





Metal Bulletin

9th Indian Iron & Steel Conference

20-21 September, 2016 ITC Maurya, New Delhi

INDIAN IRON ORE AT CROSS ROAD

R. K. SHARMA SECRETARY GENERAL

Federation of Indian Mineral Industries (FIMI)





RESOURCE BASE

India has a sound resource-base as far as iron ore is concerned. Despite having mined 2041 million tonnes between 2000 to 2013, the iron ore resources increased by 9215 million tonnes and stood at 31323 million tonnes as on 1st April, 2013 as against 22108 million tonnes as on 1st April, 2000:

Table-I India – Iron Ore Resources and Production between 2000-2013

(Qty: Million Tonnes)

| Resources | Production | Resources | Production | Resources | Production | Resources |
|---------------------|------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| as on 01-04-2000 | 2000-2005 | as on 01-04-2005 | between 2005-2010 | as on 01-04-2010 | between 2010-2013 | as on 01-04-2013 |
| 01-04-2000 | 2000-2003 | 01-04-2003 | 2005-2010 | 01-04-2010 | 2010-2013 | 01-04-2013 |
| 22108 | 532 | 25249 | 997 | 28526 | 512 | 31323 |
| | | (+3141) | | (+3277) | | (+2797) |

Notes: (i) Figures in parenthesis indicate decrease (-)/increase (+) in resources over previous figures

Source: Indian Bureau of Mines (IBM)







2. The phenomenal increase in iron ore resources was possible because of strong export demand, mainly from China. As it happens, demand leads to more intense exploration and discovery of more resources.

INDIAN IRON ORE: EXPORT-LED

3. Domestic demand being very limited, Indian iron ore industry was always export oriented. Steel demand in the country being low and two big major producers viz. TISCO and SAIL having captive mines, the demand for iron ore from other steel producers was limited. Most of the iron ore produced in the country was thus exported through canalising agency, MMTC. Bellary-Hospet sector's iron ore industry was developed around 1956 to cater to export demand.





Even KIOCL was developed to feed Iranian steel mill. Subsequently sponge iron plants started coming into operation. However, their requirements were highly specific: closely sized iron ore of 5-18 mm of +65% Fe. This led to further wastage of iron ore since sizing of iron ore led to generation of more fines, whose demand in the world particularly Japan and South Korea (who were the only major importing countries) was very limited. Of late, JSW has emerged as a major steel producer whose demand for iron ore is mainly fines and met from the surrounding lessees in and around Bellary-Hospet region in Karnataka.

4. To promote exports, iron ore was de-canalised in mid-1996 which allowed private miners and exporters to seek export market. It was only when Chinese demand started picking up since 2000 that iron ore exports and production started picking up gradually till they peaked in 2009-10 when exports were 117.37 million tonnes and production 218.55 million tonnes. The exports and production started sliding thereafter particularly from 2011-12 when export duty was raised from 5% on fines to 20% w.e.f. 1st March, 2011 (for lumps and fines) and further increased to 30% w.e.f. 30th December, 2011. The following table illustrates the phenomenon more clearly:











Wyses distinguished to the total policy and the tol

6. India is also the largest producer of sponge iron (DRI) in the world:

| Table-IV | | | | | | |
|--|------------|--|--|--|--|--|
| Production of Sponge Iron | | | | | | |
| (in '000 tonnes) | | | | | | |
| Year | Production | | | | | |
| 2009-10 | 24326 | | | | | |
| 2010-11 | 26709 | | | | | |
| 2011-12 | 19634 | | | | | |
| 2012-13 | 19768 | | | | | |
| 2013-14 | 18204 | | | | | |
| 2014-15 | 20378 | | | | | |
| 2015-16 | 16283 | | | | | |
| Source: Joint Plant Committee, Kolkata | | | | | | |

TOTAL IRON ORE DEMAND

7. Due to sluggish demand for steel the annual domestic consumption of iron ore hovers around 100-115 million tonnes:



Table-V



Iron ore Production, Stocks at Mine-Heads, Demand, Imports,
Net Demand, Surplus available

| | | (mil | lion | tonnes | |
|--|--|------|------|--------|--|
|--|--|------|------|--------|--|

| Year | Production | Stocks at | Der | Imports | Net | Surplus | | |
|---------|------------|-------------------|-----------------|---------|---------------|---------|--------|-----------|
| (1) | (2) | mine-heads | Domestic demand | Exports | Total | (7) | demand | available |
| | | (3) | (4) | (5) | demand (6) | | (6-7) | (e) |
| 2011-12 | 168.58 | 123.80 | 96.61 | 61.74 | 158.35 | 0.98 | 157.37 | 134.03 |
| 2012-13 | 136.61 | 120.20 | 100.48 | 18.37 | 118.85 | 3.05 | 115.80 | 174.70 |
| 2013-14 | 152.18 | 124.37 | 108.33 | 14.42 | 122.75 | 0.36 | 122.39 | 154.16 |
| 2014-15 | 128.91 | 128.66 | 113.48 | 6.12 | 119.60 | 12.09 | 107.51 | 150.06 |
| 2015-16 | 155.90 | 143.98 (P) | 115.00 | 4.50 | 119.50 | 7.09 | 112.41 | 187.47 |

P= Provisional

Source: IBM for production and mine-head stocks; domestic consumption calculated; FIMI for exports.



NIMI



CONSEQUENCES

8. The consequences of the Government of India's policy have been such that cheap availability of raw materials could not lead to more production of steel but it did lead to slow-down of the iron ore industry, leading to job loss of more than one million people, engaged directly or indirectly in the mining industry. What was being exported were mainly surplus fines which were or are not required in the country. Its exports did not in any way affect the iron ore supply to domestic steel plants.





9. What is more distressing is that due to the policy of Government, India started importing iron ore whereas exports are declining year after year as can be seen from the following table:

Table-VI
India's Iron Ore Imports and Exports

(million tonnes)

| | 2011-2012 | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 |
|---------|-----------|-----------|-----------|-----------|-----------|
| Imports | 0.98 | 3.05 | 0.36 | 12.09 | 7.09 |
| Exports | 61.74 | 18.37 | 14.41 | 6.12 | 4.50 |

Source: Ministry of Commerce & Industry







10. The Government of India's idea before imposing export duty on iron ore was to reduce the export of raw materials and promote value-added steel which would give more jobs in the country. The cheap availability of raw materials did not result in more steel production and its exports. It is also surprising that Indian steel industry is having all the raw materials within the country and in some cases captive mines, and yet it is not able to compete with steel imported from countries who are totally dependent on imported raw materials:

Table-VII
Imports and Exports of Finished Steel

| (Qty. in million tonnes); (Value in Rs Crore) | | | | | | |
|---|----------|-------|----------|-------|--|--|
| | Exports | | | | | |
| Year | Quantity | Value | Quantity | Value | | |
| 2010-11 | 6.66 | 26996 | 3.64 | 18433 | | |
| 2011-12 | 6.86 | 32888 | 4.59 | 19922 | | |
| 2012-13 | 7.93 | 39290 | 5.37 | 26450 | | |
| 2013-14 | 5.45 | 30416 | 5.98 | 29747 | | |
| 2014-15 | 9.32 | 44994 | 5.94 | 31283 | | |
| 2015-16 | 11.71 | NA | 4.07 | NA | | |

Source: Ministry of Commerce & Industry





- 11. The experience tells us that raw materials availability in a country is not the prime consideration for setting up of steel and aluminium industries. It is the *domestic demand* for these metals which is the prime factor to set up these industries in a country. Despite exporting all the raw materials for steel and aluminium industries, Australia produced 4.9 million tonnes of steel and 1.65 million tonnes of aluminium in 2015. In the case of Brazil, it produced 33.2 million tonnes of steel and 0.78 million tonnes of aluminium in 2015. The underlying reason is that there is not enough demand for steel and aluminium in these countries.
- 12. FIMI is putting across Government of India that exports of iron ore will not lead to any scarcity of ore to domestic steel plants, present or future. Rather more production will lead to more exploration and discovery of more resources and create more jobs. We hope Government of India will realise and remove export duty as they have done for ore less than 58% Fe or scale down the export duty to make exports competitive in the world market.







13. The onus of increasing steel (or aluminium) consumption and consequently production lies with the Government. It has to free the economy and do what JM Keynes once called "pump priming" in infrastructure and other areas which are steel-intensive in terms of its usage. The Union Budget 2016-17 puts more emphasis on infrastructure development and it is hoped that in times to come, steel industry may gradually be on the growth path. However, even then, it would be essential to export iron ore which may not be required by the steel industry to make the optimum use of resources and to keep jobs in place.

