



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 3.8% in 2017, as estimated by IMF in its April, 2018, World Economic Outlook update. The growth momentum increased in 2017, with growth in advanced economies (estimated 2.3% growth in 2017) as well as in emerging market and developing economies (estimated 4.8% growth in 2017).

The strong growth momentum is expected to continue in 2018 and 2019, driven mainly by growth in advanced economies, expectation of favourable financial conditions and acceleration in demand. Growth in emerging market and developing economies is also expected to strengthen further. Global economic activity is forecast to grow by 3.9% in 2018 as well as 2019. Overview of World Economic Outlook Projections is as under:

World Economic Outlook Projections (Percentage Change)

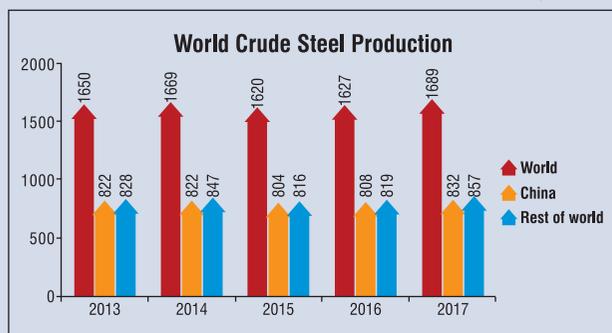
	Year Over Year			
	Estimate		Projections	
	2016	2017	2018	2019
World Output	3.2	3.8	3.9	3.9
Advanced Economies	1.7	2.3	2.5	2.2
United States	1.5	2.3	2.9	2.7
Euro Area	1.8	2.3	2.4	2.0
Japan	0.9	1.7	1.2	0.9
Emerging Market and Developing Economies	4.4	4.8	4.9	5.1
China	6.7	6.9	6.6	6.4
India	7.1	6.7	7.4	7.8
Brazil	-3.5	1.0	2.3	2.5
Russia	-0.2	1.5	1.7	1.5

Source: IMF World Economic Outlook Update, April 2018

World Steel Scenario

In 2017, Global Crude Steel production increased by 3.8% to reach 1689.4 million tonnes (MT) compared to 2016. All major steel production regions registered an increase in Crude Steel output, except Japan where output decreased marginally.

Asia accounted for 1152.2 MT of Crude Steel production in 2017, up by 3.5% vis-à-vis 2016. China continued to dominate World Crude Steel production with an output of 831.7 MT, at a growth of 3.0% over 2016. In 2017, China decreased its share of Global Crude Steel Production to 49.2% compared to 49.6% in 2016. India, which is currently the world's third largest steel producing



nation, increased its annual Crude Steel Output by 6.2% to reach 101.4 MT in 2017. Japan produced 104.7 MT of Crude Steel in 2017, a marginal decline by 0.1% compared to 2016. South Korea's Output of Crude Steel stood at 71.0 MT in 2017 at a growth of 3.5%. Crude Steel Production in the US in 2017 stood at 81.6 MT, up by 3.9% over 2016. The EU (28) also saw growth in Crude Steel output by 3.9% to reach 168.4 MT in 2017.

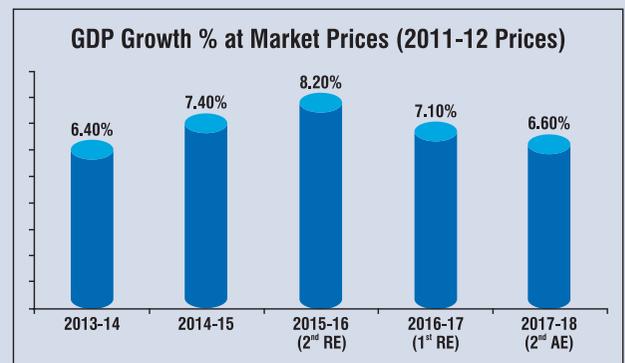
Top 10 Steel Producing Countries

Rank	Country	2017 (MT)	2016 (MT)	% Change
1	China	831.7	807.6	3.0%
2	Japan	104.7	104.8	-0.1%
3	India	101.4	95.5	6.2%
4	United States	81.6	78.5	3.9%
5	Russia	71.3	70.5	1.1%
6	South Korea	71.0	68.6	3.5%
7	Germany	43.4	42.1	3.1%
8	Turkey	37.5	33.2	13.0%
9	Brazil	34.4	31.3	9.9%
10	Italy	24.1	23.4	3.0%

World Steel Association has forecast that global steel demand will increase by 1.8% in 2018 and reach 1616.1 MT, compared to an estimated demand of 1587.4 MT in 2017. Steel demand in China is expected to remain stable in 2018 at 736.8 MT. In the emerging and developing economies excluding China, steel demand is forecast to grow by 4.9% in 2018.

Indian Economic Environment

GDP growth for the year 2017-18 has been estimated at 6.7% at constant market prices as per the provisional estimates of annual national income by the Central Statistics Office (CSO), compared to 7.1% in 2016-17. The advance estimates have pegged agriculture and allied sectors growth at 3.4%, industry sector at 5.5% and services sector at 7.9% for 2017-18. The estimated GDP growth rate during Q-4 of Financial Year 2017-18 was 7.7% compared to 6.1% in the corresponding quarter of the previous year, with growth in agriculture (4.5%), manufacturing (9.1%) and construction sectors (11.5%) contributing to overall growth in Q-4 of Financial Year 2017-18.



(RE: Revised Estimates, AE: Advance Estimates)

The Index of Industrial Production (IIP) growth during 2017-18 is estimated at 4.3% compared to 4.6% growth during same period last year. IIP growth rates for mining, manufacturing and electricity sectors for 2017-18 are at 2.3%, 4.5% and 5.4% respectively. In the same period, while consumer durables registered a modest growth of 0.7%, consumer non-durables registered a growth of 10.4%. Capital goods and Infrastructure/Construction goods registered growth of 3.9% and 5.6% respectively.

Fiscal deficit for the Financial Year 2017-18, as per revised estimates (RE) stood at 3.5% of GDP. The budget estimate of fiscal deficit for 2018-19 has been set at 3.3% of GDP.

Indian Steel Scenario

According to World Steel Association, India produced 101.4 MT of Crude Steel during calendar year 2017, up by 6.2% over 2016. As per Joint Plant Committee (JPC), production of Crude Steel during Financial Year 2017-18 stood at 102.3 MT, at a growth of 4.5% over same period last year. Finished steel production (non alloy + alloy/stainless) also registered a growth of 3.1% to reach 105 MT during Financial Year 2017-18, compared to same period last year. Exports of total finished steel increased by 16.7% to 9.6 MT during Financial Year 2017-18 over last year, while imports increased by 3.5% to 7.5 MT.

Consumption of total finished steel in India stood at 90.7 MT in Financial Year 2017-18, up by 7.9% over same period of last year. Demand for finished steel in India is expected to grow at 5.5% in 2018, as projected by World Steel Association.

B. OPPORTUNITIES & THREATS FOR SAIL

Opportunities:

- India is one of the fastest growing steel consumers in the World and is all set to become the 2nd largest steel consumer in the World in the coming years.
- Options to outsource non-core activities viz. township, schools, hospitals, etc.
- Leveraging the benefits of Modernization and Expansion Plan to improve product quality and operational efficiency, and reduce cost of production.

Threats

- Stringent environment norms for Steel Plants and Mines.
- Naxalite affected mining areas.
- Increased competition from domestic as well as Global steel companies.
- Rake availability from the railways for inward and outward movement of raw materials and finished goods.

C. RISKS AND CONCERNS

- Internally, there have been deficiencies in the form of delays in the ramping up of production from the new Units due to initial stabilization factors. Further, higher capital related charges on account of incremental Depreciation and Interest of new facilities have also increased expenses.
- In order to determine Carrying Capacity of mining leases of such mines which are under operation in Saranda Forests in Jharkhand, Ministry of Environment, Forest and Climate Change (MoEFCC) is in the process of finalisation of report on Mining Plan for Sustainable Mining (MPSM). As per the draft MPSM, the leases of Manoharpur (Chiria) ore mines falls in Ankua Forest Block, the proposed Critical Biological Hot Spot, and thus, may restrict/prohibit mining in entire Chiria leases. Chiria being the single largest iron ore deposit in the Country, having estimated resources of about 2 billion tonnes is essential for iron ore security of the Steel Plants of the Company. Finalisation of MPSM in aforesaid direction may impact future of Chiria mine of SAIL.
- Bolani Iron Ore Mines consists of two Leases viz. 5.1 Sq. Mile Lease and 6.9 Sq. Mile Lease. The infrastructures in the 6.9 Sq. Mile lease are necessary for sustenance of operation of adjoining 5.1 Sq. Mile lease of Bolani Ore Mines due to geographical location of the Leases. Extension of lease period of the 6.9 Sq. Mile Lease of Bolani Mine in Odisha under MMDR (Amendment Act), 2015 read with notification dated 3rd December, 2015 of Ministry of Mines, Government of India is pending with Steel & Mines Department, Government of Odisha. Extension of lease period for 6.9 Sq. Mile Lease is essential for un-interrupted operation of Bolani Mine.

Government of Odisha issued a "Show Cause" Notice on 17th March, 2017 to SAIL asking as to why the 6.9 Sq. Mile Lease should not be

lapsed for not filing the necessary application for saving the Lease as provided under Rule 28(2) of the erstwhile MCR, 1960. The Company has submitted its reply to the said Show Cause notice on 15th July, 2017 and also attended a personal hearing in the matter on 22nd July, 2017. Final Order of the State Govt. in this regard is still awaited.

- In view of revised Guidelines dated 1st April, 2015, issued by the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, there is a requirement of payment of NPV (about ₹1,100 crore) for entire forest land within mining lease area by 30th March, 2017. SAIL, being a Government Company, the matter has been taken up with MoEFCC for exemption of payment of NPV under the referred Guidelines. As the clarification in this regard was not provided by MoEFCC, therefore, to avoid closure of SAIL mines in Jharkhand on account of non payment of NPV, the Company had approached Hon'ble Jharkhand High Court for relief and Hon'ble Court in its interim Order directed not to take any coercive action against SAIL. Further, Hon'ble High Court in its Judgment dated 27th April, 2017 has observed that "having regard to the nature of the issues involved, this Court is of the opinion that the matter is required to be heard by learned Division Bench of this Court". Hearing of the matter in the Division Bench is yet to start.

D. OUTLOOK

Analysts are upbeat over the expected above normal monsoon and higher GDP growth. The slow pace of public and private sector projects is expected to improve with the Government of India's thrust on infrastructure projects. Further, 'Make in India' initiative has got a boost by a slew of measures aimed at improving the ease of doing business in the Country. Small and medium industry- a major employment generator for the economy- has been liberated to participate in the Nation's development in accordance with its potential. Bold measures by the Government such as improved targeting of subsidy, broadening of the tax base and expected buoyancy in tax revenue are all aimed at achieving the fiscal consolidation which had been an area of concern in the recent past.

E. STRENGTHS & WEAKNESSES

Strengths

- SAIL is one of the largest steel producers in the Country, with a well diversified product portfolio, a robust nationwide marketing network, captive iron ore resources, skilled and highly qualified manpower and a dedicated R&D facility.
- Availability of land bank at existing Plant/Unit locations for future capacity expansion.
- Modernization and Expansion Plan culminating with new and modernised units, newer technology, enhanced product portfolio with more value added products, efficient and more environment friendly operations.
- Highly qualified professionals with experience in steel making.

Weaknesses

- Dependence on external sources for coking coal exposes the Company to market risks.
- Limited captive availability of high quality raw materials.
- High manpower cost and relatively low manpower productivity.

F. REVIEW OF FINANCIAL PERFORMANCE

1. FINANCIAL OVERVIEW OF SAIL

SAIL achieved sales turnover of ₹58,297 crore during the Financial Year 2017-18, which was higher by 19% over last year's turnover of ₹49,180 crore. However, the net sales turnover of ₹56,893 crore was higher by 30% over last year's net sales turnover of ₹43,866 crore. During the Financial Year 2017-18, there was Loss after Tax of ₹481.71 crore as compared to Loss after Tax of ₹2,833.24 crore during the last year, which reflects 83% better performance than last year. The comparative performance of major financial parameters during the Financial Years 2017-18 and 2016-17 is given below:



(₹ crore)

Particulars	2017-18	2016-17
Sales Turnover	58297.26	49180.24
Less: Excise Duty	1403.90	5314.69
Net Sales Turnover	56893.36	43865.55
Profit before interest, depreciation, exceptional/abnormal items and tax (EBIDTA)	5184.37	671.60
Less: Interest and Finance Charges	2822.75	2527.82
Less: Depreciation	3064.92	2679.95
Profit before tax (PBT) before exceptional / abnormal items	-703.30	-4536.17
Exceptional Items :		
Less: Exceptional Item-Voluntary Retirement Compensation	254.20	216.74
Pension Provision Written back	-458.16	0.00
Wage Revision Provision	-110.82	0.00
Other Exceptional Items	288.35	0.00
Less: Abnormal Item-Expenses on temporarily suspended mines	82.07	97.95
Profit (+)/Loss(-) Before Tax	-758.94	-4850.86
Less: Provision for taxation	-277.23	-2017.62
Profit(+)/Loss(-) After Tax	-481.71	-2833.24
Other Comprehensive Income	186.32	-353.60
Total Comprehensive Income (+)/Loss(-)	-295.39	-3186.84
Net Worth	35714	36009
EBIDTA to Net sales (%)	9.11	1.53
Return (PAT) on Net worth (%)	-1.35	-7.87
EBIDTA to average capital employed (%)	8.78	1.27
Earning per share of Rupee 10/- each	-1.17	-6.86
Debt Equity Ratio	1.27:1	1.15:1

As compared to last year, the Loss before Tax of the Company in the Financial Year 2017-18 has reduced mainly due to higher Saleable Steel Production(1.5%), concast production(11%), Saleable Steel Sales(7%), Net Sales Realisation of 5 Integrated Steel Plants(20%), improved product mix, write back of pension provision for the period 1st April, 2015 to 31st December, 2016, write back of wage revision provision of Q4 of Financial Year 2016-17, higher usage of CDI for CDI furnaces, reduction in coke rate, improvement in BF productivity, improvement in energy consumption, reduction in salaries & wages, etc. However, the profitability of the Company has been adversely affected due to provision towards various mining related issues, increase in average imported and indigenous coal prices, increase in consumption of stores & spares, repairs & maintenance, security expenses, higher usage of imported coal in blend due to lower availability of indigenous coal, increase in average rate of purchased power, increase in interest cost and depreciation, etc.

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 program named 'SAIL Uday' was initiated during 2016-17.

The program was taken up with an aim to review and sharpen SAIL's business strategies and processes, build for sustained market leadership and drive the Company towards profitability. As a part of the 'SAIL Uday' program, the Company engaged M/s. Boston Consulting Group (BCG), 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 (BCG). The Roadmap contains over 260 recommendations encompassing various functional areas of the Company including Raw Materials, Production, Sales & Marketing, Supply Chain & Logistics, Man Power & Productivity, etc. The Company has now embarked upon the next phase of "SAIL Uday" program involving implementation of the recommendations which would contribute towards achieving the Company's turnaround.

1.2.2 Cost Control Measures

- Emphasis on cost reduction with improvement in productivity continued during the year through process improvement and efforts by R&D. Awareness was created at all levels to control cost in all areas of operation.
- Strategic actions such as optimizing coal blend, improvement in yields, reduction in coke rate, enhanced concast production, sale of idle assets and maximizing use of in-house engineering shops resulted in enhanced cost reduction during the year.
- During the Financial Year 2017-18, a total of 1269 employees separated from the services of the Company through the Voluntary Retirement Scheme (VRS), 2017. With a view to further rationalise manpower, VRS, 2018 has been implemented w.e.f. 1st May, 2018.

1.2.3 Marketing

The Company took various initiatives during the Financial Year 2017-18 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 2017-18, including the following:

- API grade certification is the international benchmark for steel used in Oil and Gas pipelines. SAIL has developed API X-70 PSL-2 Grade Plates from the New Plate Mill at RSP to meet the demand from the oil sector. Your Company is now certified to produce plates compliant to this critical grade, thereby opening up the lucrative market in oil and gas pipelines.
- As infrastructure grows, more and more steel bridges shall be constructed using specialised steels optimised for this end use. The World's highest railway bridge (the Chenab Bridge in Jammu & Kashmir), is situated where ambient temperatures can go below zero degrees centigrade. The steel structure of the bridge, however, is required to perform without any compromise of safety even at extreme low temperatures. In response to this demanding requirement, your Company developed Customized IS:2062 E 250 C & Customized IS:2062 E 410 C plates, which go beyond the normal grades and guarantee higher strength and higher toughness even at - 20° Celsius.
- In order to meet the needs of our defence forces, your Company has developed Quenched & Tempered Plates under the brand SAIL ARM. These plates can be used for ammunition testing, armour plating, etc.
- Railway Wagons need steel with high strength and toughness. In order to meet requirements for high capacity wagons as per new designs by RDSO, SAIL developed and supplied High Strength plates conforming to quality ISH 5986 Gr. 590R for this critical application.

In order to introduce customers to the advantages offered by SAIL's new product range, the Company formed dedicated cross functional teams for marketing products from the new mills at IISCO Steel Plant, Durgapur Steel Plant, Rourkela

Steel Plant & Bokaro Steel Plant and engaging with new market segments. Seminars, workshops and meetings were organized with end users, architects, structural designers, etc. Visits were exchanged between customers, SAIL Plants, designers and architects in order to achieve a mutual understanding of end user requirements as well as production, performance and testing parameters. These efforts enabled your Company to develop and supply several new grades and products, including commencement of supplies to the highly demanding and high value auto segment. It also enabled to open up potential markets for supply of API X-70 plates to the demanding oil sector and for supply of parallel flange beams to State Electricity Boards.

To enhance its product basket and develop avenues for enhancing value to the customer, a new vertical "Special Initiatives Group" (SIG) has been formed in the marketing department. The SIG has focused on last mile connectivity i.e. bridging the gap between mill products and the customer's end use, and has identified new avenues for creating value such as Re-Bar Processing; Crash Barriers; Precision Pipes; Colour Coated Sheets, etc.

In order to tap the potential of the vast rural market, your Company has taken the initiative of conducting rural workshops to educate rural Indians about usage of steel. In the Financial Year 2017-18, more than 100 locations over 26 States / Union Territories have been covered.

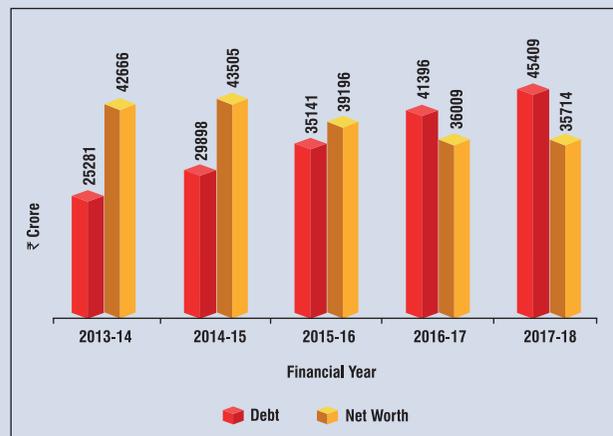
To enhance value to customer, nearly 17,000 MT of steel in specially bundled and packed condition was door delivered directly to customers' site in Bangladesh.

Your Company has one of the largest marketing networks among the steel producers in the Country. As on 1st April, 2018, SAIL's network of marketing offices consists of 37 Branch Sales Offices, 10 Customer Contact Offices, 25 Departmental Warehouses and 22 functional Consignment Agency yards. Marketing effort is further supplemented through SAIL's extensive retail channel comprising of 1837 dealers, including 409 rural dealers that aims to reach the products of mass consumption to remote corners of the Country.

In order to further reach out to the end customer in the Retail Segment through an efficient distribution channel and provide value addition in product, delivery and services to customers, Distributors are being appointed across the Country as part of 2-tier Dealer- Distributor model.

1.3 Funds Management

During the year, the Company continued its thrust on judicious funds management including raising of funds at competitive rates, timely repayment of loans including interest, advance planning and action for future fund raising, etc. to meet the growth objectives. The Company had borrowings at ₹45,409 crore as on 31st March, 2018. The Company has fully hedged the foreign currency risk on Buyers' Credit and repayment of External Commercial Borrowings. The debt equity ratio of the Company increased to 1.27:1 as on 31st March 2018 from 1.15:1 as on 31st March, 2017 due to increase in borrowings as well as reduction in Net-worth during the year. The Net-worth of the Company declined from ₹36,009 crore as on 31st March, 2017 to



₹35,714 crore as on 31st March, 2018. 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.

1.4 Contribution to SAIL Gratuity Trust

The total contribution made by the Company to SAIL Gratuity Trust upto 31st March, 2018 was ₹ 3,349 crore. The fund size has grown to ₹ 6,309 crore as on 31st March, 2018, net of settlement done towards payment of Gratuity.

2. ANALYSIS OF THE FINANCIAL PERFORMANCE OF THE COMPANY

2.1 Revenue from Operations

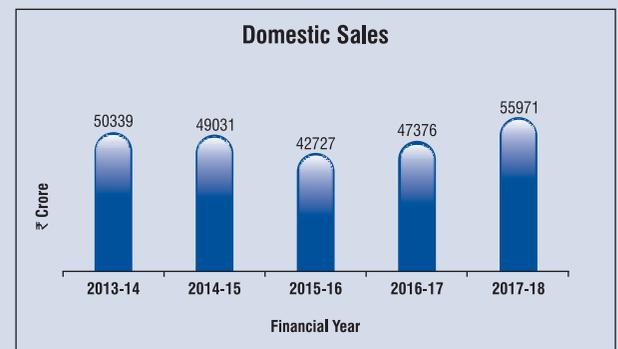
a) Sale of Products

(₹ crore)

Particulars	FY 2017-18	FY 2016-17	Change %
Sales of Saleable Steel Products	55481.04	46653.91	18.92
Sales of Other Products	2816.22	2526.33	11.47
Total Sales Turnover	58297.26	49180.24	18.54
Less: Excise Duty	1403.90*	5314.69	-73.58
Net Sales Turnover	56893.36	43865.55	29.70

*Excise Duty is for the period upto 30th June 2017 which has been discontinued upon implementation of Goods and Services Tax (GST) w.e.f. 1st July 2017. Turnover is net of GST as per the requirement under INDAS.

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, Structural, Wire-rods and Merchant Products. In addition, Electric Resistance Welded Pipes, Spiral Welded Pipes and Silicon Steel Sheets formed part of Company's rich product-mix. The product category-wise sales turnover during 2017-18 is given as under:



Products Category	% of Sales value
Saleable Steel	
Flat Products (including Pipes & Electrical sheets) (a)	51
Long Products (b)	41
Integrated Steel Plants - Mild Steel (c = a + b)	92
Alloy & Special Steel Plants - Alloy & Special Steel (d)	3
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 2017-18	FY 2016-17	Change %
23.56	31.89	-26.12

Revenue from sale of services decreased by about ₹8.33 crore during the current year.

d) Other Operating Revenues

(₹ crore)

FY 2017-18	FY 2016-17	Change %
641.54	554.97	15.60

Other operating revenues increased by about ₹86.57 crore over previous year primarily on account of higher realisation from social amenities and sale of sundries.

2.2 Other Income

(₹ crore)

FY 2017-18	FY 2016-17	Change %
484.45	535.61	-9.55

Other income decreased by about ₹51.16 crore over previous year mainly due to decrease in interest income from customers and term deposits and decrease in dividend income.

2.3 Expenditure

(₹ crore)

Particulars	FY 2017-18	FY 2016-17	% Change
Raw Materials Consumed	26678	21126	26.28
Employee Remuneration & Benefits	8850	8948	-1.10
Finance Cost	2823	2528	11.67
Depreciation	3065	2680	14.37
Other Expenses	16276	14220	14.46

During the year 2017-18, there was unprecedented increase in average imported coal prices and this has affected the raw material prices substantially. Further, indigenous coal prices also increased in line with imported coal prices due to invoking of imported coal price parity by domestic coal companies. 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, royalty and cess, etc.

2.4 Contribution to Exchequer

During the year, SAIL contributed ₹9,295 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	2017-18	2016-17	Change %
Non-Current Assets			
(a) Property, Plant and Equipment	57156	48762	17.21
(b) Capital Work-in-Progress	18395	23275	-20.97
(c) Investment Property	1	1	-3.49
(d) Intangible Assets	1455	1523	-4.46
(e) Financial Assets			
(i) Investments	1491	1395	6.87
(ii) Trade Receivables			
(iii) Loans	451	454	-0.45
(iv) Other Financial Assets	166	262	-36.67
(f) Deferred Tax Assets (Net)	4185	4006	4.48
(g) Non current tax assets (Net)	190	236	-19.30
(h) Other non-current assets	1060	1080	-1.85
TOTAL NON-CURRENT ASSETS	84552	80994	4.39

(₹ crore)

Particulars	2017-18	2016-17	Change %
Current Assets			
(a) Inventories	16997	15711	8.18
(b) Financial Assets			
(i) Trade Receivables	3870	2922	32.46
(ii) Cash & cash equivalents	79	121	-34.30
(iii) Bank balances other than (ii) above	175	168	3.84
(iv) Loans	63	61	3.95
(v) Other Financial Assets	2787	2268	22.89
(c) Current Tax Assets (Net)			
(d) Other Current Assets	5634	4282	31.58
(e) Assets classified as held for sale	33	12	172.19
TOTAL CURRENT ASSETS	29638	25545	16.02
TOTAL ASSETS	114190	106539	7.18

- Property, Plant & Equipment increased by ₹ 8,394 crore mainly due to capitalization of new facilities.
- The capital work-in-progress decreased by ₹4,880 crore on account of capitalization of various capital schemes in steel Plants.
- The Non-current Investments has increased by ₹96 crore primarily due to investment in International Coal Ventures Private Limited, a Joint Venture Company of SAIL.
- Other Non-Current Assets decreased by ₹20 crore.
- The Inventories increased by ₹1,286 crore mainly on account of increase in raw materials inventory due to high quantity and increase of imported coking coal.
- Increase in trade receivables was by ₹948 crore.
- Other Current Assets increased by ₹1,352 crore, mainly on account of Input Tax Credit Receivable under GST law.

2.6 Non-Current/ Current Liabilities

(₹ crore)

Particulars	2017-18	2016-17	Change %
Non-Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	29777	19087	56.0
(ii) Trade Payables	6	7	-18.5
(iii) Other Financial Liabilities	1179	1366	-13.7
(b) Long Term Provisions	3974	3594	10.6
(c) Deferred Tax Liabilities (Net)			
(d) Other Non-Current Liabilities	139	151	-7.9
Total Non-Current Liabilities	35075	24206	44.9
Current Liabilities			
(i) Borrowings	12244	19813	-38.2
(ii) Trade Payables	7540	5219	44.5
(iii) Other Financial Liabilities	14170	12766	11.0
(b) Other Current Liabilities	7142	5607	27.4
(c) Provisions	2304	2915	-20.9
(d) Current Tax Liabilities (Net)	-	5	-100.0
Total Current Liabilities	43401	46324	-6.3
Total (Current+ Non-Current Liabilities)	78476	70530	11.3

- Increase in long term borrowings by 56% was due to replacement of short term borrowings with long term borrowings.
- The short term borrowings decreased by ₹7,569 crore due to repayment of Commercial Paper and repayment of Foreign Currency Buyers' Credit.

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

(₹ crore)

Plant/Unit	2017-18	2016-17
Bhilai Steel Plant (BSP)	645.88	2.07
Durgapur Steel Plant (DSP)	-270.85	-951.16
Rourkela Steel Plant (RSP)	-180.24	-1357.80
Bokaro Steel Plant (BSL)	526.16	-203.07
IISCO Steel Plant (ISP)	-988.55	-1946.39
Alloy Steels Plant (ASP)	-47.46	-33.25
Salem Steel Plant (SSP)	-211.07	-234.99
Visvesvaraya Iron & Steel Plant (VISP)	-108.90	-116.89
SAIL Refractory Unit (SRU)	32.62	19.79
Chandrapur Ferro Alloys Plant (CFP)	19.30	-83.33
Raw Materials Division/Central Units*	-175.83	54.16
SAIL: Profit Before Tax (PBT)	-758.94	-4850.86

*including interest earned on deposits and retained in the books of Corporate Office.

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:

- **Inventory Reduction:** Despite higher volume of purchase of Stores & Spares (increase of about 30% on Y-o-Y basis), inventory holding as on 31st March, 2018 was 7.20 months only, slightly higher than 6.54 months as on 31st March, 2017.

- **Purchase Cost Reduction:** By adopting multi-pronged strategy in purchase of bulk items / Centralized Procurement Agency (CPA) items, cost-savings of more than ₹121 crore were achieved in several areas like Low Silica Limestone, Ferro-alloys and Sea Water Magnesia, etc.
- **E-Procurement:** E-tendering using Supplier Relationship Management / Enterprise Procurement System Platforms increased to 59.63% from 48.67% on Y-o-Y basis.
- **Systems Improvement:** Certain new/revised Policies and Procedures including Uniform Trial Procedure, Bank Guarantee Procedure in SAIL, General Terms & conditions for Sale & Auction from Plants/ Units of SAIL were issued during the Year 2017-18. Besides, for posting of data/ information on MSME Sambandh Portal of Govt. of India, an online module was developed for submission of data/ information by the Plants/ Units.

H. FOREIGN EXCHANGE CONSERVATION

The Company endeavors to procure equipment, raw materials and other inputs from indigenous sources to the extent they become available to the Company, at the commercially acceptable prices/costs and meet the requirements of the technologies being used in the Company. For incurrence of expenditure in foreign currency, besides exercising the requisite control, it is ensured that it is in the commercial interest of the Company. Further, the Company has also taken reasonable steps to ensure that all receivables in foreign exchange, which are due to the Company, are realized within contractual period.

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 in energy & other resource consumption / services / safety and environment. Replacement includes mostly replacing the existing Plant & Equipment / facility with better performance Plant & Equipment / facility; Rebuilding of certain facilities like Coke Oven Batteries after its useful life is one of the types of Replacement Scheme. Accordingly, a number of AMR schemes costing around ₹7,124 crore are under implementation 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 at Bhilai Steel Plant.
- Installation of new Rotary Hearth Reheating Furnace at Wheel & Axle Plant and Power Evacuation for 2x220MW New Power Plant at Durgapur Steel Plant.
- Installation of New Hot Strip Mill at Rourkela Steel Plant.
- Provision of Hydraulic Mudgun cum Drill Machine for Blast Furnace -1, Alternate Gas Network, New Sinter Plant, Modernization of Steel Melting Shop -I, Upgradation of Stoves of Blast Furnace No. 1, Rebuilding of Coke Oven Battery-8 and Upgradation of 6 nos. of Electro Static Precipitators of Lime Kiln and Replacement of Battery Cyclones with Electro Static Precipitators in Sinter Plant at Bokaro Steel Plant.
- 4 MW Power Plant at Chandrapur Ferro Alloy Plant.

J. IN-HOUSE DESIGN & ENGINEERING

Centre for Engineering & Technology (CET), the in-house design, engineering & consultancy Unit of SAIL provides the complete range of services from concept to successful commissioning of projects in the complete value chain of integrated steel plant and its mines. With a strength of about 240 qualified, trained and experienced engineers, CET is now taking leadership role in mineral beneficiation, pellet plant, material handling, power plant, slag granulation plant, stoves, water management, automation and many other related areas. The current major projects in its basket include Re-building of Coke Oven Battery No.7&8 at BSL, new 3.0 MT Hot Strip Mill at RSP, Modernization of SMS-1 at BSL, 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 five decades, SAIL, through SAIL Consultancy Division ("SAILCON") provides design, engineering, training, technical & 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. 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 2017-18, SAILCON laid enhanced focus on taking up training assignments and provided training services in steel making to newly recruited executives of a green field integrated steel plant.

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 2017-18, 92 projects were pursued and 38 projects completed with substantial benefits to the organization.

Three projects are being pursued with assistance from Ministry of Steel: (a) Development of Pilot scale pelletization technology for Indian Goethitic/hematite ore with varying degree of fineness (completed in September 2017); (b) Indigenous development of model based breakout prediction system for Continuous Casters; and (c) Development of automation system for optimum coal blending at coal handling plant of coke oven batteries.

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 2017-18, twenty products have been developed and some of the noteworthy products include resistant steels for Indian Construction Segment, Rail wagons, Pressure pipelines, Gas pipelines, Domestic LPG Cylinder, 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 2017-18, MoU/ Collaboration agreements have been entered into with institutions such as BIT, Sindri and IIT Kharagpur.

The efforts of RDCIS engineers and scientists have culminated in filing of 25 patents and 29 copyrights (in association with SAIL Plants) during 2017-18. As many as 90 technical papers (21 international) were published and 97 papers (24 international) were presented. In addition, RDCIS undertook contract research work and provided consultancy services and know-how to organisations outside SAIL.

In recognition of the contributions made by the Centre, RDCIS has bagged several prestigious awards (4 in total) during 2017-18 like Vigilance Excellence Award 2017, M. Visvesvaraya Award, etc.

M. INTERNAL CONTROL SYSTEMS & THEIR ADEQUACY

The Company has an efficient system of internal controls for achieving the following business objectives of the Company:

- Efficiency of operations
- 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 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 so as to achieve overall efficiency improvement including cost reduction in operations of the Company. 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 Audit Committee's observations are acted upon by the Management. The Audit Committee, inter-alia, has also monitored /reviewed the following areas:

- Periodic review of Enterprise Risk Management (ERM).
- Status of Contingent Liabilities.
- Energy Audit.
- Functioning of Vigil Mechanism in SAIL.
- Cost Audit Reports.
- Estate Related Issues.

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 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.