

Need for a New Steel Policy*

Dr. V.K. Saraswat¹ and Ripunjaya Bansal²

* **Disclaimer**: Opinions and recommendations in this article are exclusively of the authors and not of any other individual or institution.

¹ Dr. V.K. Saraswat is the former DRDO Chief & Secretary Defence R&D, recipient of Padma Shri & Padma Bhushan and is currently the Member, NITI Aayog. ² Mr. Ripunjaya Bansal is working as a Young Professional in NITI Aayog.

¹

Table of Contents

Over	view	3
Back	ground of Steel Sector	3
Deve	lopments in Domestic & Global Steel Space	4
1.	Global Overcapacity of Steel Production along with Subdued Demand	4
2.	Impact of International Markets	4
3.	Intermittent Supply of Raw Materials	5
4.	Policy/Legislative Changes	6
5.	Declining Competitiveness of Indian Steel Manufacturers	7
6.	Deteriorating Financial Health of Steel Companies	8
7.	Sustainable Development	9
8.	Need for an Independent Regulator	10
Anne	exure	11
List o	of Tables	11
Majo	or Steel Producing Nations in the World	11
Steel	Consumption of different Countries	11
Steel	Production and Consumption of India	12
Steel	imports by India	13
GDP	Growth Rate of India	14
Steel	Imports by India from different Countries	14
Roya	Ity Rates on Iron Ore in different Countries	15
Share	e of different Modes of Transportation in Steel Industry	15
Lend	ing Rates in different Countries	16
Cost	disadvantage of Indian Steel	16

Need for a New Steel Policy

Overview:

Steel plays a major role in the growth of a developing economy. Steel being a core sector, is important to the country's economic security as it is extensively used in a variety of areas such as social and economic infrastructure, defense, automobiles etc. It is valued at over \$100 Billion and contributes around 2% to GDP of the country. India has become the third largest producer of steel with 89 MT of production³, overtaking US in 2015, after China (804 MT) and Japan (105.2 MT). There was a decline in steel consumption globally and in the major steel producing nations⁴ like China, Japan, United States, Russia in 2015, whereas India saw a growth of 4.5% in comparison with the previous year. However, the steel sector in our country is in doldrums.

Background of steel sector:

The steel sector in India flourished between 2003-04 and 2007-08 as production and consumption⁵ of finished steel grew at a CAGR of 8.3% and 12% respectively. Since, the consumption surpassed production, India's steel imports⁶ increased from 1.75 MT to 7 MT (CAGR of 41.5%) over the same period. Whereas, during 2010-11 to 2014-15, the production and consumption of finished steel grew at a CAGR of 7.2% and 3.6% respectively which clearly indicates a lack of demand. However, the imports have risen to 11.7 MT from 6.6 MT during 2010-11 to 2015-16, inspite of low demand. This is primarily due to surge in cheap exports by China, Russia, Korea, and Japan etc. & other factors which is talked about later. It is to be noted that the golden years for the steel sector (2003-04 to 2007-08) was the time when India grew⁷ at over 9% and sustained this growth rate for three years, whereas the same dipped to 4.7% in 2013-14 from 8.9% in 2010-11 (GDP at

³ Major Steel Producing Nations

⁴ Steel consumption of different Countries

⁵ Steel production and consumption of India.

⁶ Steel imports by India.

⁷ GDP Growth of India.

constant prices 2004-05). The decline of steel sector in the past 4-5 years can be attributed to many factors, inter alia, the global overcapacity leading to cheap exports into India, demand deficiency of steel which highlights the need to increase the steel intensity in India especially in rural areas (per capita consumption in rural areas is ~10 kg), declining competitiveness of Indian steel manufacturers, intermittent supply of raw materials, land acquisition etc. Country's per capita steel consumption is 60.3 kg whereas the global average hovers around 220 Kg indicating the potential demand in long term.

A number of developments have taken place in the global and domestic steel space which calls for a new policy framework.

1. Global overcapacity of steel production along with subdued demand:

The world is facing a huge overcapacity of steel production whereas the demand has not kept pace with capacity addition. The world crude steel production in 2014 was 1665 MT against a demand of 1648 MT while the capacity was 2241 MT, leaving an excess capacity of 576 MT. The subdued demand is often attributed to slowdown in the world economy as it is often said that the markets adjust to lower levels of Chinese growth – the 'new normal'. India has also been affected by the above global trend which is discussed in the next point.

2. Impact of International Market Developments:

The global overcapacity in steel sector, where China has played a crucial role, has implications on our domestic industry as well. The crude steel production capacity in China stood at 1.25 billion tons in 2014, whereas the production was 823 MT leaving behind an excess capacity of 425 MT, which is around four times the installed capacity in India. China's steel production accounted for 50% of the Global steel production, whereas the capacity accounted for 55% of the Global steel capacity in 2015. The global steel capacity has increased to 2241 MT in 2014 from 1060 MT in 2000 and China accounted for steel globally has been low, so is the case in China, due to this, the Chinese companies have been dumping steel at low prices (inventory costs) into global markets, including India aggressively. This has

also been confirmed by the notification issued by Directorate General of Anti-Dumping & Allied Duties (DGAD) which stated that there is prima facie evidence of dumping of steel products by China, Japan, Korea, Russia, Brazil and Indonesia.

Moreover, the devaluation in Chinese Yuan and Russian Ruble have resulted in increase of steel imports in India from these two countries. Chinese imports of 3.6⁸ MT in 2014-15 increased to 4 MT in 2015-16 which accounted for around one third of the total steel imports in India in 2015-16.

Apart from above, India had signed Free Trade Agreements (FTAs) with South Korea and Japan under CEPA (Comprehensive Economic Partnership Agreement) in January, 2010 and August, 2012 respectively under which the duties on most of the products, traded between the countries, are either eliminated or reduced sharply. Due to this, the import duty on steel for Japan and Korea was 0.8% and 1.25% in June, 2015 respectively, whereas the import duty on flat steel and long steel products was 12.5% and 10% respectively for other countries. Due to FTA's, steel imports from South Korea and japan have increased by 52% and 25% respectively in 2015-16 over the previous year. Since, the FTAs are a Government to Government deal, so, they should be acknowledged, however, the Government should try to drive out steel from the purview of FTA's.

3. Intermittent Supply of Raw Materials:

The supply of two crucial raw materials namely iron ore and coal have not been continuous to the steel sector. There have been some instances over the past years which have caused the disruption of supply of raw materials to the industry which has resulted in non-availability of raw materials or high prices or both. There have been various mine closures over the past five years as a result of Shah Commission investigation and Supreme Court announcements. Bans on iron ore mining had been imposed through Supreme Court (SC) rulings in the states like Karnataka & Goa in July, 2011 and September, 2012 respectively due to illegal mining, and in Odisha due to the lack of requisite clearances pending from the state Government in May 2014. However, the mining resumed in Karnataka in April 2013 after SC laid down the modalities for mine auctioning with an annual cap of 30 MT, Goa in April, 2014 after SC had put an annual cap of 20 MT

⁸ Steel Imports by India from different Countries

production and in Odisha in May, 2016 after the SC vacated its earlier order of May, 2014. Moreover, the steel industry was also affected by the cancellation of 214 coal blocks by SC in September, 2014, though, the industry can now procure the coal by participating in the coal auctions. The impact of the above developments have resulted in the sporadic supplies of raw material to the steel industry, thereby distressing it.

4. Policy/Legislative Changes:

In view of the increased exports by China, South Korea, Japan, Russia etc. there is a need to monitor the requisite anti-dumping and safe guard duties closely. A slew of measures have been taken by the Government to check the steel imports like, imposition of a 20% safeguard duty (minus any existing anti-dumping duty) in September, 2015 till September, 2016 following which it will be reduced to 18% till March 2017, then brought down to 15% till September 2017 and eventually to 10% by March 2018. In December, 2015, an anti-dumping duty in the range of 5.3% -57.4% was levied on imports of cold rolled flat products of stainless steel citing continued dumping of the subject goods. Apart from the above, the Directorate General of Foreign Trade came out with a Minimum Import Price (MIP) in February, 2016 on 173 steel products, providing the much needed relief to the industry. However, the steel imports have risen by 25% in 2015-16, it may take a bit of time to realize the impacts of these provisions. Also, there is a need to closely monitor the customs duty on raw materials like iron ore and coking coal. There is a much anxiety among the industry regarding the removal of export duty on iron ore, for instance, in Goa the export duty on iron ore has been removed keeping in view the dismal demand for iron ore (low grade) in the state. The steel industry is concerned whether such a law would be passed on pan India basis or not as it might cause a shortage of iron ore and increase in its prices. Thus, we need to be on our toes while monitoring/changing/introducing any of the legislative or policy changes so that our domestic industries are not at any disadvantage and a check can be kept on unfair practices like dumping etc.

5. Declining Competitiveness of Indian Steel Manufacturers:

The Indian Steel companies enjoy some inherent advantages in terms of abundant availability of raw materials at cheap prices and workforce at low costs apart from the presence of a strong domestic steel market. The cost of steel production in India is around \$320 - \$340 per ton in comparison with \$400 per ton in China and japan, whereas the global average is around \$390 per ton. Inspite of the low cost of production, Indian steel has still become uncompetitive in global markets. Why?

The solution does not lie in a single answer. The following factors have led to above situation.

An import duty of 2.5% on coking coal and a coal cess @ of INR 400/ton is levied, it is argued by met coke and steel manufacturers that the combined effect of import duty and coal cess is more than the 5% import duty on met coke, which makes the domestic met coke unviable. The royalty⁹ on iron ore at 15% is one of the highest in the world, whereas the global average is in the range of 3%-7%, which would erode India's comparative advantage of relatively cheaper raw materials. Apart from the above, the cost of transportation (freight costs) in India is also one of the highest in the world which further adds to the cost of delivered steel. For e.g. Freight cost from Jamshedpur to Mumbai can be as high as \$50/ton in comparison with \$34/ton from Rotterdam to Mumbai. The cost of steel transportation and associated raw materials via road is around four times expensive than waterways and twice that of railways & the share¹⁰ of road traffic in India is quite high at 55%-60%. The industrial power tariffs in our country are also one of the highest in world on Purchasing Power Parity (PPP) basis mainly due to cross subsidization. The rate of lending¹¹ for the steel projects is as low as 6% in China, 1.5% in Japan and 4% in South Korea in comparison with 12% in India which makes it difficult to service the debt. The combination of all the above factors have made the Indian steel uncompetitive¹² as the final cost of steel rises to around \$420/ton. As it is easier said than done, this situation calls for reforms

⁹ Royalty Rates in Different Countries

¹⁰ Share of different modes of transportation in Steel industry

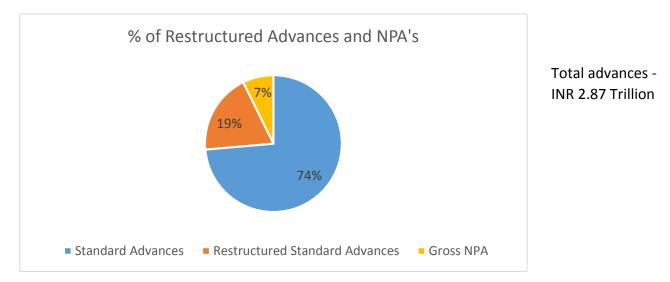
¹¹ Lending Rates in different countries

¹² Cost disadvantage of Indian Steel

in different sectors which might be a heavy duty task for the concerned stakeholders.

6. Deteriorating Financial Health of Steel Companies:

The steel companies have been in huge debts over the past couple of years due to the combined effects of supply and demand side sectors in steel industry. The situation is guite critical as they are not even able to service their interest costs. There was an aggregate debt of INR 45160 Cr on the iron & steel industry in 2014 according to the Corporate Debt Restructuring (CDR) Cell progress report, which has increased to INR 53580 Cr in March, 2016. The share of stressed advances as shown in the graph below has reached 25%, out of which 19% are restructured standard advances and 7% are Non-Performing Assets (NPA's). Rapid measures need to be taken to improve the financial health of steel industries, otherwise, it may become difficult to meet the demand for steel as the sector recovers from the global slowdown. It is to be noted that the Government has given financial support to the steel industry earlier in 1999 and 2003, while presently, the Government is trying to support the industry through RBI via strategic debt restructuring scheme for the third time, irrespective of whether the scheme works or not. Therefore, the steel sector which has a long gestation period needs long-term finance like pension funds etc., which have the capacity to withstand cyclical volatility of profits unlike funding from banks, External Commercial Borrowing (ECB) or capital markets.



Source: Reserve Bank of India & Ministry of Steel

7. Sustainable Development:

With regards to increased constraints over GHG emissions all over the World post COP 21, the expansion in the steel sector will have to cater to the environmental aspects. Iron & Steel industry accounted for 6.7% of the total CO₂ emissions in 2010 (IEA). The local air and water pollution also assumes significant importance when talking about mitigating the impact on environment. India is at 2.7 tonsco₂ /ton of crude steel, whereas the world average is around 1.8 tco₂ /tcs which shows that there is a lot of potential for improvement. Though, the developed world might be struggling with the retrofitting of older steel plants, India has an opportunity to leapfrog to the latest technology.

8. Need for an Independent Regulator:

Since, Steel is a deregulated sector, there is a need for an independent regulator for effective regulation, which the sector presently lacks. Also, in the mining sector, though, NMDC should act as a regulator, but it itself is engaged in the iron ore mining, which may create a conflict of interest. Therefore, a new independent regulator is required in the mining sector as well.

In the light of the above developments, there is need for a new and dynamic steel policy. Seeing the current situation of the steel sector, it may be unlikely to achieve the targets envisaged in the National Steel Policy 2012 i.e. a capacity of 300 MT and production of 275 MT by 2025. To bring the steel sector back on track, mere tinkerings in the present policy would not bring out a transformational change that is required. Moreover, there is a need to examine the entire value chain associated with the steel industry, right from the raw materials to the production of finished products to find out the exact bottlenecks in the sector. An ecosystem has to be created that would ensure the profitability of each of the associated industry whether mining, pet coke, pellet, sponge iron, etc. and simultaneously it needs to be checked that none of these make windfall gains at the expense of other. Apart from that, the transport unions and banks have to be taken on board for smooth, efficient transportation of various materials at uniform prices across the entire nation and availability of long term finance at competitive rates respectively. Though, the above situation may seem idealistic, we have to strive towards it to make the entire steel sector profitable either through direct Government intervention or independent regulators,

however, the latter is preferred. Therefore, the integration of different sectors assumes paramount importance in the wake of declining steel and associated industries rather than working in silos, which has been the trend till now. NITI Aayog, being the Government's think tank would be the right place to build on the consensus for a new National Steel Policy with the support from different stakeholders comprising various Ministries, PSU's, State Governments, industry associations, academia, think tanks etc.

Annexure:

List of Tables:

• ³Major Steel Producing Nations in the World:

Steel Production of Different Countries (MT)			
Country	2014	2015	
China	823	804	
Japan	111	105	
India	87	89	
United States	88	79	
Russia	72	71	
South Korea	72	70	
Brazil	34	33	

Source: World Steel Association

• ⁴Steel Consumption of different Countries:

Steel Consumption of Different Countries (MT)				
Country	2014	2015	% reduction in consumption in 2015	
China	711	672	-5.5%	
Japan	68	63	-7.4%	
India	76	80	5.3%	
United States	107	96	-10.3%	
Russia	43	39	-9.3%	
South Korea	56	56	0.0%	
Brazil	26	21	-19.2%	

Source: World Steel Association

• ⁵Steel Production and Consumption of India:

Year	Finished Steel Production	Consumption of Finished Steel
2003-04	40.7	33.11
2004-05	43.51	36.37
2005-06	46.56	41.43
2006-07	52.52	46.78
2007-08	56.07	52.12
2008-09	57.16	52.35
2009-10	60.62	59.33
2010-11	68.62	66.42
2011-12	75.69	71.02
2012-13	81.68	73.48
2013-14	87.67	74.09
2014-15	90.6	76.36
CAGR (2004-05 to 2014-15)	7.61%	7.70%
CAGR (2003-04 to 2007-08)	8.34%	12.01%
CAGR (2010-11 to 2014-15)	7.19%	3.55%

Source: CMIE

• ⁶Steel Imports by India:

Year	Import of Finished Steel
2003-04	1.75
2004-05	2.29
2005-06	4.3
2006-07	4.92
2007-08	7.02
2008-09	5.84
2009-10	7.38
2010-11	6.66
2011-12	6.86
2012-13	7.92
2013-14	5.45
2014-15	9.32
2015-16	11.7
CAGR (2004-05 to 2014-15)	15.07%
CAGR (2003-04 to 2007-08)	41.52%
CAGR (2010-11 to 2014-15)	8.76%

Source: CMIE

• ⁷GDP Growth of India:

Year	GDP at Constant prices (2004-05)in INR Cr.	% growth over previous year
2005-06	3253073	9.48
2006-07	3564364	9.57
2007-08	3896636	9.32
2008-09	4158676	6.72
2009-10	4516071	8.59
2010-11	4918533	8.91
2011-12	5247530	6.69
2012-13	5482111	4.47
2013-14	5741791	4.74

Source: NITI Aayog

• ⁸Steel Imports by India from different Countries:

Country	2012-13 (MT)	2013-14 (MT)	2014-15 (MT)	2015-16 (MT)
China	1.7	1.1	3.6	4.0
Japan	1.6	1.4	1.6	2.0
Korea	1.7	1.3	1.9	2.9
Total	7.9	5.5	9.3	11.7

Source: Ministry of Steel

• ⁹Royalty Rates on Iron Ore in different Countries:

Royalty on Iron Ore		
Australia	6.5–7.5 %	
Brazil	2%	
Canada	2-16%	
India	15%	
South Africa	0.5-7%	
United States	0-5%	

Source: PWC report – Corporate income taxes, mining royalties & other mining taxes

• ¹⁰Share of different Modes of Transportation in Steel Industry:

Share of different modes of transportation in steel industry				
India China US				
Road	55-60%	20-25%	35-40%	
Rail	36%	28-33%	48-52%	
Water	6%	47%	12%	

Source: NCAER

• ¹¹Lending Rates in different Countries:

Comparison of lending rates				
Country	2013	2014	2015	
China	6%	6%	5.60%	
Japan	1.50%	1.20%	1.20%	
Korea	4.50%	4.50%	3.70%	
India	12.50%	11.30%	12%	

Source: Ministry of Steel

• ¹²Cost disadvantage of Indian Steel:

Cost disadvantage of Indian Steel Industry (USD/ton)		
Logistics & Infrastructure	25 - 30	
Power	8 - 12	
Import Duty on Coal	5 – 7	
Clean Energy Cess	2 – 4	
Taxes & Duties on Iron Ore	8 - 12	
Finance	30 - 35	
Total Cost disadvantage	80 - 100	

Source: Ministry of Steel & Industry Sources