 2020 through which 426 number of employees separated from the services of the Company.

1.2.3 Marketing

Your Company has taken a number of initiatives during the Financial Year 2019-20 aimed at sustaining and consolidating its position as the leading steel producer of the Country.

Further, with a view to widening the options that the Company makes available to customers and to meet their needs for customized or specific application steels, a number of new products were developed in 2019-20, including the following:

- At Rourkela Steel Plant, DIN Grade (Equivalent BIS Grade IS 2062 E350C with wear resistance properties) plates have been developed for LHB coaches of Railways.
- Customised IS 2062 E410C plates have been developed for the auto sector. These customised plates developed for hot forming application at customers' end, retain the required strength level even after hot forming process.
- BQ plates of ASTM 537 Class 1 (Normalized Rolled) giving equivalent properties of furnace normalized, have also been developed at Rourkela Steel Plant for Boiler applications.
- Ship building plates of IRS Gr B have been developed at Bokaro and Bhilai Steel Plants for Ship building applications.
- At Bokaro Steel Plant, High Strength CR coils like IS 513 ISC390W and ISC440W, ISC410LA have been developed for supply to two wheeler part manufacturers in the auto sector.
- At IISCO Steel Plant, special grades WRC in grades SAE 15B 25 & SAE 1006 EN 8 D were developed, apart from High Carbon and Aluminium Killed grade. Besides the usual efforts to enhance sales, your Company has taken a number of initiatives to improve sales and market presence which, inter-alia, include the following:
- In order to help build awareness and acceptance of steel usage in rural areas, SAIL has an ongoing rural outreach programme "Gaon Ki Ore". Under the campaign, 180 workshops have been conducted during the financial year 2019-20 across the Country working with village level public decision makers, opinion makers, masons, builders, etc.
- Your company has launched its reinforcement bar brand "SAIL-SeQR". This

brand is being promoted as better quality steel for safer homes. This brand is focused to enhance retail presence of SAIL with special emphasis on rural penetration. In the first year of launch, the Company has produced about 2 lakh tonnes of "SAIL SeQR" reinforcement bars. It has been decided to retail "SAIL SeQR" through the 2-Tier distributor system to meet the quality expectations of the retail sector and to build up the brand image. Comprehensive distribution and promotion plan has been drawn up for sales of SAIL SeQR to Retail customers.

- Your company has continued the thrust on the "NEX" brand of structurals, assuring improved performance. Efforts have been made to increase usage of "NEX" brand of structural through workshops and interactions amongst Designers, Architects, Engineers in Government and Private sectors.
- In order to popularise and enhance usage of steel in structural designs, an innovative campaign has been undertaken in premier Engineering colleges including IITs, NITs across the Country. The inputs provided are beyond the traditional course and are aimed to encourage steel structural for design amongst academia and future engineers.
- In order to introduce customers to the advantages offered by SAIL's new production facilities, dedicated cross functional teams have been formed for marketing products from the new mills at our Steel Plants at Burnpur, Durgapur, Rourkela and Bokaro. These teams have engaged with new market segments in order to achieve a mutual understanding of end user requirements as well as production, performance and testing parameters.

With a view to explore alternative modes of transportation of materials, coastal movement of materials was made from Bokaro to Chennai through Haldia.

Your company has the largest marketing network among all steel producers in the Country. As on 1st April, 2020, SAIL's functional network of marketing offices consists of 37 Branch Sales Offices, 10 active Customer Contact Offices, 23 Departmental Warehouses and 21 functional Consignment Agency yards. Marketing efforts are further supplemented through SAIL's Retail Channel that reaches the products of mass consumption to remote corners of India.

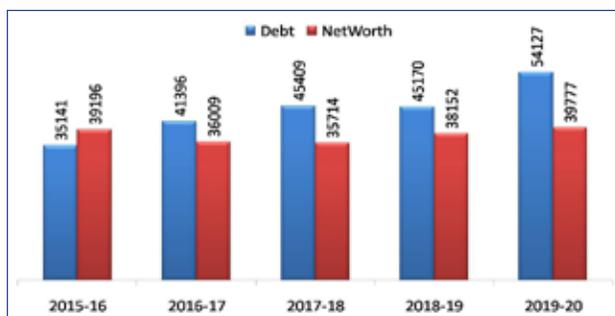
SAIL has an extensive dealership network comprising of more than 2300 dealers spread across the Country. With 33 Distributors already in place in the 2-tier distribution network as on 1st April 2020, this channel of retail sales is being further strengthened. This huge network spread across the Country helps in meeting the requirements of a wide range of customers spread through length and breadth of the Country. Total sales to distributors in the financial year 2019-20 has shown significant growth of over the previous year.

Some other initiatives undertaken by your Company include launching of Incentivisation Scheme for MSMEs to promote Local Industries based in and around our Integrated Steel Plants.

As an environmentally and socially conscious Company, with a view to improving the air quality and reducing pollution, a drive for planting of saplings in the warehouses have been undertaken.

1.3 Funds Management

There is increase in the borrowings of the Company from ₹45,170 crore as on 31st March, 2019 to ₹54,127 crore as on 31st March, 2020 in line with INDAS. The debt equity ratio of the Company as on 31st March, 2020 is 1.36:1 as compared to 1.18:1 in the previous year. The interest and finance charges on operation account during the current year at ₹3,486.76 crore are higher by ₹331.84 crore over CPLY. The Net-worth of the Company has increased from ₹38,152 crore as on 31st March 2019 to ₹39,777 crore as on 31st March 2020. M/s. CARE Ratings, M/s. India Ratings and M/s. Brickwork Ratings, RBI approved credit rating agencies, assigned 'CARE AA- Outlook: Negative', 'India Ratings AA- Outlook: Negative' and 'BWR AA Outlook: Negative' ratings respectively for SAIL's long-term borrowing programme. The trend of borrowings and Net-worth is given as under:



1.4 Contribution to SAIL Gratuity Trust

Based on the contribution made by the Company to SAIL Gratuity Trust, the fund size has grown to ₹6,357.62 crore as on 31st March, 2020, net of settlement done towards payment of Gratuity.

2. ANALYSIS OF THE FINANCIAL PERFORMANCE OF THE COMPANY

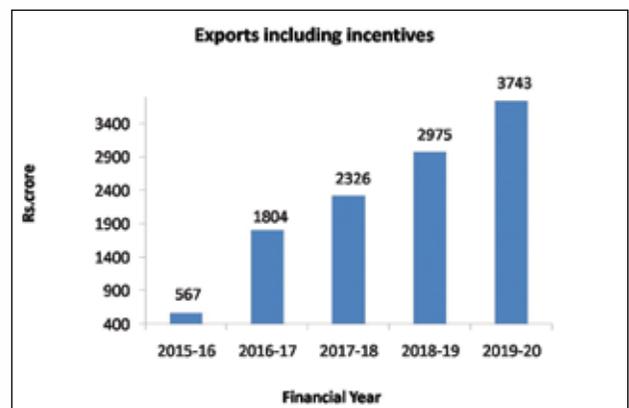
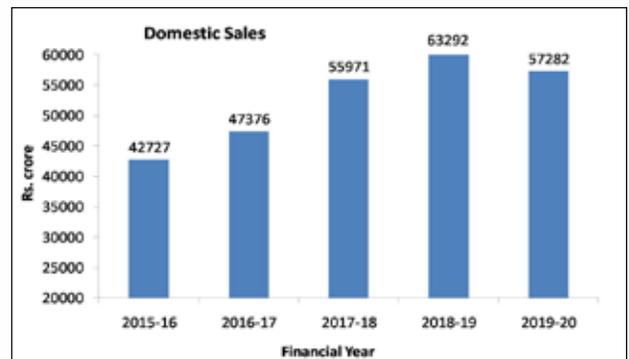
2.1 Revenue from Operations

a) Sale of Products

(₹ crore)

Particulars	FY 2019-20	FY 2018-19	Change %
Sales of Saleable Steel Products	59298.35	62541.86	-5.18
Sales of Other Products	1726.53	3725.44	-53.66
Total Sales Turnover	61024.88	66267.30	-7.9
Net Sales Turnover	61024.88	66267.30	-7.9

b) Trend of Domestic Sales and Exports



The Company catered to almost the entire gamut of the mild steel business namely, Flat Products in the form of Plates, HR Coils/Sheets, CR Coils/Sheets, Galvanised Plain/Corrugated Sheets and Long Products comprising Rails, Structurals, Wire-Rods and Merchant Products. In addition, Electric Resistance Welded Pipes, Spiral Welded Pipes and Silicon Steel Sheets formed part of the Company's rich product-mix. The product category-wise sales turnover during the FY 2019-20 is given as under:

Products Category	% of Sales value
Saleable Steel	
Flat Products (including Pipes & Electrical Sheets) (a)	44
Long Products (b)	47
Integrated Steel Plants – Mild Steel (c = a + b)	91
Alloy & Special Steel Plants - Alloy & Special Steel (d)	4
Total Saleable Steel (e = c + d)	95
Secondary Products (Pig Iron, Scrap, Coal Chemicals, etc.) (f)	5
Total (g = e + f)	100

c) Sale of Services - Service Charges

(₹ crore)

FY 2019-20	FY 2018-19	Change %
22.89	28.53	-19.77

Revenue from sale of services decreased by about ₹5.64 crore during the current year.

d) Other Operating Revenues

(₹ crore)

FY 2019-20	FY 2018-19	Change %
612.78	671.48	-8.74

Other operating revenues decreased by about ₹58.70 crore over previous year primarily on account of lower realisation from sundries.

2.2 Other Income

(₹ crore)

FY 2019-20	FY 2018-19	Change %
985.22	532.82	84.91

Other income increased by about ₹452.40 crore over previous year mainly due to increase in interest income from customers and bank deposits, dividend from investments and recovery of liquidated damages.

2.3 Expenditure

(₹ crore)

Particulars	FY 2019-20	FY 2018-19	% Change
Raw Materials Consumed	29212.87	32291	-9.53
Employee Remuneration & Benefits	8781	8830	-0.56
Finance Cost	3487	3155	10.51
Depreciation	3755	3385	10.94
Other Expenses	19023	18829	1.03

During the FY 2019-20, the decrease in raw materials cost was on account of reduction in input prices, particularly of imported coal. During the year, the Employees' Remuneration & Benefits have decreased mainly due to reduction in manpower numbers on account of natural separation and voluntary retirement scheme. Higher finance cost was due to increase in borrowings and increase in depreciation was due to capitalization of new facilities. The increase in other expenses was on account of increase in the cost of stores & spares, repairs & maintenance, power & fuel, handling expenses, security expenses, etc.

2.4 Contribution to Exchequer

During the Financial Year 2019-20, SAIL contributed ₹12,154 crore to the national exchequer by way of payment of taxes and duties to various government agencies.

2.5 Non-Current / Current Assets

(₹ crore)

Particulars	2019-20	2018-19	% change
NON CURRENT ASSETS			
(a) Property, Plant and Equipment	65369	59907	9.12
(b) Capital Work-in-Progress	8752	16014	-45.35
(c) Right of use Asset	2205		
(d) Investment Property	1	1	0.00
(e) Intangible assets	1443	1451	-0.55
(f) Financial Assets			
(i) Investments	1585	1585	0.00
(ii) Trade Receivables			
(iii) Loans	665	564	17.91
(iv) Other Financial Assets	447	258	73.26
(h) Deferred Tax Assets (Net)	2079	2898	-28.26
(i) Non current tax assets (net)	152	154	-1.30
(j) Other non-current assets	1481	1357	9.14
TOTAL NON CURRENT ASSETS	84179	84189	-0.01

(₹ crore)

Particulars	2019-20	2018-19	% change
CURRENT ASSETS			
(a) Inventories	23747	19442	22.14
(b) Financial Assets			
(i) Trade Receivables	8812	4495	96.04
(ii) Cash and cash equivalents	153	35	337.14
(iii) Bank balances other than (ii) above	210	185	13.51
(iv) Loans	50	53	-5.67
(v) Other Financial Assets	2189	2161	1.30
(c) Current tax assets (net)			
(d) Other Current Assets	5730	5867	-2.34
(e) Assets classified as held for sale	27	11	145.45
TOTAL CURRENT ASSETS	40918	32249	26.88
TOTAL ASSETS	125098	116438	7.44

- Property, Plant & Equipment increased by ₹5,462 crore and the capital work-in-progress decreased by ₹7,262 crore mainly due to capitalization of new facilities and various capital schemes in steel Plants.
- Other Non-Current Assets increased by ₹125 crore.
- The inventories increased by ₹4,305 crore mainly on account of valuation of sub grade iron ore fines.
- Increase in trade receivables was by ₹4,317 crore mainly on account of dues outstanding from Indian Railways
- Other Current Assets decreased by ₹137 crore.

2.6 Non-Current/ Current Liabilities

(₹ crore)

Particulars	2019-20	2018-19	% change
Non-Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	34560	30803	12.2
(ii) Trade Payables	7	7	0.0
(iii) Other Financial Liabilities	1296	1331	-2.6
(b) Long Term Provisions	4109	4295	-4.3
(c) Deferred tax liabilities (net)			
(d) Other non-current liabilities	398	253	57.3
Total Non Current Liabilities	40370	36689	10.0
Current Liabilities			
(i) Borrowings	16641	10631	56.5
(ii) Trade Payables	6321	7258	-12.9
(iii) Other Financial Liabilities	13732	14693	-6.5
(b) Other current liabilities	5757	6706	-14.2
(c) Provisions	2322	2309	0.6
(d) Current Tax liabilities (net)	180		
Total Current Liabilities	44952	41597	8.1
TOTAL (Current + Non Current Liabilities)	85322	78286	9.0

- Long term borrowings increased by 12% mainly due to funds being blocked in inventory and debtors including Railways.
- The short term borrowings has increased by ₹6,010 crore due to increase in debtors by ₹4,317 crore mostly on account of increase in dues from Indian Railways as well as due to market slowdown.

3. PLANT-WISE FINANCIAL PERFORMANCE (PROFIT BEFORE TAX)

(₹ crore)

Plant/Unit	2019-20	2018-19
Bhilai Steel Plant (BSP)	1799.03	509.37
Durgapur Steel Plant (DSP)	-441.79	278.62
Rourkela Steel Plant (RSP)	-409.20	1472.21
Bokaro Steel Plant (BSL)	48.44	1916.49
IISCO Steel Plant (ISP)	-1091.69	-402.05
Alloy Steels Plant (ASP)	-98.78	-40.64
Salem Steel Plant (SSP)	-345.58	-259.00
Visvesvaraya Iron & Steel Plant (VISP)	-74.64	-75.72
SAIL Refractory Unit (SRU)	48.74	50.71
Chandrapur Ferro Alloys Plant (CFP)	-22.37	11.20
Raw Materials Division/Central Units	3758.50	-123.30
SAIL: Profit Before Tax (+)/Loss(-)	3170.66	3337.89

G. MATERIALS MANAGEMENT

A number of initiatives were taken to reduce cost of inputs and improve the performance of materials management, some of which are summarized as under:

- Procurement on GeM Portal: SAIL has signed an MOU with Government e-Marketplace (GeM) on 17th July, 2019 for procurement of Goods & Services on GeM Portal. By virtue of the MOU, GeM deployed GOTT (GeM Organisational Transformation Team) with effect from 23rd December, 2019 for enhancing procurement of Goods & Services on GeM Portal. SAIL has procured Goods worth ₹28.90 crore in the FY 2019- 20 as against an amount of ₹2.69 crores incurred during 2018-19.
- Procurement: E-tendering using SRM/EPSS platform increased from 91% to more than 97% on Y-o-Y basis.
- Automatic Acceptance/ Return of EMD: SAIL has implemented automatic acceptance/ return of EMD at Rourkela Steel Plant (RSP) and has signed an Agreement with ICICI Bank for rendering this service. Action to implement similar system in other Plant/Units of SAIL has already been initiated.
- Systems Improvement: SAIL has revised Purchase/ Contract Procedure in 2020 as PCP – 2020 and have e-published it the intra-website of the Company after incorporating recent provisions of procurement on GeM Portal, revised provisions of Public Procurement Policy, recent Office Memoranda/ Guidelines issued by Ministry of Steel, Department of Public Enterprises, MSME and Make in India Policy. The document has been revised to bring more clarity in procurement process.

H. FOREIGN EXCHANGE CONSERVATION

SAIL's imports are large as compared to the exports, and therefore, the foreign exchange has a larger impact on the Company in terms of the foreign exchange outgo, affecting the Country's foreign exchange reserves.

It has been our endeavour to minimize the imports through domestic substitution wherever possible, and also emphasise on exports. As a result, gradually the Company's export of finished products have been on the increasing trend. One of the major raw materials which SAIL has been importing is Coking Coal. Efforts are being made to use a blended coal mix with increased indigenous coal, which would lead to reducing the dependence on the Imported Coking Coal in order to reduce the outflow of precious foreign currency. Further, measures are being taken to expand the basket/ pool of suppliers for imported inputs/raw materials. With the Government of India announcing that there will not be any Global tender for projects up to ₹200 crore, the domestic participants shall get an opportunity, thereby, resulting in conserving of Foreign Currency. In addition to this, the Company has taken up various initiatives to indigenise the procurement of raw materials and other inputs to the extent they become available to the Company at the commercially acceptable prices/costs and commensurate with the requirements of the technologies adopted by the Company.

I. PROJECT MANAGEMENT

AMR SCHEMES

Besides Modernisation and Expansion Projects, the Addition, Modification & Replacement(AMR) Schemes have also been taken up which are required for management of existing operations and primarily focuses on improving the current level of efficiency and output in incremental measures. AMR Schemes are undertaken for improving or revamping of existing facilities for sustaining the existing operations, balancing / debottlenecking of production processes, improvement energy & other resource consumption / services / safety and environment. Replacement includes mostly replacing the existing Plant & Equipment / facility with better performance Plant & Equipment / facility. Accordingly, a number of AMR schemes costing around ₹7,500 crore were under implementation during financial year 2019-20 in different

Plants of the Company as under:

- Construction of permanent Barracks at 21 locations for Rowghat Deposit, Upgradation of Stoves for Blast Furnace-4, Installation of Cast House Defuming System in Blast Furnace No.7, Setting up of Static facility for Environmentally Sound Management of Polychlorinated Biphenyls and Installation of Electro Static Precipitators as replacement of Multi Cyclones for all 4 nos. of Sinter Machine at Sinter Plant –II and Treatment & Cycling of Waste Water of Outlet-C at Bhilai Steel Plant.
- Installation of a new Rotary Hearth Reheating Furnace at Wheel & Axle Plant, Power Evacuation for 2x20 MW New Power Plant, Replacement of Converter shells together with Bottom Stirring System & Installation of Secondary Emission Control in all the three Converters of SMS and Procurement of One no. Steam Turbine Rotor Assembly for Turbo-Blower Nos. 1-4 in Old Power Plant at Durgapur Steel Plant.
- Installation of New Hot Strip Mill and Power evacuation at 220kV from M/s. NSPCL to MSDS-IV at Rourkela Steel Plant.
- Provision of Hydraulic Mudgun cum Drill Machine for Blast Furnace -1, New Sinter Plant, Modernization of Steel Melting Shop -I, Upgradation of Stoves of Blast Furnace No.1, Rebuilding of Coke Oven Battery-8, Up-gradation of 6 nos. of Electro Static Precipitators of Lime Kiln, Replacement of Battery cyclones with Electro Static Precipitators in Sinter Plant and Development of alternate system for drawal of raw water from Damodar River from BSL & Township at Bokaro Steel Plant.

Further, out of the above, following projects worth about ₹4,100crore have been completed during the year 2019-20:

- New HSM at Rourkela Steel Plant.
- Upgradation of Stoves of BF-1 at Bokaro Steel Plant.
- Provision of Hydraulic Mud Gun and Drilling Machine at BF-1 at Bokaro Steel Plant.
- Converter of SMS-I at Bokaro Steel Plant.
- Installation of new Rotary Hearth Reheating Furnace at Wheel & Axle Plant in Durgapur Steel Plant.

J. IN-HOUSE DESIGN & ENGINEERING

Centre for Engineering & Technology (CET), the ISO 9001:2015 certified in-house design, engineering and consultancy Unit of SAIL caters to the area of projects required for modernization and expansion growth of the Company by embracing state of the art technology, practicing strong ethics and placing high levels of emphasis on customer satisfaction. Retaining its competitive edge through innovation, CET is always exploring ways to improve the business processes and services in areas covering mining, coal coke & chemicals, iron & sinter making, steel making, finishing mills and environmental projects. Special emphasis, in the recent past, has been in mineral beneficiation, iron ore pelletisation, material handling, power plant, slag granulation plant, blast furnace stoves, recycling of waste water for zero liquid discharge, automation and related areas. The current major projects cover many brownfield as well as greenfield projects in its order book which include MDO at Tasra coking coal mines, MDO at Taldih, Installation of Coke Oven Batteries, SMS-I, Caster, LF at BSL, New Hot Strip Mill at RSP, Installation of New Bar Mill, Converter Shell changing at DSP & BSP, RH plant at BSL, BSP, Oxygen Plant at RSP, BSL, Power evacuation project at DSP, RSP, etc.

K. CONSULTANCY SERVICES

Your Company has one of the largest pool of qualified and experienced engineers, technologists, and professionally qualified HR & training experts. Based on its large and varied expertise and experience acquired over the last six decades, SAIL, through SAIL Consultancy Division (SAILCON) provides design, engineering, training, technical and project management consultancy services in Iron & Steel and related areas and offers a wide range of services to clients globally. SAILCON is an ISO 9001:2015 certified quality organization and has actively undertaken ventures by drawing its strength from the extensive and varied expertise embedded in SAIL Plants and Units and served its esteemed customers as per their requirements.

Besides offering technological know-how, SAILCON also offers a wide range of training programmes including those involving development of skill and expertise in the related fields. Apart from training in the technical areas, SAILCON also provides training related to HR, Implementation of Quality Management System and various Management Development Programmes. Technical and Management Training services are its forte and these services have been availed of by several organizations in private and public sector within India and abroad.

"SAILCON" has executed assignments within India and abroad covering countries like Egypt, Saudi Arabia, Iran, Qatar, Thailand, Nepal, Philippines etc.

During the Financial Year 2019-20, SAILCON laid enhanced focus on taking up environment management related assignments.

L. RESEARCH & DEVELOPMENT

Research and Development Centre for Iron & Steel (RDCIS) of the Company is India's premier research organization in the field of ferrous metallurgy. Recognizing that

development and assimilation of new technologies & process innovations are basic tenets for sustainable growth, SAIL has given thrust for its R&D efforts through its well equipped R&D Centre located at Ranchi. It has more than three hundred diagnostic equipment and adequate pilot facilities under fifteen major laboratories. The Centre undertakes research projects encompassing the entire spectrum of iron & steel starting from raw materials to finished products. In the year 2019-20, 70 R&D projects and 50 projects were completed with substantial benefits to the organization.

Two projects are being pursued with assistance from the Ministry of Steel: (a) Indigenous development of model based breakout prediction system for Continuous Casters, and (b) Development of automation system for optimum coal blending at coal handling plant of coke oven batteries.

Apart from Annual Performance Plan projects, 22 Short Term Assignments (STAs) were also carried out by RDCIS to investigate technical issues and suggest remedial measures for key concern areas in the Coal, Sinter Plant, Blast furnace, Steel, Refractory and Rolling Mills, etc.

RDCIS also pursues pioneering work in the area of development of niche products as per market requirements aiming at superior performance based on application. During the year 2019-20, eighteen products have been developed and some of the noteworthy products include resistant steels for Indian construction segment, Boilers and Pressure Vessels, Auto Segments, EME, TLT sector, etc.

In its pursuit for excellence in various research fields, RDCIS enters into collaboration mode of research in specific areas with renowned research institutions and academia. During the year 2019-20, Collaboration assignments have been pursued with institutions and PSUs such as Indian Oil R&D; C-DAC, Thiruvananthapuram; Central Building Research Institute, Roorkee; NML Jamshedpur.

The efforts of RDCIS engineers and scientists have culminated in filing of 15 patents and 7 copyrights (in association with SAIL Plants) during 2019-20. As many as 56 technical papers (26 international) were presented in seminars/symposia/conferences and 74 papers (16 international) were published in prestigious journals.

SAFETY

SAIL Safety Organization (SSO) monitors and guides the Safety Promotional, and Fire activities undertaken at different steel Plants/Units/Mines/Stockyards. To accomplish the above mentioned functions, SSO formulates and prepares appropriate Safety Policies, Procedures, Systems, Action Plans, Guidelines, etc. and follows up for their implementation and thereby helps in providing Accident-free Work Environment. Consistent efforts are also being made by SSO for competence building in the area of Safety Management through HRD interventions covering Heads of Shops, Line Managers, Safety Personnel and Trade Union leaders.

A multi-disciplinary Safety Engineering Departments exists in each of the Steel Plants and Mines to look after their safety needs. The emphasis is now on Systematic Approach to Safety Management. SSO is also managing the secretariat of the Joint Committee on Safety, Health & Environment in the Steel Industry (JCSSI), a bipartite forum which addresses Steel Plant Safety, Health & Environment issues with active involvement of management and central & plant level trade unions and provides guidelines to the member organizations. Prioritising safety foremost, the Company

has engaged Safety Consultant for Safety Culture Transformation, and a pilot project is in progress in Bhilai Steel Plant, and to be followed up with in other Steel Plants/Units. Acknowledging the importance of Safety, the activities and measures undertaken are reviewed at the highest level by the Board Sub Committee on Health, Safety & Environment.

M. INTERNAL CONTROL SYSTEMS & THEIR ADEQUACY

The Company has adequate and efficient Internal Control Systems for achieving the following business objectives of the Company:

- Efficiency of operations.
- Judicious utilization and protection of resources.
- Accuracy and promptness of financial reporting.
- Compliance with the laid down policies and procedures.
- Compliance with various laws and regulations.

In SAIL, Internal Audit is a multi-disciplinary function which reviews, evaluates and appraises various systems, procedures/policies of the Company and suggests meaningful and useful improvements. It helps Management to accomplish its objectives by bringing a systematic and disciplined approach to improve the effectiveness of risk management towards good corporate governance.

The Company is constantly taking measures to make the Internal Audit function more effective. The Internal Audit is subject to overall control environment supervised by Board Level Audit Committee, providing independence to the Internal Audit function, emphasizing transparency in the systems and internal controls with appropriate skill-mix of internal audit personnel, etc. Audit Plan based on identification of key-risk areas with thrust on system/process audits and benchmarking of the best practices followed in the Plants/Units, is made and approved by Audit Committee of the Board so as to achieve Cost Saving and Revenue Generation, Review of Inventory and Idle Assets, Systems Improvement, Compliance with Policies and Procedures, etc. Training and development of Internal Audit Executives, bringing awareness amongst auditees, converging on the pro-active role of internal audit remained other focus areas during the year. The Audit Committee in its meetings with the Company's Statutory Auditors also ascertains their views on the adequacy of internal control systems in the Company and their observations on financial reports.

The Internal Audit system is supplemented by well-documented Policies, Guidelines and Procedures and regular reviews are being carried out by the Internal Audit Department. The reports containing Significant Audit Findings along with settlement/updated status are periodically submitted to the Management and Audit Committee of the Board.

CAUTIONARY STATEMENT

Certain statements in the Management Discussion and Analysis, describing the Company's objective, projections and estimates are forward looking statements and progressive within the meaning of applicable Laws and Regulations. Actual results may vary from those expressed or implied, depending upon economic conditions, Government Policies and other incidental factors.