Indian Iron Ore Scenario

Rajesh Somani
M.D. & C.E.O.
Swiss Singapore Overseas Enterprises
Cautionary Statement and Disclaimer

This presentation may contain forward-looking statements. Actual results might differ substantially or materially from those expressed or implied. This presentation should not be relied upon as a recommendation or forecast either by Aditya Birla Group or by Swiss Singapore Overseas Enterprises.

The views expressed are personal views of the speaker and may contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of this information.
India stands fourth among Global crude steel producers. Expect to breach 150 Mt by year 2020 taking it only next to China.

Worldsteel
Challenges being faced by Indian steel industry

- **Liquidity**: With global steel prices weakening, steel mills have been facing liquidity problems for procurement of raw materials.
- **Resources**: Irregularities in mining and mine allocations have led to mining bans or restrictions and caused temporary raw material shortages.
- **Infrastructure**: Lack of proper roads, railways, highways & bridges, port facilities & power supply, affect viable functioning of the industry.
- **Delays**: The absence of a clear cut land acquisition policy, and the resultant delays due to political interference, local protests, long wait for government clearances etc. have hampered growth.
- **Lack of Technology**: In several developed countries, 1.05~1.1 mt of crude steel is required to produce 1 mt of saleable steel. In India, the average is still high at 1.2 mt.
- **Low productivity**: The per capita labor productivity in India is at 90-100 tons which is one of the lowest in the world. The same in Japan, Korea and other major countries is about 600-700 tons per man per year.
- **Inefficiency of public sector units**: Most of the public sector units are plagued by inefficiency caused by under investment on social overheads, poor labor relations, inefficient management, utilization of capacity, etc. This hinders proper functioning of the steel plants and results in heavy losses.
Challenges being faced by Indian steel industry cont’d

- **Low capacity utilization**: The capacity utilization in India is very low and mostly remains below 80%. Reasons - strikes, lockouts, scarcity of raw materials, energy crisis, inefficient administration.

- **Inability to meet heavy demand**: Even at low per capita consumption rate of 55 Kg, India has not been able to meet demand, resulting in imports. Production has to be increased to save precious foreign exchange.

- **Shortage of metallurgical coal**: India’s coal reserves, especially high grade coking coal for smelting iron are limited, forcing steel plants to import metallurgical coal from Australia, S. Africa, Indonesia, etc. Serious thought is now being given to replace imported coal by natural gas from Krishna-Godavari basin.

- **Inferior quality of products**: Lack of modern technological and capital inputs and weak infrastructural facilities leads to a process of steel making which is more time consuming, expensive and yields inferior variety of goods forcing India to import better quality steel from abroad. Thus there is urgent need to improve the situation and take the country out of desperate position.
India’s iron ore resources & state-wise distribution as on 1-Apr-2010

Total resources of iron ore in the country is around 28.52 Bt as on 1st Apr 2010. Hematite ores estimated at 17.88 Bt and magnetite 10.64 Bt. Karnataka and Orissa together share 56% of total reserves. Hardly any Greenfield explorations or magnetite deposits explored. Explorations made are at shallow depth of 50-60 meters. Private participation for professional research & exploration programs can yield much higher reserves.

Source : IBM-Nagpur, FIMI
Iron ore in India will last at least another 200 years

All major greenfield steel projects have applied for captive iron ore mines. With appropriate focus on exploration and technology, India should be able to identify enough resources to sustain projected steel consumption of approximately 200 Mt per annum for another 200 years.

Source: FIMI, IBM-Nagpur
Major iron ore exporting ports in India currently used for discharging imported cargoes

West coast ports exposed to heavy monsoons. Fines shipments disrupted from June to Sept. Lumps move in small quantity during this period.

Mines closer to ports. Low cost logistics.

Ports modernizing. But inland logistics need quick up-gradation for cost effectiveness.

South east coast gets retreating rains in Nov & December. Fines much drier. Shipments during rains continue amid TML issues.

Map and ports only indicative. Not to scale
India’s share in world sea-borne supplies dropped

Inspite of increased global demand, Indian share in supply to global markets reduced from 10.2% in 2010 to 1.4% in 2014 due to mining disruptions in the country.
India’s share to Chinese imports almost vanished

CY - 2014

- Australia, 58.8%
- Brazil, 18.3%
- Others, 17.4%
- S. Africa, 4.7%
- India, 0.8%

CY - 2010

- Australia, 42.9%
- Brazil, 21.2%
- Others, 15.6%
- S. Africa, 4.8%
- India, 15.6%

India’s share to China also reduced from 96.6Mt (15.6%) in 2010 to 7.84Mt (0.8%) in 2014.

Source: Mysteel. (Mt)
India currently produces around 35 Mt of iron ore pellets against existing capacity of 61 Mt. With brownfield expansion of 13.6 Mt and greenfield expansion of another 61 Mt by 2016-17, total capacity was expected to reach 135 Mt. Investors re-considering plans due to export tax of 5% imposed w.e.f. Jan 2014.

Source: SSOE estimates
Indian crude steel Production
Current situation

<table>
<thead>
<tr>
<th>Period</th>
<th>Crude Steel Production (Mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>74.29</td>
</tr>
<tr>
<td>2012-13</td>
<td>78.42</td>
</tr>
<tr>
<td>2013-14</td>
<td>81.54</td>
</tr>
<tr>
<td>2014-15</td>
<td>84.00 (Estimate)</td>
</tr>
</tbody>
</table>

Source: Joint Plant Committee
# Big plans – Will this happen?

Source: projectstoday

<table>
<thead>
<tr>
<th>MOUs signed with State Govts</th>
<th>Steel Projects by States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td><strong>No. of MoUs</strong></td>
</tr>
<tr>
<td>Orissa</td>
<td>49</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>65</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>74</td>
</tr>
<tr>
<td>West Bengal</td>
<td>12</td>
</tr>
<tr>
<td>Other states</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steel Projects by Ownership</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
<td><strong>Projects</strong></td>
</tr>
<tr>
<td>Government</td>
<td>9</td>
</tr>
<tr>
<td>Private</td>
<td>77</td>
</tr>
<tr>
<td>Private (Indian)</td>
<td>72</td>
</tr>
<tr>
<td>Private (Foreign)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>86</strong></td>
</tr>
</tbody>
</table>

By 2020 Indian steel production is expected to reach about 154 Mt compared to 81 Mt as of now. Just about 73 Mt of additional production can actually come up in India in next 6 years as against newly proposed capacity of 197 Mt. India is not really short of iron ore.
India’s own iron ore requirement will grow three times by 2025

India needs to fast track iron ore mining plans to meet its own requirement which could touch 260 Mt by end of the decade. Failing to achieve this will either lead to failure to reach the crude steel targets or result in heavy import of iron ore from overseas suppliers.

Source: IBM-Nagpur, FIMI
India’s share to world production dropping as Global miners ramp up iron ore production for export

India’s iron ore production has dropped from 217 Mt in 2009-10 to 137 Mt in 2013-14. May further drop to 110 Mt in 2014-15 due to regulatory issues and lease renewal delays. International price slide & acute shortage in domestic market prompted steelmakers into importing iron ore to meet the demand.
Indian iron ore exports wills stay under 20 Mt in future

High export duty @ 30% & other taxes, high evacuation costs to the ports, International price corrections and export restrictions and mining stoppages continuously reduced Indian exports from mid 2010. Indian exports could stay under 20 Mt in future.

Source: FIMI, IBM Nagpur, JPC, GMOEA
Indian iron ore imports could grow to 12 Mt in FY 14-15

India’s iron ore exports in Apr-Oct ‘14 have plunged to 4.38 Mt, down around 73% from 16.3 Mt recorded in FY2013-14, and down about 96% from 101.53 Mt exported in FY2009-10. Iron ore imports in the first nine months of FY2014-15 stood at around 6.28 Mt. According to conservative estimates, total iron ore imports by India are expected to grow to 11~12 Mt in the FY 2014-15

Source: The Dollar
Indian Iron ore Production/Supply
Current situation

If India removes/relaxes its export restrictions, when might this happen, why might it happen, and what will happen to global markets?

Currently except Karnataka, there are no known export restrictions in India. Status of exports from the 5 major iron ore producing provinces in India is as under:

1) **Orissa** : Exports have become unviable due to high costs involved and continuously falling prices.

2) **Jharkhand** : No export price viability. Port infrastructure used is same as miners from Orissa.

3) **Chattisgarh** : NMDC currently supplies only to Indian domestic mills.

4) **Karnataka** : Supreme Court has put a cap of 30 Mt for production of iron ore of which only about 21 Mt are currently being produced. Mines are still awaiting Govt clearances for leases and environmental issues. Export restrictions may be lifted only after domestic requirements are met.

5) **Goa** : Goa’s state government has just removed a two-year ban on iron ore mining. Mines will require fresh approvals from Ministry of Environment. Actual exports could begin after Oct ‘15 due to monsoons. Falling prices of iron ore, export duty of 30%, Royalty of 15% and state tax of 10% will make Goan exports uncompetitive.
New government’s policies to stimulate investment to India and update on infrastructure construction progress

- About 17 Coal & Power related infrastructure projects cleared.
- Initiatives such as making online environmental and forest clearances for industrial projects made available, focusing on skill development, amending labor laws, and allocating funds to the manufacturing sector.
- Improving farm productivity, building quality infrastructure & boosting manufacturing
- Setting up farm credit, price stabilization funds & agriculture-tech infrastructure funds
- Public-private partnerships and tax holidays in the transport sector, providing custom duty relief to the energy sector, digitalizing rural India, and building smart cities and metro infrastructure in some cities.
- Revival of special economic zones, tax breaks for manufacturing units investing over INR 250 million, the revival of medium and small scale enterprises, and the building of an industrial corridor.
- The new Government also emphasized the need to strengthen the manufacturing sector and indigenize production by inviting FDI and appealing: “Come, Make in India”.
Indian Iron ore Production/Supply
Current situation...... cont’d

With the cost raising of domestic miners, would it make imported ore more attractive?

- Costs of domestic miners, for domestic consumption, are well within miners reach.
- Imports are due to shortage of ore which has resulted from closure of mines for regulatory and legal reasons.
- During 2014-15 crude steel production in India is expected to reach 84 Mt requiring about 134 Mt of iron ore (as per thumb-rule of 1 Mt crude steel = 1.6 Mt of iron ore). India may produce about 110 Mt of iron ore during the period. Imports are expected to remain at 11-12 Mt levels. The small gap of 12 Mt may get plugged by re-opening of mines.
- Imports are not attractive for steel production in India. However due to sheer shortage in domestic markets, the mill owners have imported about 6.8 Mt during the first six months of the current Financial year. Imports will continue till shortage of domestically produced raw material persists.
Our Guiding Principles

OUR VISION
To be a premium global conglomerate with a clear focus on each business.

OUR MISSION
To deliver superior value to our customers, shareholders, employees and society at large.

OUR VALUES
Integrity
Commitment
Passion
Seamlessness
Speed
India’s third largest business house, first multi-national corporation.

The Group is in the league of Fortune 500

Turnover of over USD 40 billion, more than 53% of revenues flow from its overseas operations

Powering India’s growth through its involvement in the core sectors of the economy viz. Metals, Cement, Textiles, Carbon Black, Trading, Financial Services, Telecom, Retail

Operations in 36 countries across five continents

Anchored by over 133,000 strong workforce belonging to 42 different nationalities

Ranked 4th in the world and 1st in Asia Pacific in the “Top companies for Leaders” (Study by Aon-Hewitt, RBL group and Fortune Magazine)
Our Flagship Companies

- Cement
- VSF
- Textiles
- Chemicals

- Aluminium
- Alumina
- Copper
- Fertiliser
- Chemicals
- Mines

- VFY
- Carbon Black
- Insulators
- Chemicals
- Textiles
- Garments
- Software services
- Insurance
- Financial services
- Fertilizer
- BPO

- Telecom

- International Trading

- Retail

Joint Ventures
- Birla Sun Life Insurance Co Ltd
- Hindalco-Almex Aerospace Ltd
- Aditya Birla Grasun Chemicals (Fangchenggang) Ltd
- Hydromine
- Thai Peroxide
- A V Group
- Tanfac Industries Ltd
## The Aditya Birla Group - A Global Perspective

<table>
<thead>
<tr>
<th>Business</th>
<th>Region</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium Rolling</td>
<td>Global</td>
<td>1</td>
</tr>
<tr>
<td>Viscose Staple Fibre</td>
<td>Global</td>
<td>1</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>Global</td>
<td>1</td>
</tr>
<tr>
<td>Insulators</td>
<td>Global</td>
<td>4</td>
</tr>
<tr>
<td>Acrylic Fibre</td>
<td>Global</td>
<td>5</td>
</tr>
<tr>
<td>Cement</td>
<td>Global</td>
<td>Among top 10</td>
</tr>
<tr>
<td>Primary Aluminium</td>
<td>Asia</td>
<td>1</td>
</tr>
<tr>
<td>Chlor-Alkali</td>
<td>India</td>
<td>1</td>
</tr>
<tr>
<td>Viscose Filament Yarn</td>
<td>India</td>
<td>2</td>
</tr>
<tr>
<td>Retail Business</td>
<td>India</td>
<td>Among top 2</td>
</tr>
<tr>
<td>Telecom</td>
<td>India</td>
<td>Among top 3</td>
</tr>
<tr>
<td>BPO</td>
<td>India</td>
<td>Among top 10</td>
</tr>
</tbody>
</table>

- Among the world's best energy efficient fertilizer plants
- The largest Indian MNC with manufacturing operations in the USA
- A top fashion (branded apparel) and lifestyle player in India
Trading Business

- Established in Singapore since 1978
- Global Trader Programme (GTP) status by Singapore Government
- Offices in 15 countries
  - Singapore
  - Dubai
  - Myanmar (Yangon)
  - China (Shanghai)
  - Bangladesh (Dhaka)
  - Indonesia (Jakarta)
  - Sri Lanka (Colombo)
  - Tanzania (Dar-e-Salaam)
  - Ivory Coast (Abidjan)
  - Canada (Edmonton)
  - Vietnam (Ho Chi Minh City & Hanoi)
  - Russia (Moscow)
  - India (Mumbai/Delhi/Kolkata/Gandhidham)
  - Brazil (Sao Paulo)
  - Kenya (Mombasa)
- Revenue USD 4.4 Billion (FY 13-14)
- Total Volume exceeding 19.0 Mill. Tons per annum
- Net Worth exceeding USD 200 Million
- Having own shipping desk in Dubai to cater to all in-house requirements
- Having Annual contracts with various refineries for Sulphur, Jet A-1, Naphtha & Gasoil etc.
Main Products

1. Energy
   - Petroleum Products: Naphtha, Furnace oil, Jet A1/Kerosene, Gas Oil, Mogas
   - Coal: Steam Coal (Non Coking), Anthracite Coal, Pet Coke, Met Coke

2. Sulphur & Sulphuric acid

3. Fertilizers: Urea, DAP, MAP, TSP, MOP, CAN, NPK, AS, SSP, Rock phosphate


5. Others
   - Agricultural Produce: Beans & Pulses, Rice, Tea, Sugar, Cocoa, Maize, Feed Mill Extractions
   - Industrial Raw Materials & Minerals: Fluorspar, Soda Ash, Caustic Soda, Clinker
   - Others: Fibre, Bitumen, Paraffin Wax, Polymers.
**Major Counter Parties**

- **Refineries:** ADNOC, ADGAS, BAPCO, SAUDI ARAMCO, KPC - Kuwait, Tasweeq (Qatar Petro), PRL-Pakistan, Formosa- Taiwan.


- **Oil Majors and Traders:** Chevron, Totsa Total, BP, Shell, Morgan Stanley, Vitol, Glencore, Cargill, Trafigura, Addax, RIL, HPL, Singapore Petroleum, ENOC, Hin-leong, MPEL-Myanmar, CPC-Taiwan, Mitsubisihi, Itochu, Mitsui.

- **Coal Miners & Traders:** Anglo Coal, BHP Billiton, Xstrata, Total Energy, Cargill, Vitol, Sempra, Flame, Essent Trading, Bulk trading, CBB, Carbofer, Glencore, Energy Coal, Duferco, Oxbow, PT Bam, Pt Minakrida Bhakti, IMR, V-Coalimex.

- **Major Coal Buyers:** Ultra Tech Cement, Binani Cement, Ambuja Cement, Saurashtra Cement, Sanghi Cement, SDCC, China Minmetal, Grasim Industries, Birla Copper, Nirma Ltd, ABNL, Global Commodities, Fujirah Cement, Maheshwari Bros., Jindal Stainless, Welspun, DCM Shriram Group.

- **Fertilizers:** Yuntianhua, Shangdong Luxi Chemical, Sinochem, Sinopac, CNAMPG, Yunnan Dihai, Fertil, Qafco, Sabic, PIC, Sohar, MMTC, IPL, IFFCO, STC, RCF, TFC-Tanzania, CFL-Srilanka, CFC-Srilanka, BCIC, Petrovietnam, Lafchemco, SFC, Philphos, Pt Gresik, Pt PUSRI, Pt. PIM, Pt Kaltim, ICL, TCP Pakistan.

- **Steel & Iron ore:** GIIC-Bahrain, Kudremukh, BHP, RIO, FMG, Pluton-Australia, Vale, Kumbha, Ye Steel, Baosteel, Sanming steel, Tangshan Jiaxin steel, Hangzhou steel, Shagang Steel.
Trading Business – Values

**Integrity** – Honesty in every action
Ethical, transparent, truthful, upright, principled, respectful

**Commitment** – Deliver on the promise
Accountability, discipline, responsibility, results orientation
self confidence, reliability

**Passion** – Energized action
Intensity, innovation, transformational, fire in the belly,
inspirational, deep sense of purpose

**Seamlessness** – Boundary less in letter and spirit
Team work, integration, involvement, openness, global,
learning from the best, empowering

**Speed** – One step ahead always
Response time, agile, accelerated, timelines, nimble, prompt,
pro-active, decisive
Contact us at:

**Swiss Singapore (Shanghai) Trading Co. Ltd.,**

B-2504, Dawning Center,
500 Hongbaoshi Road, Across Gubei Road,
**Shanghai, China - 201103**

长宁区红宝石路500号（近古北路）东银中心B座2504室

Uday.redkar@adityabirla.com Balaji.krish@adityabirla.com

Tel: +86 21 60909855 Fax: +86 21 62362704

---

**Swiss Singapore Overseas Ent. Pte. Ltd.,**

903-2904, Level 29, ONE By Omniyat Tower,
Business Bay, Off Sheikh Zayed Road,
**Dubai, UAE**

Tel: +9714-4463700, Fax: +971-4-4533583

Madhu.n@adityabirla.com

---

**Swiss Singapore Overseas Ent. Pte. Ltd.,**

65 CHULIA STREET, #48-05/08,
**SINGAPORE - 049513**

Tel: +65-65785229 Fax: +65 62224984

Vishal5.Gupta@adityabirla.com

---

www.swiss-Singapore.com
www.adityabirla.com
Trusted Business Partner
Thank you