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Overview of Steel Industry – Challenges and Strengths of RINL, VSP

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Abstract

Steel may be the most widely used input material in manufacturing sector. This is mainly due to its excellent mechanical properties, resistance to corrosion and low cost. It is used in many industries and varied applications.
In general, the demand of steel is cyclic in nature. When the economy is in upward trend, steel demand increases and drops down during economic down turn. Towards the end of 2014, China started oversupply of steel and this caused the steel price drop to the lowest ever.
Global steel scenario analysis from 2016-17 to 2019-20 along with Indian Economy and status of Indian Steel Industry as well as strategies adopted by RINL for success during the period from 2016-17 to 2019-20 were analysed and described in detail in this paper.
In this paper authors made an effort to present the overview of global Steel Industry, the status of Indian Steel Industry during 2016-17 to 2019-20. The paper also highlights the strategies adopted by RINL, Visakhapatnam Steel Plant to face the challenges during the said period.

Keywords: *Steel, manufacturing, mechanical properties, corrosion, cyclic, strategies*

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Introduction

Undoubtedly, steel is the most widely used input material in manufacturing sector due to its excellent mechanical properties, resistance to corrosion and low cost. Steel industry contributes about 2% to the GDP of India. Apart from this direct contribution, the effect on Indian economy is 1.4 times with an employee multiplier of 6.8 X. It is understood from World Steel Association that for every two jobs created globally in steel industry, ancillary industries create 13 more jobs [1].

Global perspective:

The demand for steel is cyclic in nature. When the economy is in upward trend, steel demand increases and drops down during economic down turn. Towards the end of 2014, China started oversupply of steel which caused the steel price drop to the bottom most.

Today, India is the second largest steel producer in the world next only to China. For India's economic growth Steel has contributed immensely. This is clearly visible from the similar growth patterns of steel production and India's GDP in the country. This is an indication of the economy's dependence on steel production. The consumption of finished steel in India has increased from 6.5 MT in 1968 to 100.72 MT in 2019.

Considering global steel production capacity and demand, the steel sector appears to have entered into a recovery path after collapsing in 2015 following its seven years' downtrend. The years 2018 and 2019 witnessed an unusual

increase in steel production and caused depression in steel sector fundamentals. The same is shown in **Figure. 1** [2].

Figure. 1: Steel production capacity and cyclical steel demand

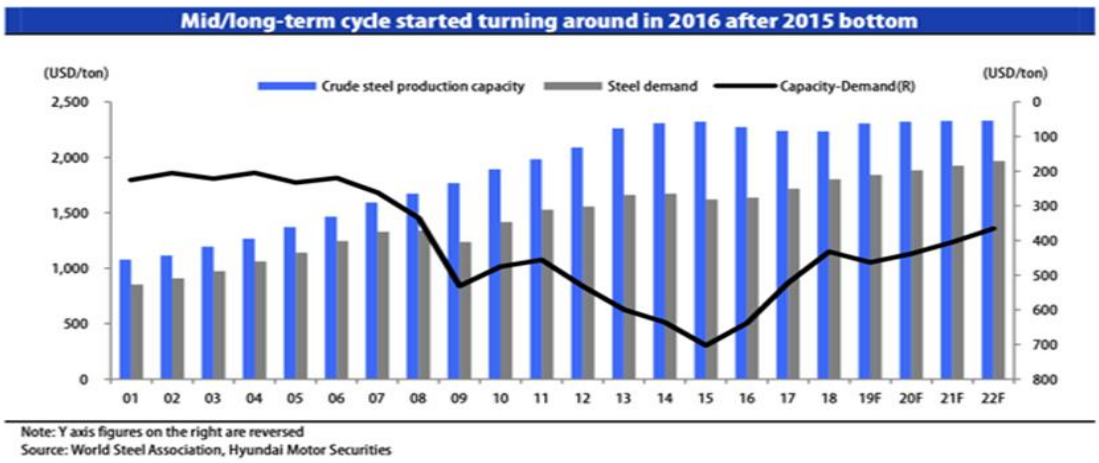
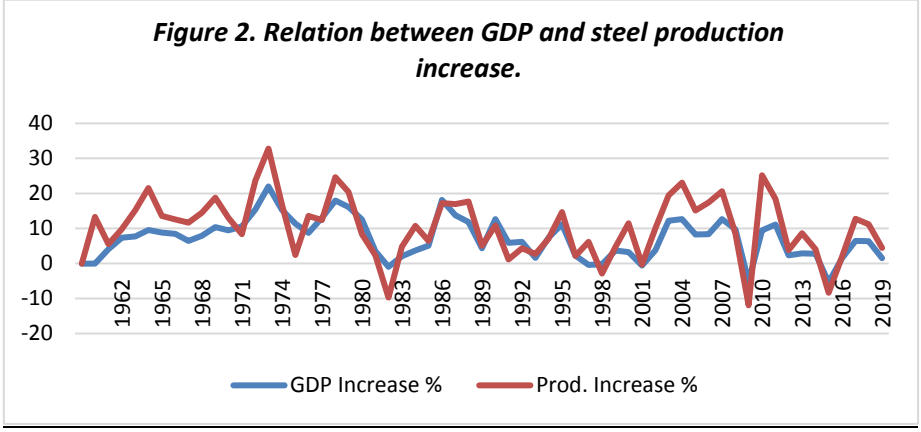
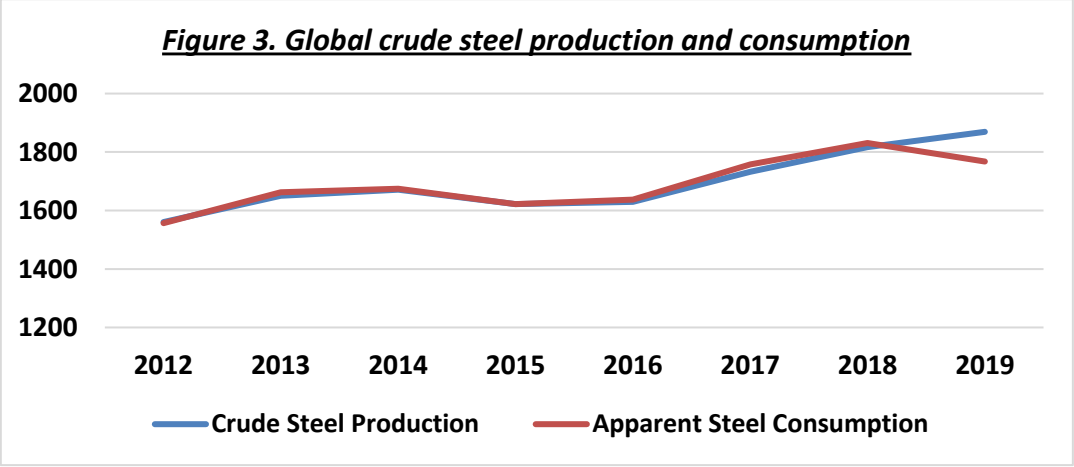


Figure 2. depicts the relation between GDP and steel production increase. It is observed that the spikes of GDP and steel production increase are of the same trend in most of the years and its contribution to the GDP is significant. [3]



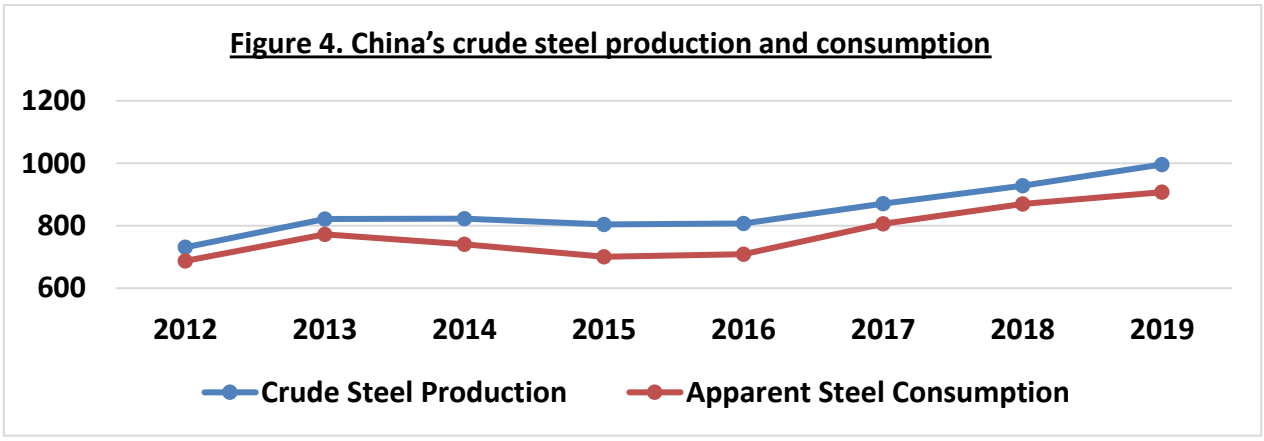
Source: GDP data: World Bank, Steel Production data: World Steel Association

Global steel production and consumption scenario:



Source: World Steel Association

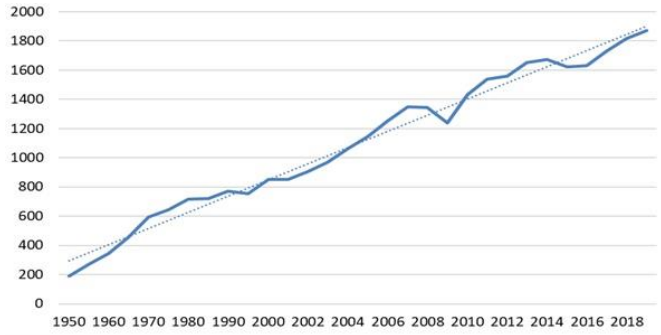
Fig 3 indicates that world steel production and consumption were almost matching till 2018. Since then, consumption has remained the but capacity increased significantly. This indicates excess capacity built up. It can be observed from Chinese steel production and consumption (Fig 4), there is always significant gap in production and consumption levels throughout. This excess steel is being dumped all over the world by China causing severe instability in steel prices.



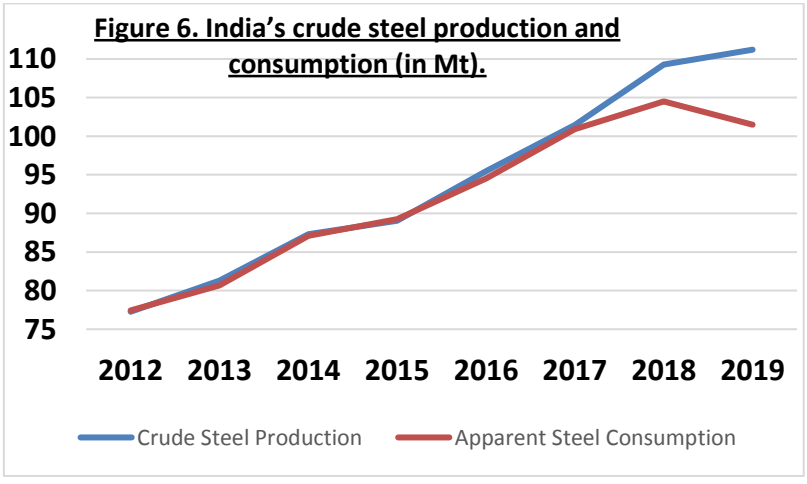
Source: World Steel Association

As per World Steel Association, steel was the foundation for the last 100 years of progress and termed the steel as equally essential to meet the challenges of the next 100 years to come. Global crude steel production improved from 734 MT in 1991–92 to 1869 MT in 2019–20. Whereas, crude steel production in India augmented from 17 MT in 1991–92 to 111.2 MT in 2019–20. These improvements are shown in Fig 5.[4]

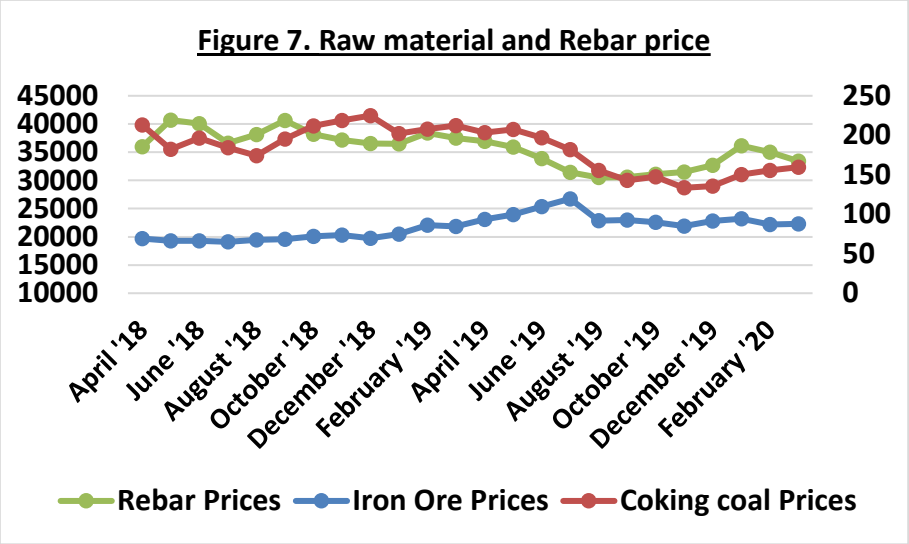
Figure 5. World's crude steel production (in Mt).



As far production and consumption are concerned (Fig. 6), the gap started widening since 2015. The gap has been further widened from 2017 onwards. This is purely on account of excess capacity developments in all the Indian steel plants as well as production from secondary steel makers.



Global steel Raw Material Price scenario:



Raw material and Rebar prices from April '18 to March '20 have been depicted in Fig 7. It can be observed that the prices are very volatile. Iron ore price was almost constant till December '18 and it started increasing steadily from January '19 and reached peak in July '19. This added additional burden on steel makers. Likewise coking coal prices peaked in the month of December '18 and nullified the advantage of constant cost of iron ore. Again in the month of November 2019, the prices of coking coal have dropped down to the lowest. The steel prices dropped continuously till July '19 and peaked only during January '20. It started falling again due to COVID 19 pandemic. [5]

Reasons for economic slump:

Consequent to the trade actions, many steel companies world over are under severe stress because of excessive or cheaper exports from China. The domestic prices in China went down to the levels of 1,600 yuan/tonne in 2015, but remained above 3,300 yuan/tonne, this time. As a result, the raw material prices also remained higher. The Imported Coking Coal prices which reduced to the levels of USD 75/t in 2015, remained above USD 200/t till Jun'19.

The main impact was from depreciation in currencies of steel exporting countries like Russia and Turkey. Since Russia is self-sufficient in raw material, the depreciation in currency has not impacted them and helped them to export Steel at cheaper prices. The Russian Steel companies are making profits even after reduction in export prices from USD 543/t as on 01/04/2018 to as low as USD 347/t in Oct'19, a reduction to the extent of as high as 36%. [5]

Year wise analysis of global trends:

In the year 2016-17, Global Apparent steel consumption recovered to 1% during 2016, after decelerating by 3% in 2015. As per World Steel Association (WSA) Short Range Outlook (SRO) April 2017, the momentum of accelerated growth is expected to continue in 2017 and 2018, in both Developed Economies and Emerging and Developing economies, with the exception of China. About 45% of global steel demand is from China and expected to reduce the growth rate and restrict the global growth rate to mere 1.3% and 0.9% in 2017 and 2018 respectively.

According to Short Range Outlook of WSA released in April 2018, apparent steel consumption enhanced by 4.7% during 2017 where China's growth rate contribution is about 8.3 %. It was expected that the steel demand in both developed and developing economies (excluding China) is expected to maintain sustained growth. It was projected that India register higher growth rates of about 5.5% and 6.0% amongst top 10 steel consuming countries in years 2018 and 2019 respectively.

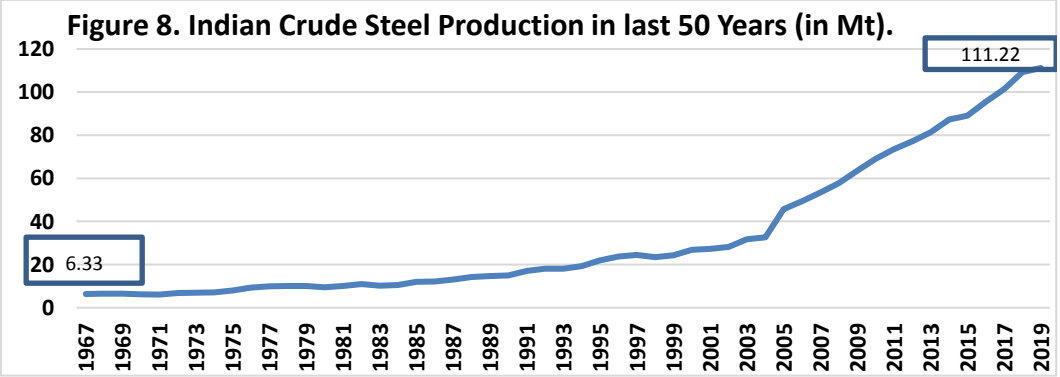
In the year 2018-19, according to World steel association SRO released in April 2019, apparent steel consumption increased by 4.9% during 2018 and China achieved a growth of 7.9%. It was projected that the growth rate may be reduced to 1.3% and 1.0% in 2019 and 2020 respectively, due to the expected deceleration in Chinese steel consumption to 1.0% and -1.0% respectively. Slowing global economy, China's reduction in steel consumption, ambiguity surrounding trade policies and the political situation in many regions suggest a possible restraint in business confidence and investment. [6]

Indian Context:

Today, the steel industry's contribution towards GDP of the country is about 2%. This is regarding direct contribution and it also contributes immensely towards indirect contribution due to the dependence of other sectors on steel. Steel industry employs nearly half a million people directly and two million people indirectly. According to World Steel Association, globally, for every two jobs created in the steel industry, 13 more jobs are created across the supply chain. [1]

India is the second largest crude steel producer in the world, with 111.20 MT produced in 2019–20 (an increase from 109.30 MT produced in 2018–19) [6]. India became a net exporter of steel in FY 2016–17, with exports of finished steel totalling to 8.24 MT and imports of 7.22 MT of steel in the same year. India maintained this position with a positive trade balance of 2.138 MT in the next year also. But with increasing protectionism and current trade war (among other factors), India's exports have decreased by about 33.9% in its exports and achieved only 6.36 MT in 2018–19 and imports increased by around 4.7% total imports amounting to 7.83 MT. Due to this, India once again became a net importer of steel in the financial year 2018-19 [5].

Fig. 8 shows crude steel production growth since 1967. It indicates that the rapid growth in crude steel production has taken place from 2005 onwards. Till the year 2004, the growth was steady and marginal. After 2005, private sector steel plants played a substantial role in consolidation of the Indian steel industry, and Indian steel companies have acquired foreign steel plants in their growth journey, which is indicated in fig 8. [6]



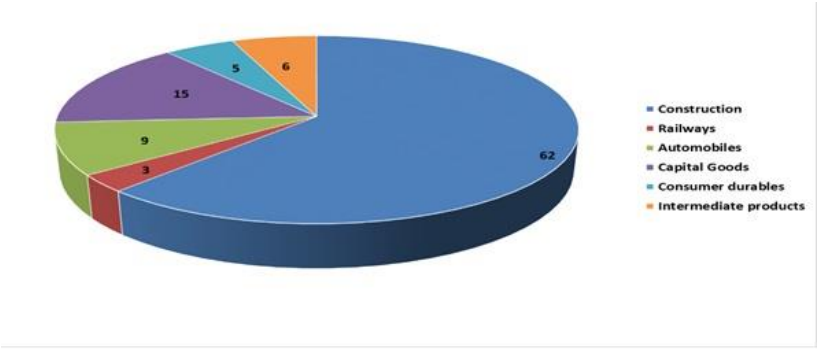
When India became the world's second largest steel producer by beating Japan in 2017-18 [7], its contribution was about 5.9% of the global contribution. In 2019, the global steel usage was at 1767.5 MT, which grew from 1708.4 MT in 2018. The average Per capita consumption of steel increased from 224 kg in 2018 to 229.3 kg in 2019 [6]. Whereas, the per capita consumption of steel in India stood at 74.3 kg in 2019 [6]. There is lot of gap existing when compared to world per capita consumption.

On the back of continued domestic demand, Indian steel industry seen robust growth in the last 10–12 years. Since 2008, domestic steel demand increased by 80% and growth of steel production has improved up by 75%. Production capacity also augmented in tandem, and the resultant growth has been fairly gradual [5].
National Steel Policy introduced by Indian Government in 2017, envisions the growth trajectory of the Indian steel industry till 2030–31. The highlights of the policy are mentioned below:

- Enhancement of Steel-making capacity to 300 million tonnes per annum by 2030–31.
- Subsequently Crude steel production to reach 255 million tonnes by same period, at 85% capacity utilisation.
- Finished steel production to reach 230 million tonnes, assuming a yield loss of 10% for conversion of crude steel to finished steel – that is, a conversion ratio of 90%.
- Steel consumption to reach 206 million tonnes by 2030–31 and net exports are expected at 24 million tonnes.
- With this steel production levels, the per capita steel consumption is expected to increase to 160 kg by 2030-31 from the present level of 74.3 in 2019-20.
- An additional investment of INR 10 lakh crore is envisaged [8].

According to Joint Plant Committee data, India produced 110.9 million tonnes of crude steel by the end of 2018–19 [5]. In order to reach 255 million tonnes of crude steel production by 2030–31, CAGR of about 7.2% is needed in steel production [9]. The target decided by government is achievable because in 2018–19, crude steel production grew by 7.6%. Thus, the growth target charted by the government is in sync with the industry's growth trajectory [10]. The approximate sector-wise demand for steel is shown in Fig 9: [3]

Figure 9. Sectoral demand of steel in 2018-19.



It is expected that India will become the world's third largest construction market by 2025. The real estate sector in India is growing at a CAGR of over 4% and the affordable housing and smart cities initiative of government will drive growth in this sub-segment. Some of the major government initiatives, both ongoing and planned, are as follows:

- Provision road connectivity through the Bharatmala programme.
- Port connectivity through the Sagarmala programme.
- In the oil and gas sector, the Urja Ganga Gas Pipeline Project.
- Under urban infrastructure, 100 smart cities will be developed further.
- Development of National Investment and Manufacturing Zones (NIMZs) [11].

Infrastructure: India's total investment in construction sector is likely to grow by 50% over the next 5 years. The urbanisation rate in India is expected to increase to 40% by 2030-31 from current level 33% [3].

Railways: This sector, presently contributing 3% of steel demand, is growing at a rapid pace. It grew by 13.4% in 2018 [12] and is expected to grow by more than 20% in 2019 [3]. India is aiming for 100% track electrification, dedicated freight corridors and high-speed rail corridors results in significant steel demand [3].

Automobiles: The Indian automotive industry is the fourth largest in the world and presently contributing around 9% of steel demand [13]. This sector, including component parts, is expected to cross USD 250 billion by 2026. India's auto and auto component export markets are also expected to grow at a CAGR of 3% until 2026 [13].

Capital goods: The Indian capital goods sector contributes around 15% of steel demand. However, it has several sub-segments, such as machinery and equipment are the most prominent and these two sub-segments alone accounts for about 23% of total manufacturing and about 4% of India's total gross value added (GVA) [14].

Consumer durables: This sector contributes about 5% of India's steel demand. India is a consumption-driven economy and traditionally this sector has witnessed robust growth [3].

Intermediate products: Intermediate products sector accounts for the remaining 6% of India's steel demand and this sector is closely connected to the auto and oil and gas sectors, in addition to industrial activity.

Challenges facing the Indian steel industry

The Indian steel industry is often regarded as uncompetitive globally. National Institution for Transforming India (NITI) Aayog [15] report explains that an additional cost component of about USD 80–100 is making Indian steel non-competitive in international market. The breakup of this additional cost is mentioned below:

- Logistics and Infrastructure requires additional cost of 25 – 30 US$ per ton
- Cost of power adds to the overall cost by around 8 – 12 US$
- Import duty on coal costs additionally about 5 – 7 US $
- Clean energy cess is about 2 – 4 US$
- Taxes and Duties on iron ore incur an additional expenditure of 8 – 12US$
- Financial cost on borrowed capital is around 30 – 35 US$

Source: NITI Aayog

Indian Economy 2016-17:

In the financial year 2016-17, GDP growth was around 7.1%, which was slower than the 8% recorded in 2015-16 Fig 10a. During the year 2016-17 the Gross value added (GVA) growth was 6.6% and in Q4 the same was 5.6%, compared to 7.9% in 2015-16 and 8.7% in Q4 of that year as shown in Fig 10b. [16]

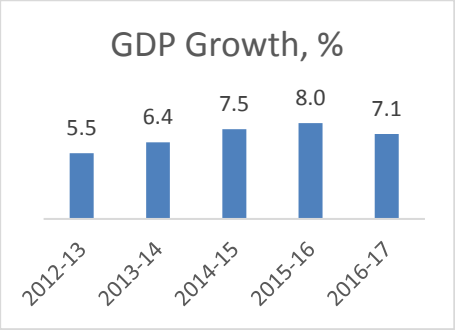


Figure 10a. Indian GDP rate.

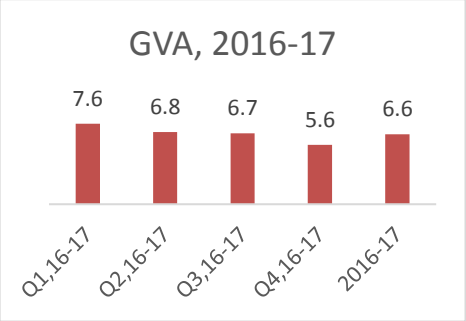
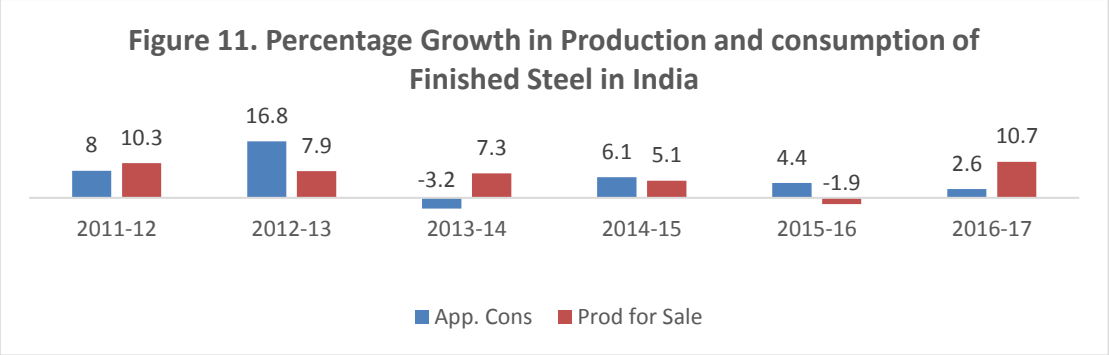


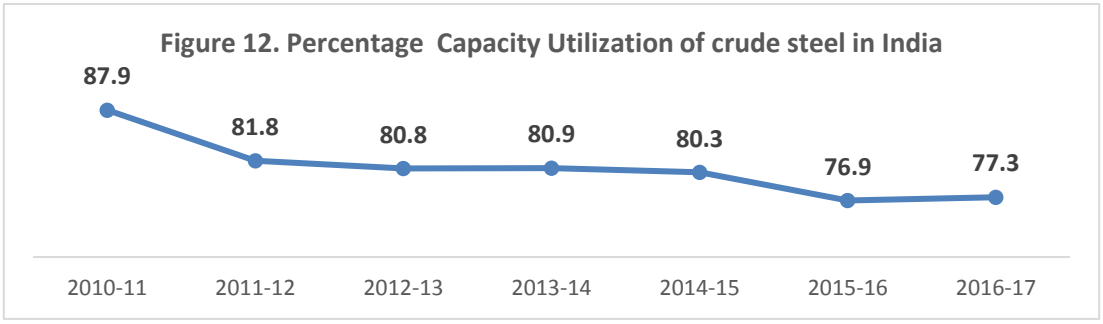
Figure 10b. Indian GVA rate.

Indian Steel Scenario 2016-17:

As per JPC report, apparent consumption of steel saw a moderate growth of 2.6% while production for sale increased by more than 10 % (10.7%) in 2016-17 (Fig 11).

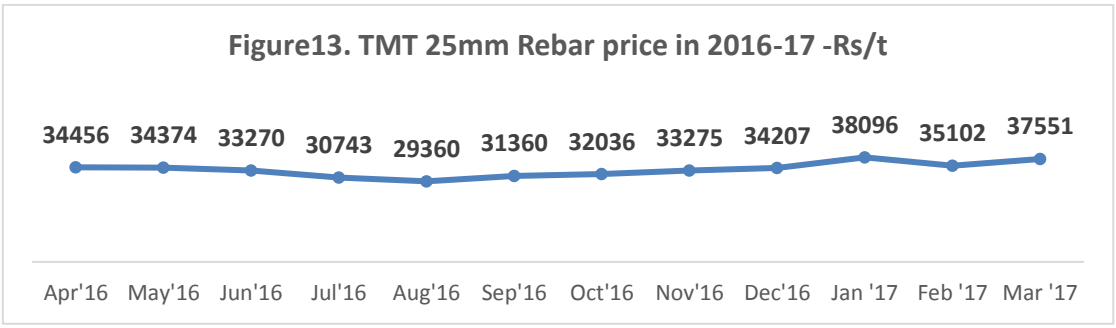


As per JPC report, capacity utilization in the country has been showing decline trend in the past few years due to aggressive capacity additions in the country coupled with sluggish market conditions as shown in Fig 12.

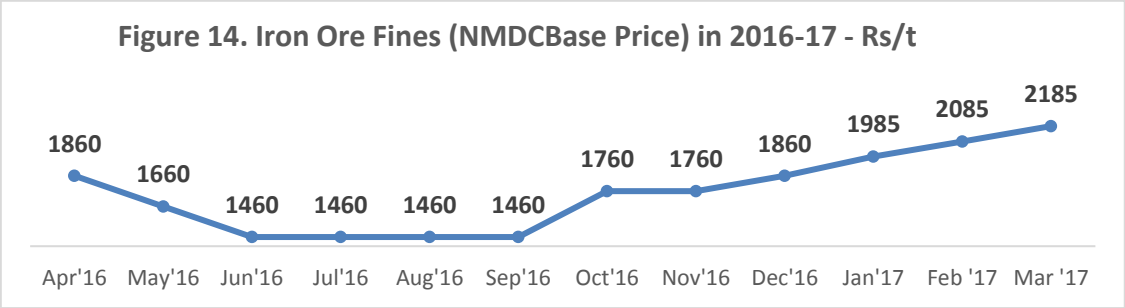


Source: JPC.

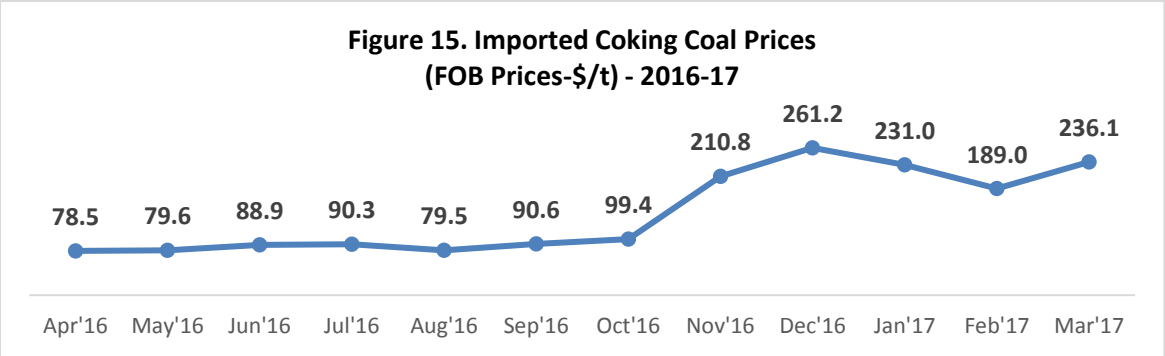
Steel sector in the country witnessed high degree of volatility during 2016-17. The recovery in prices was lower, in case of Long Product segment, where RINL is operating. The TMT Rebar prices crashed by 15% during April to August 2016 before recovering thereafter mainly on account of surge in imported coking coal prices as per JPC reports (Fig 13).



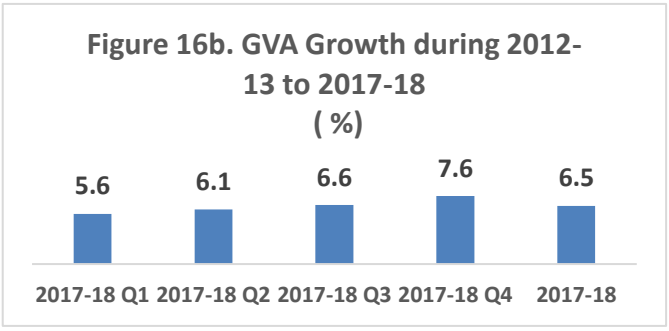
Domestic prices of Iron Ore Fines followed a similar trend as there was a fall of 21% between April 2016 and June 2016 period which started firming up in Q3. There was an increase by about 17% in prices of Iron Ore from Apr'16 to Mar '17 as depicted in Fig 14..

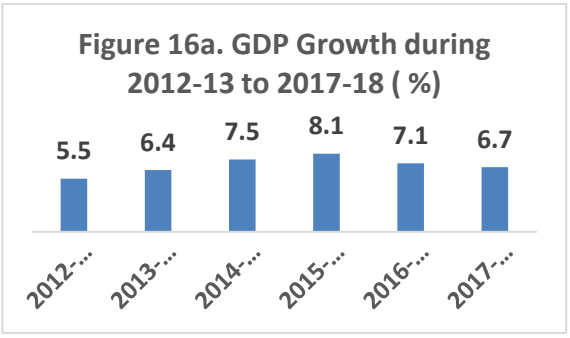


The International prices of coking coal surged by more than 200% from about USD 90/t during Jun'16 to more than USD 300/t during Nov'16 as per JPC Report Fig 15. The impact of this surge is reflected in the Weighted Average Price of Imported Coking Coal received thereafter.[16]



Indian Economy 2017-18: GDP growth in the financial year 2017-18 was 6.7% when compared to 7.1% growth recorded in 2016-17. Gross value added (GVA) growth increased to 7.6% in the fourth quarter of 2017-18 from 6.0% in the fourth quarter of 2016-17 as depicted in Fig 16b. [17]



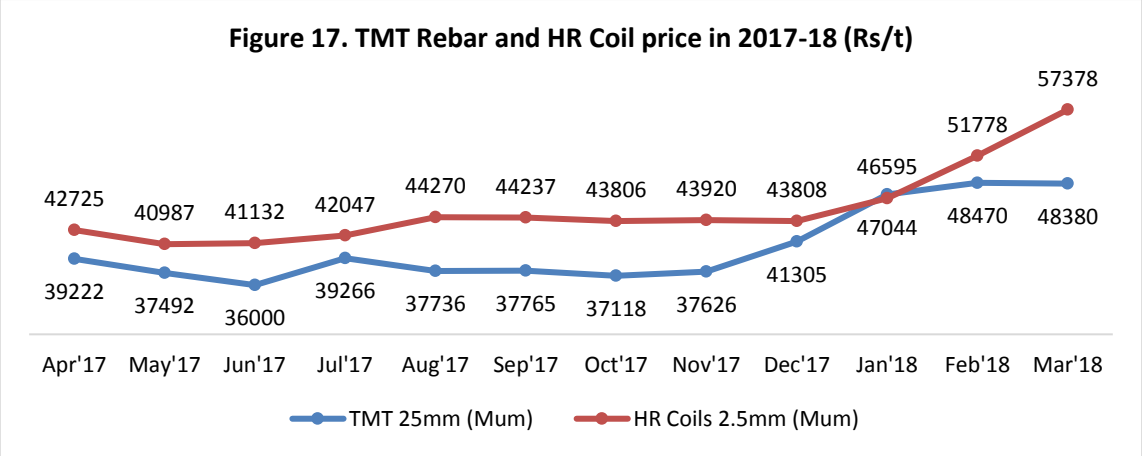


Indian Steel Scenario 2017-18:

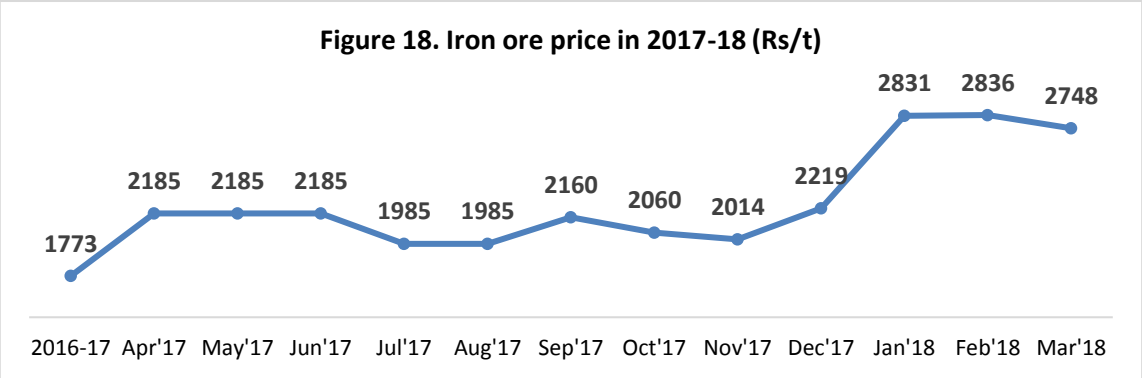
As per World Steel Association, India became the 2nd largest crude steel producer in the world during 4th quarter of 2017-18 (Jan-Mar 2018), surpassing Japan's crude steel production. Indian finished steel production increased at 6.80% in 2017-18. After returning to the net exporter status in 2016-17, India consolidated on the same, with net exports of steel increased from 1.016 Mt in 2016-17 to 2.183 Mt in 2017-18. Apparent finished steel consumption of India registered a growth of 7.70% in 2017-18 when compared to growth rate of 2016, which was about 3.09%.

The Indian economy seems to have recovered from the impact of currency reforms and GST implementation by Indian government. The demand for long products improved from the Dec'17 levels and the prices finally showed signs of firming up after trailing the prices of flat products for almost two years. [18]

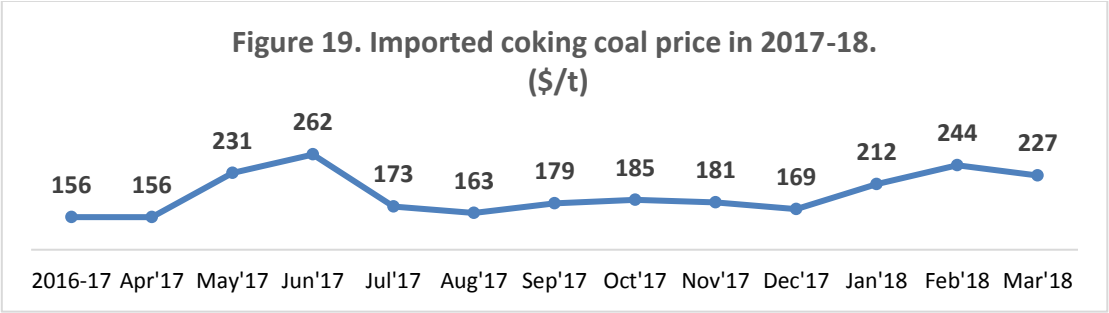
The average increase of TMT rebar prices is 21% in the year over corresponding period last year (CPLY). The prices in Mar'18 were higher by 29% compared to CPLY levels. These price variations are shown in Fig 17.



Iron Ore Fines cost remained almost stable between Apr-17 to Dec'17 and thereafter cost increased sharply during Jan – Mar '18, apparently this may be due to the impact of Supreme Court order on excess mining in Odisha. However, the average iron ore fines cost increased by 34% during 2017-18 over CPLY. The costs are shown in Fig 18.

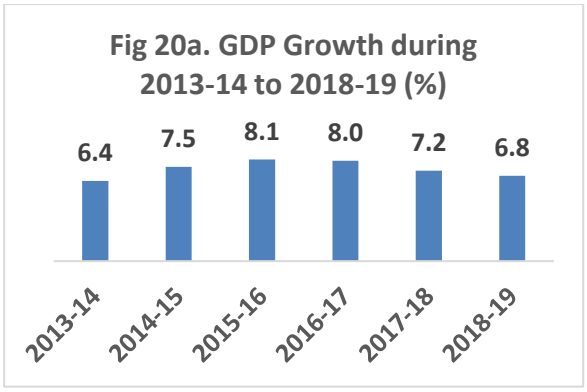


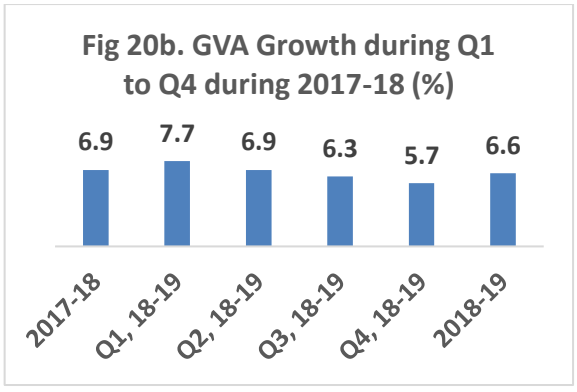
Imported Coking Coal (ICC) prices surged during Apr-Jun'17 and Jan-Mar'18 due to supply constraints from Australia. The average cost increase of 28% was observed during the year 2017-18 over CPLY as per Fig 19.



Indian Economy 2018-19:

Indian GDP growth was at 6.8% in 2018-19 against 7.2% in 2017-18 as shown in Fig 20a. The overall GVA growth was 6.6% for the year 2018-19 against 6.9% in 2017-18, the GVA was continuously reducing from 7.7% in the 1st Quarter to 5.7% in the 4th Quarter as depicted in Fig 20b. However, GVA in Manufacturing and Construction sectors registered higher growth rate of 6.9% and 8.7% respectively, during the year as shown in Fig 21 [19].





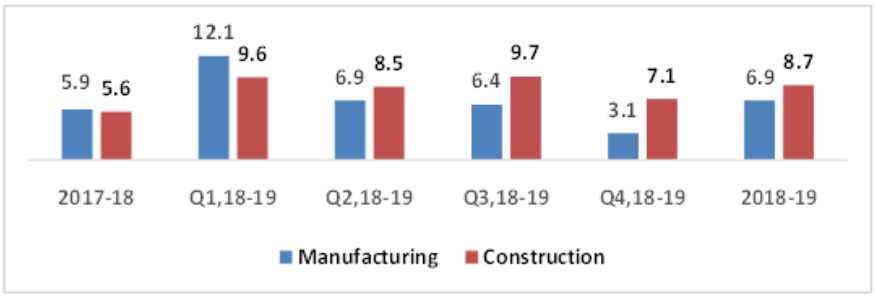
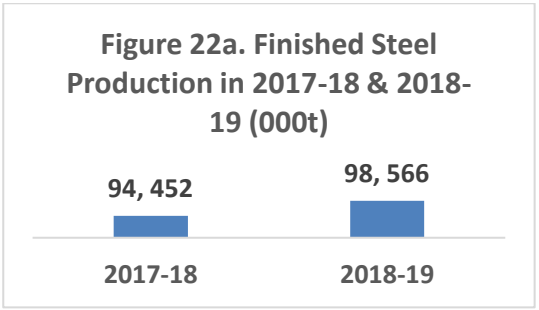
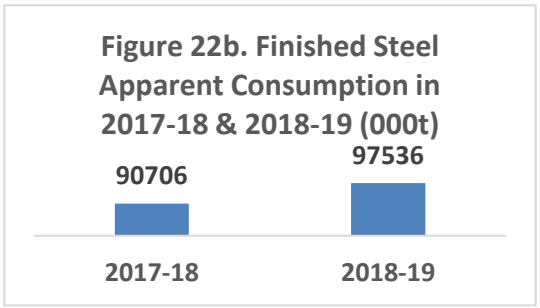


Figure 21. Manufacturing and Construction sector performance in 2018-19

Indian Steel Scenario 2018-19:

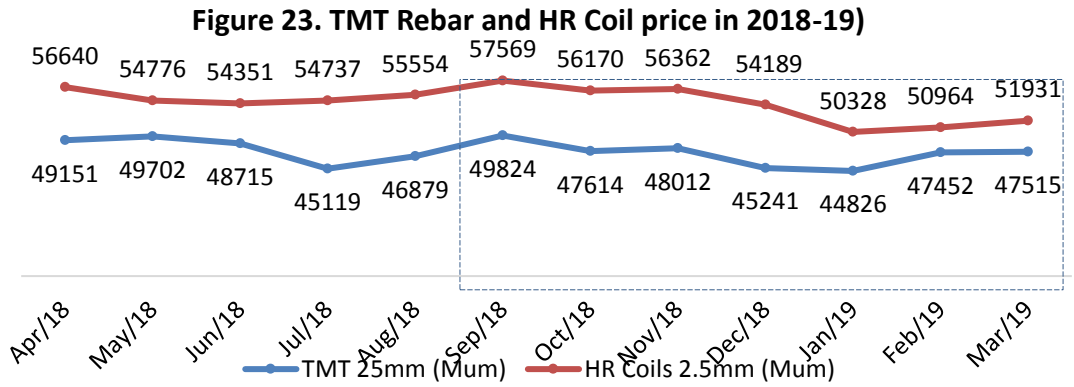
Apparent finished steel consumption in India registered a lower growth of 7.5% during 2018-19 against 7.9% in 2017-18. At the same time, the exports reduced by 34% to 6.361 Mt in 2018-19 from 9.619 Mt in 2017-18, due to trade actions and slump in global steel prices. This led to build-up of inventory with Indian Steel Producers, in spite of lower growth in production, at 4.4% in 2018-19 against 6.8% in 2017-18. Production and consumption are shown in Fig 22a&b.



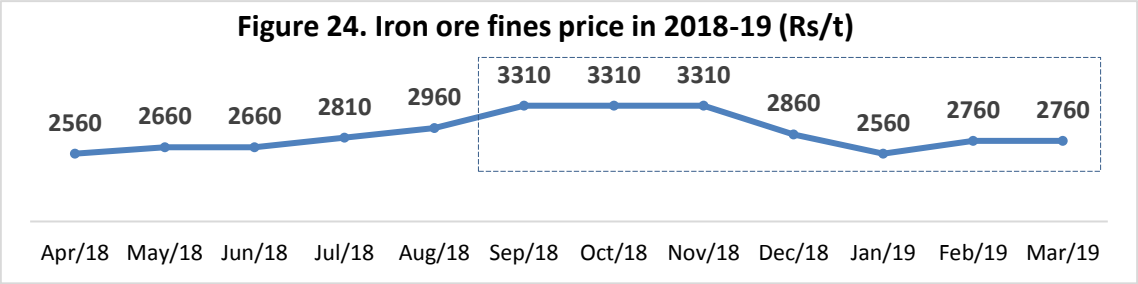


In case of non-flat steel category, the reduction in exports was even higher at 69%. The Exports reduced in 2018-19 to 0.705 Mt from 2.258 Mt of 2017-18. Consequently, there was a build-up of inventory with Indian Steel Producers by an extent of 2.157 Mt. [20]

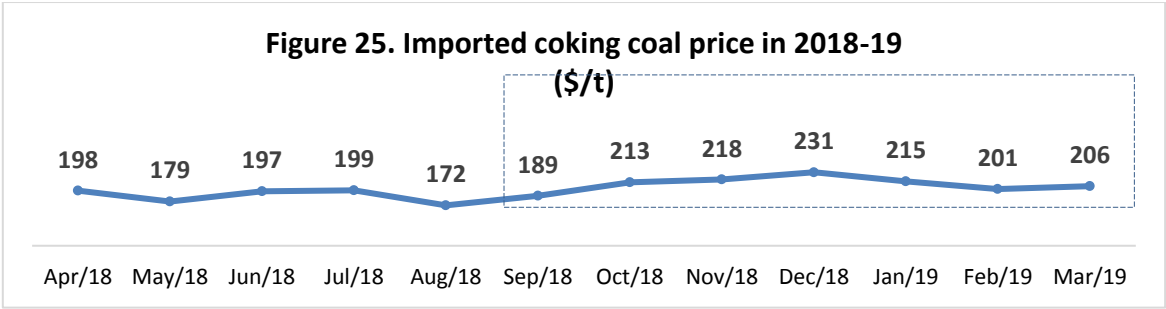
During second half of 2018-19, steel prices softened significantly as shown in Fig 23. However, the raw material costs ruled high and thereby, impacting the financials.



Iron Ore prices increased sharply during the period Apr'18 – Nov'18 and this may be due to closure of some mines in Odisha as shown in Fig 24. The base price of Iron Ore Fines from NMDC increased by 27% i.e. from Rs. 2,560 per ton to Rs. 3,310 per ton during this period. Further, to meet the shortfall of receipt from NMDC, the company had to look for procurement of Iron Ore from other sources also, through auction and tender routes. This resulted in an average increase of 27% during the year over previous year.



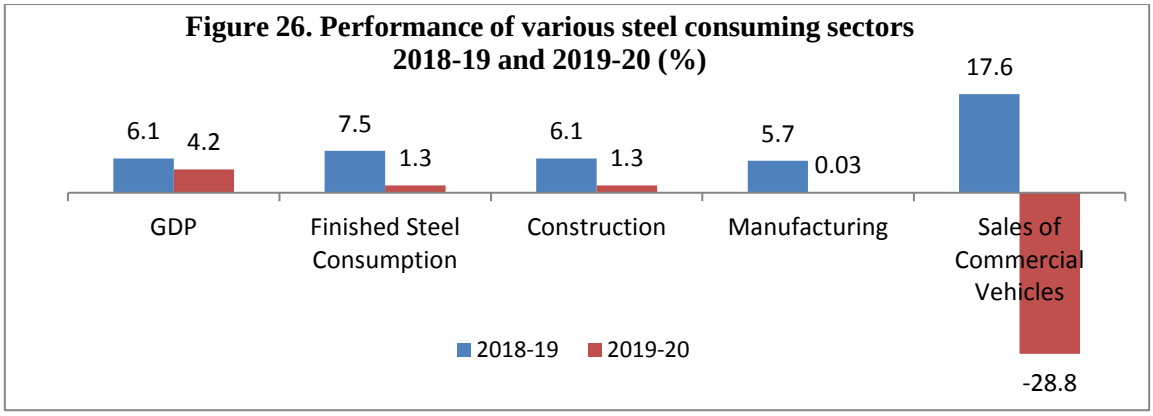
Imported Coking Coal cost surged during the period Aug-Dec'18 due to supply limitations from Australia as shown in Fig 25.



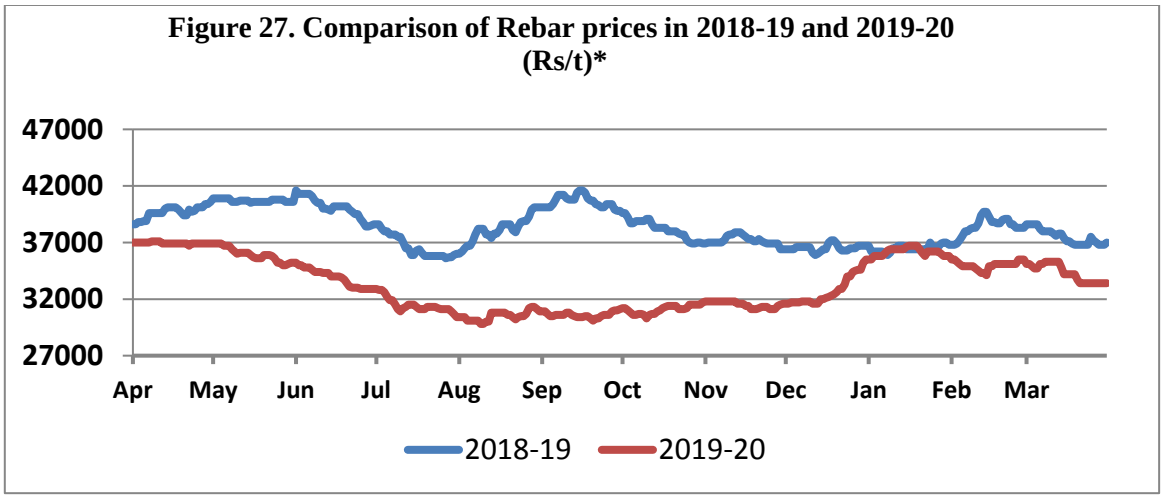
Added to that, there was value depreciation of Indian Rupee against the US Dollar to an average of Rs.69.83 during the year from an average of Rs.64.50 in the previous year.

Indian Economy and steel scenario 2019-20 :

Growth rate of Indian economy softened to a level of 4.2% in 2019-20 as against a growth of 6.1% in 2018-19. The growth in consumption of steel in the country in 2019-20 was reduced to 1.3% as against 7.5% in 2018-19. Sectors like construction and manufacturing that drive steel consumption experienced steep decline in growth in 2019-20 to 1.3% and 0.03% respectively as depicted in Fig 26. This caused severe sluggishness in steel markets in 2019-20. [21]



As a result, the trend of recovery in steel markets in 2018-19 did not sustain in 2019-20 as prices of long products witnessed steep fall of more than Rs.10,000/t during the period Sep'19-Sep'20 (Fig 27). The reduction in prices of Imported Coking Coal and Iron Ore was not commensurate. [22]



Though the prices improved in Q4, the trend was short lived as the global markets started feeling the impact of spread of COVID-19 even before the imposition of National Lockdown in the country from 24th March,2020.

RINL's Perspective: In the last quarter of every running year, SWOT analysis is performed and strategies will be prepared for next year. Accordingly, SWOT analysis of 2016-17 with few strengths and weakness of RINL are mentioned below:

Strengths & Weaknesses:

Table 1: Strengths and Weaknesses of RINL

Strengths	**Weaknesses**
Shore based steel plant (locational advantage)	No Captive Mines for major raw materials like Iron Ore and Coking Coal.
Well established marketing and customer network in India	Single Location operations and only into Long Products segment, exposed to cyclic markets.
Availability of Land for expansion purposes	High Equity base
Reputation as quality producer.	Lack of investible surplus
Dedicated manpower	
Strong environmental and Social commitments	

Opportunities & Threats:

Table 2: Opportunities and Threats of RINL

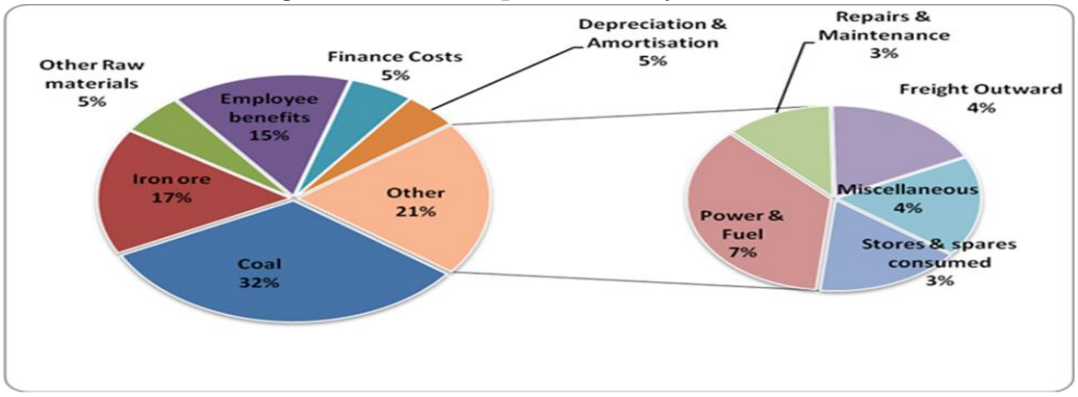
Opportunities	**Threats**
Restructuring initiatives of Govt. of India	Higher competition.
Product diversification	Sluggish market conditions
Export of steel products to developing Economies	Volatility in supply and prices of raw materials such as iron ore and coking coal
Availability of new / expansion units for production	Lone iron ore supplier.
Greater production potential	Higher competition from secondary steel making sector in long products.
State of the art Secondary metallurgy facilities for production of High-End Value-Added Steels	Declining margins due to increasing cost of production
	Oversupply in India due to slowdown in other economies

Financial analysis will be performed in comparison with previous year and further strategies will be finalised for next year.

Expenditure (Net of Inter Account Adjustments)

The cost of material consumed including that for trial run production is Rs.7,789.77 Cr against Rs.6,019.40 Cr. This works out to 29% increase. Increase in interest expenditure is mainly due to increase in working capital requirements, capitalization etc. Higher depreciation is on account of capitalization of new units such as Steel Melt Shop -II, Wire Rod Mill-II, Sinter Plant-3 etc during the last year.

Figure 28. RINL's Expenditure analysis in 2016-17



Initiatives taken by the Company:

RINL is putting all efforts, apart from focusing on value added steel production, to explore internal drivers for cost reduction and the various cost reduction initiatives being undertaken are reviewed and additional cost rationalization measures have been identified in the areas pertaining to raw material, generation of green energy and improvement in operational efficiency, etc. The salient initiatives to reduce operating cost like Improvement in Labour Productivity, Leveraging Technology, Benchmarking, Maximization of captive power generation from Power Plant-2, Cost reduction initiatives, Substitution with cheaper raw materials, Improvement of realisations through Value Added steel, Improvement of realisations through optimum market mix etc.

Outlook for RINL in 2017-18:

Boost to infrastructure as outlined in the Union budget 2017-18 creates a hope for improving demand conditions for steel in the later part of the year 2017-18 and in 2018-19 which is a positive sign. With stable growth projections for steel demand by WSA for India during 2017 & 2018, RINL is set to take advantage of the situation by increasing the volume of production from new / expansion units. RINL is also focusing on improving the production of value

added steel in 2017-18 after commissioning and stabilization of additional secondary metallurgy facilities like vacuum degasser etc. Also, the range of the product basket is being improved and the Special Bar Mill products shall partially be made available in the coil form.

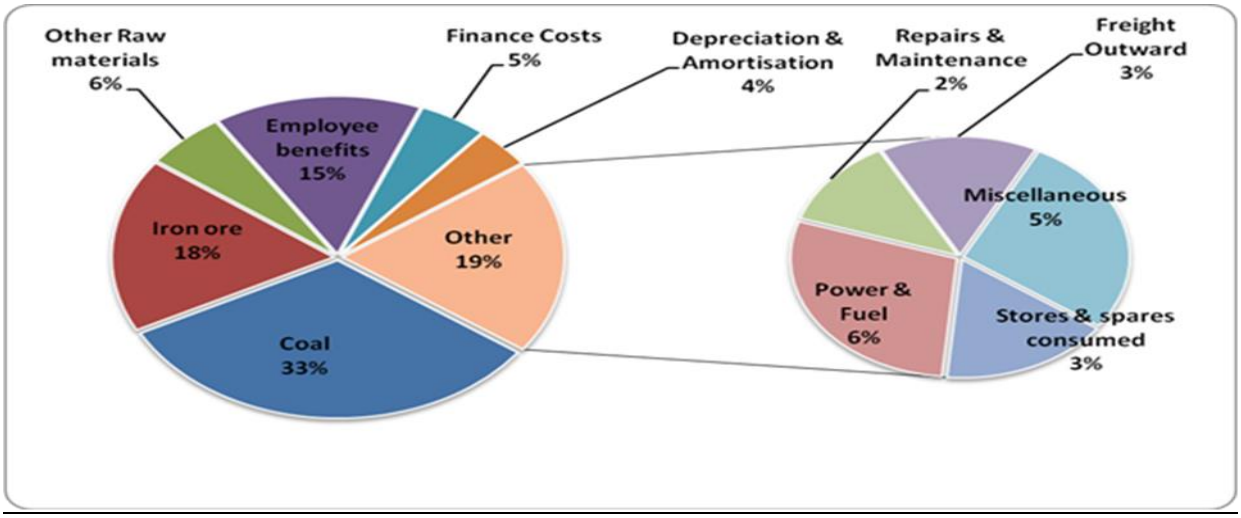
Based on the outlook, focus areas of RINL for 2017-18 are finalized.

- Increasing the production by early stabilisation from new and revamped units
- Augmenting production of high end Value Added Steel
- Thrust on improving sales in high NSR region
- Concentrating on high impact Cost reduction initiatives to improve bottom line

Expenditure analysis for 2017-18:

Based on the following expenditure analysis, next year strategies are finalised. Higher financial costs and depreciation are mainly by virtue of capitalization of new units like Special Bar Mill, Captive Power Plant – 2, Revamped Blast Furnace – 2 and Converters B and F during the year.

Figure 29. RINL's Expenditure analysis of 2017-18



Initiatives taken by RINL:

RINL has completed modernisation of all the major units with the commissioning of Blast Furnace-2 in Oct'17 and accomplished 17% growth in saleable steel production. Further, RINL pursued various cost reduction measures such as improvement in labour productivity, leveraging technology, benchmarking, maximization of power generation from waste energy, cost reduction initiatives, substitution with cheaper alternative raw materials, improvement of realisations through Value Added steel production, Improvement of realisations through optimum market mix, Optimisation of borrowings, Tax incentives etc.

Outlook for the company in 2018-19

With the buoyant global prices and recovering domestic demand, positive growth is expected in the steel sector in 2018-19.

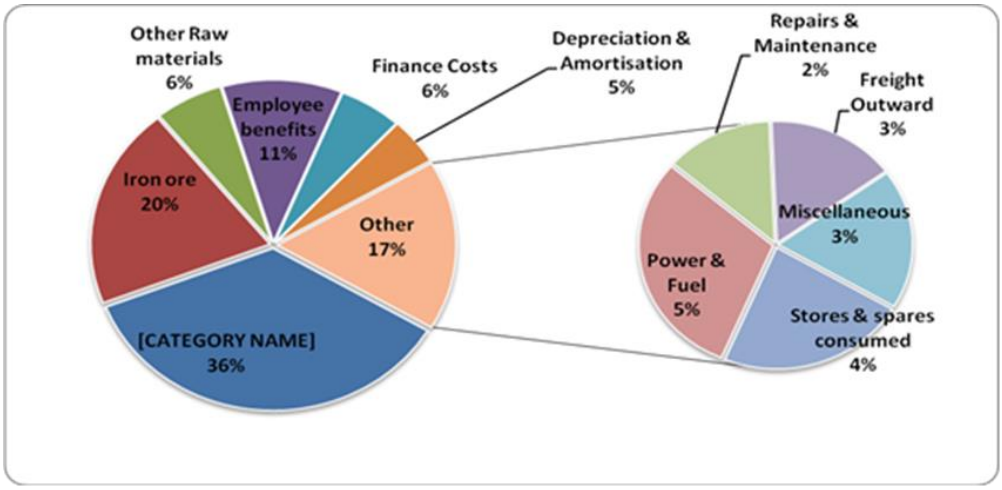
Thrust areas for RINL during 2018-19 are:

- Early stabilisation and increase of production from new and revamped units
- Increasing production of high end Value Added Steel
- Maximising sales in high NSR regions
- Maximizing the production of finished steel
- Optimization of logistics costs

Financial overview

RINL registered sales turnover of Rs. 20,844 crores (including sale of trial run production of Rs. 506.32 crores) with a growth of 25% in value over the previous year. The Net Sales Realization during the year registered a growth of 17% over CPLY.

Figure 30. RINL's Expenditure analysis of 2018-19



Initiatives taken by the Company:

RINL has completed modernisation of major production units and accomplished 11% growth in saleable steel production. Further, RINL pursued various cost reduction measures viz. improvement in labour productivity, leveraging technology, benchmarking, maximization of power generation from waste energy, cost reduction initiatives, substitution with cheaper raw materials, improvement of production of Value Added steel etc.

Outlook for RINL in 2019-20

India is projected to maintain a growth of 7.1% in 2019, which is the highest among the major steel producers of the world. The thrust being given by the Indian Government for infrastructure development and manufacturing sector would have positive impact on steel industry in general and RINL in particular. The company would further gain from productivity and efficiency improvements in 2019-20. Some of the thrust areas for RINL in this direction are:

- Achieving rated capacity of 6.3 Mt as early as possible
- Enhancing production of high end Value Added Steel
- Improving sales in high NSR region
- Maximizing the production of finished steel
- Commencing the commercial production from Forged Wheel Plant
- Purchase of coke to be minimised to reduce cost of production by improving PCI usage and commissioning of Battery-5

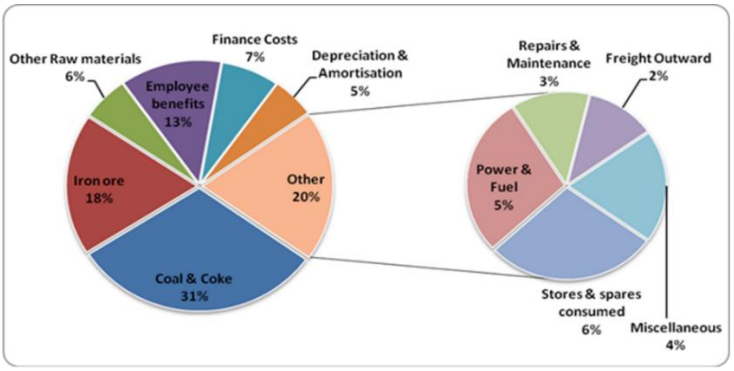
Due to slowdown in Construction and Automobile sectors, the two main sectors for the Long Product Portfolio of the company, there was build-up of inventory, forcing the company to adopt optimum production model. By operating with 2 Blast Furnaces, during the period Sep-19 to Jan'20, the company could also avoid purchase of BF Coke from external sources, which became un-remunerative at the prices prevailing.

Financial overview

Due to slowdown in Construction and Automobile sectors, the Sales Volume was lower by 13% and Net Sales Realization was also lower by 13% compared to the previous year. As a result, the Company registered a sales turnover with a fall of 24% in value over 2018-19.

Analysis of Expenditure for the F.Y 2019-20 (incl. Trial Run):

Figure 31. RINL's Expenditure analysis of 2019-20



Initiatives taken by the Company:

Optimizing operations: Considering the lower market demand for steel, Hot Metal production was optimized by ramping up production from Blast Furnace-2 & Blast Furnace-3 after shutting down one Blast Furnace (during 6th Sep'19 - 26th Jan'20) and obtained advantage in Techno Economic parameters, in addition to inventory liquidation and avoidance purchased coke.

Cost Reduction Initiatives: The Company pursued various cost reduction initiatives and which include leveraging technology**, b**enchmarking**, m**aximization of power generation from waste energy, substitution with cheaper raw materials, recycling of wastes etc.

Outlook for the company in 2020-21

Steel producers were severely impacted during Q1 as Govt. of India (GoI) introduced stringent measures to curb the spread of COVID-19 in the country. As per JPC Report for May '20, Production and Consumption of steel in Apr-May 2020 period contracted by 65% and 68% respectively. Company has adopted an optimized model of production to liquidate inventory and contain expenditure. In the face of low levels of domestic demand, RINL resorted to exports to ensure cash flows.

Going forward, in the immediate term the recovery is expected to pick up as compared to lower base of Apr'20 and May'20 but it would be still lower than 2019-20 (WSA projects contraction of 18% in steel demand in the country in 2020). The focus areas for RINL in these difficult times include:

- Optimised production model to meet the market requirement and to ramp up production as market improves.
- Development of new grades.
- Focus on High End Value Added Steel sales.
- Improving sales in high NSR region.
- Focus on exports.
- Commercial production from Forged Wheel Plant.
- Minimising impact of bought out BF coke by improving PCI usage and commissioning of Battery-5

In the longer run i.e. starting from Q4 2020-21, it is expected that stimulus package announced by Govt. of India (GoI) and initiatives towards "Atmanirbhar Bharat" would start taking shape and drive consumption of steel.

It can be observed from the initiatives taken each year that based on outlook for the coming year and cost analysis of the previous year initiatives were optimized. Strategies keeps changing based on the challenges ahead each year. Strategies are not same every year. It is very important to consider SWOT analysis results and finalize strategies for next year. The typical SWOT analysis results of RINL for one year has been shown in Table 1 & Table 2.

Road ahead

RINL Visakhapatnam Steel Plant is the only shore based Integrated Steel Plant in the Country. It is well connected with Port and Railways for transportation of Raw Materials and Finished Goods. The Plant has a rated capacity of 7.3 million tons per annum Liquid Steel production. It has huge land bank for expansion of its capacity up to 20 million tons.

As India is marching towards becoming a manufacturing powerhouse through policy interventions like Make in India, since the metal industry has strong forward linkages to many important sectors such as automotive, construction, infrastructure and manufacturing, immediate measures to improve these sectors will drive demand for steel. The Indian steel industry has the potential to help regain its positive trade balance in steel and also drive the export manufacturing capabilities of India. The immediate requirement is to improve the competitiveness of the steel industry. To make the indian steel more competitive, cost reduction across the supply chain, development of efficient logistics and reduction in financing costs are some of the issues to be addressed at the earliest.

The evolution of various emerging technologies such as robots, drones and IoT, the much needed transformation is under progress in steel industry and this transformation provides the steel business with valuable solutions. The increased efficiencies and integration of new technologies will help in improving the labour productivity. Subsequently, it will improve the cost reduction and overall profitability in the industry. It is expected that in next 10 years, the digital disruption improve exponentially. The implementation of the emerging technologies is a crucial factor for success in future.[25]

Steel contributed enormously towards economic growth of India. This is obvious from the similar growth patterns of GDP and steel production in India, which also indicates that the economy's dependence on production of steel. India's finished steel consumption increased from a mere 6.5 MT in 1968 to 100.72 MT in 2019, whereas GDP (at constant price, 2010) improved from USD 0.25 trillion in 1968 to USD 2.7 trillion now.

Conclusions:

Owing to China's over steel production, its export market improved substantially and resulted in dumping its excess inventory in all other countries wherever possible. Conversely, some major producers (such as those in Europe and the United States) ceased their manufacturing operations internally to compensate for these cheaper imports from China to minimize their operational costs.

Consequent to the trade actions, many steel companies' world over are under severe stress. However, unlike 2014, this time, the impact is not from excessive or cheaper exports from China. The domestic prices in China went down to the levels of 1,600 yuan/tonne in 2015, but remained above 3,300 yuan/tonne, this time. As a result, the raw material prices also remained higher. The Imported Coking Coal prices which reduced to the levels of USD 75/t in 2015, remained above USD 200/t till Jun'19.

The main impact was from depreciation in currencies of steel exporting countries like Russia and Turkey. Since Russia is self-sufficient in raw material, the depreciation in currency has not impacted them. In fact, it helped them to export Steel at cheaper prices. The Russian Steel companies are making profits even after reduction in export pricess from USD 543/t as on 01/04/2018 to a low of USD 347/t in Oct'19, a reduction of 36%. The global steel prices have become so low that China started importing from the global markets, including from RINL.

Due to this disconnect between Global Prices of Steel and Raw Materials, the companies like RINL faced a greater challenge this time than in 2015.

The slowdown in Indian Economy in 2019-20 added further challenges. The Construction Sector and Automobile Sector, which mainly contribute to Long Steel consumption, suffered the most. During the period Apr-Nov'19, the production of Cement reduced by 0.02%, while it increased by 14.2% in the same period last year, indicating

weakness in Construction. The production of automobiles reduced by 13.75% during the period Apr-Nov'19, while it increased by 12.53% in the same period last year.

The Net Sales Realisations of RINL, in Nov'19 was about Rs.9,000/t (23%) lower than Nov'18. On cumulative basis, the NSR reduced by about Rs.6,000/t (15%). The raw material prices reduced by a mere Rs.200/t. Due to this, the contribution levels have reduced to about Rs.3,000/t against Rs.9,000/t in the same period last year. Considering these low contribution levels, we have adopted 2 Blast Furnces operation, where the improvement in efficiency and lower coke purchase offset the loss in contribution.

However, the situation is improving. The Imported Coking Coal prices are reducing and Global Steel prices are recovering. The offtake of steel in domestic market improved and the prices are firming up. So, let us not lose heart with the present position. We would come back to normalcy very shortly.

References:

https://pib.gov.in/newsite/PrintRelease.aspx?relid=153661 and https: // steel.gov.in/ make-india#skipCont

2020 Cyclical Industry Outlook, Nov. 25, 2019, published by: Hyundai Motor Investment & Securities, Today's Market, Market Outlook.

The Indian steel industry: Growth, challenges and digital disruption, Indian Steel Association, PWC, November, 2019.

GDP data: World Bank, steel production data: World Steel Association, http:// jpcindiansteel.nic.in

http://jpcindiansteel.nic.in

http://www.worldsteel.org

https://www.business-standard.com/article/economy-policy/india-pips-japan-to-be-second-largest-global-steel-producer-119012100723_1.html

https://steel.gov.in/sites/default/files/draft-national-steel-policy-2017.pdf

CAGR computation

https://steel.gov.in/national-steel-policy-nsp-2017

https://www.globaldata.com/store/report/gdcn0460mr--construction-in-india-key-trends-and-opportunities-to-2023/

Centre for Monitoring Indian Economy (CMIE) Database

https://www.ibef.org/industry/india-automobiles.aspx

http://www.cmie.com

https://niti.gov.in/sites/default/files/2019-07/Need%20for% 20a%20new%20Steel%20Policy_NITI%20Website%20Final.pdf

Economic Survey 2016-17, Ministry of Finance, Government of India.

Economic Survey 2017-18, Ministry of Finance, Government of India.

https://www.ibef.org/archives/industry/steel-reports/indian-steel-industry-analysis-march-2018

Economic Survey 2018-19, Ministry of Finance, Government of India.

https://www.ibef.org/archives/industry/steel-reports/indian-steel-industry-analysis-march-2019

Economic Survey 2019-20, Ministry of Finance, Government of India.

https://www.ibef.org/archives/industry/steel-reports/indian-steel-industry-analysis-august-2020