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INTRODUCTION

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OUTO
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Indian Steel Industry – Opportunities and Challenges

S C Suri
Life Fellow IIM &
Vice Chairman, IIM DC

India's steel industry has grown at about 10% per year, from 27 million tonnes in 2001 to 72 million tonnes in 2011. According to the Planning Commission of India, the country's steel production is expected to grow by around 60 million tonnes during the 12th FYP (2012-13 to 2016-17). "India's domestic steel consumption will continue to grow steadily for several years. It shall be driven by urbanization, favourable demography, GDP growth, refocus on industrialization and investments in infrastructure. The current challenges, while posing constraints on supply side, do offer opportunities for players both local and global."

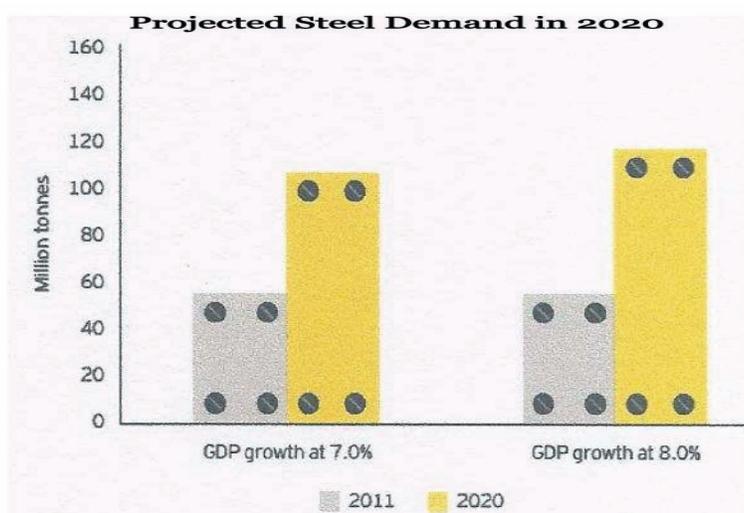
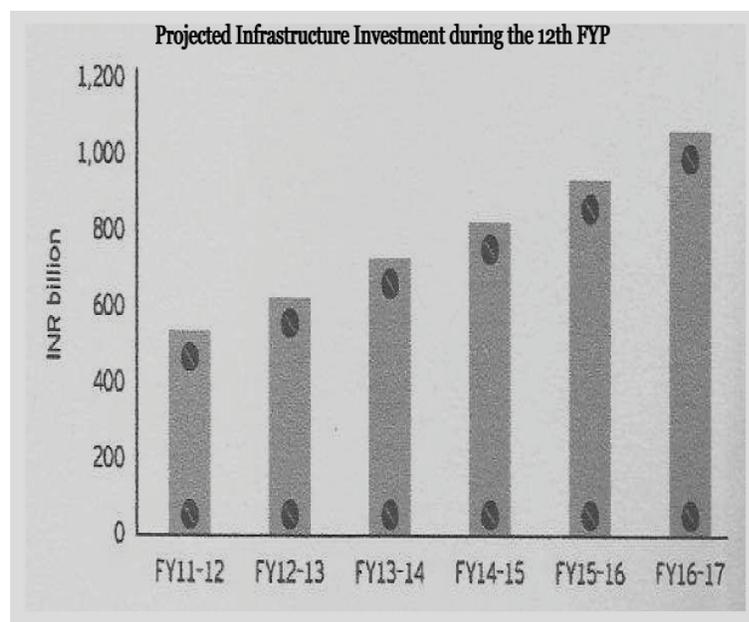
The growth in India's industry is primarily a result of domestic steel consumption. This has been driven primarily by infrastructure-related investments and consumer durables. The 12th FYP projects an investment of US\$ 1 Trillion in infrastructure alone will accelerate steel consumption. As an estimate, this increase in infrastructure spends may itself lead to additional demand of approximately 40 million tonnes per annum during 2012-13 to 2016-17.

The rising middle-class population, along with increased urbanization, will increase steel intensity in the economy. According to the report of the working group on steel industry for the 12th FYP, the Indian urban population is expected to increase to 600 million by 2030 from the current level of 400 million. The rising middle-class urban population boosts demand for automobiles, white goods and other consumer durables leading to higher per capita steel consumption.

Indian steel consumption growth has an elasticity of about 1.1 growth in GDP. In other words, if the Indian economy grows at 7% per year, steel demand is likely to grow by 7.7% during the same time, from the current 68 million tonnes to around 132 million tonnes by 2020.

Opportunities

In line with GDP growth, Indian steel demand has immense opportunities to grow across sectors in the mid-to long term. The rapid rise in production over the last few years has resulted in India becoming the fourth largest producer of crude steel and the largest producer of sponge iron or direct-reduced iron (DRI) in the world. The country has the opportunities of becoming the second largest producer of steel in world in max. 3-5 years.



Rural demand is picking up

Currently, per capita rural consumption in India stands at around 10kg. This is significantly lower than urban per capita consumption. Projects like Bharat Nirman and Rajiv Gandhi Awaas Yojana have led to increased demand for construction steel like thermo-mechanically treated (TMT) bars and galvanized plain and corrugated (GP/GC) sheets, but there remains a significant opportunity to grow rural steel demand by widening the distribution network and by providing customized solutions catering to the needs of 70% of the population.

Investment planned in road sector

The 11th FYP (FY07-12) registered a road investment worth US\$ 66 Billion which is a rise of more than 100% in comparison to the 10th FYP (FY02-07). Going further, an investment worth US\$132b has been planned for the 12th FYP. The government has launched many road investment programs, namely the National Highways Development Project (NHDP) and Pradhan Mantri Gram Sadak Yojana (PMGSY), to increase the connectivity of roads to ports and plant sites.

Indian Railways – a key contributor to steel demand in the country

Indian Railways has an ambitious investment plan to US\$328b through 2020 under its 'Vision 2020' program. Vision 2020 plans massive capacity augmentation to meet traffic demand and improve safety and operational efficiency. The organization's plan is to invest around US\$42.6b out of the total allocated budget in laying down new lines. Freight car procurement is also expected to increase to 75,000 per annum from the present level of 15,000 per annum. Many of the investments will have high steel intensity. Indian Railways' ability to meet Vision 2020's target holds the key to steel demand during the current decade.

Automobile and power sectors offer opportunity for specialized steel

The increase in volume by the automobile majors will drive the demand for specialized steel such as ultra-fine grain steel and dual phase steel. The demand for cold rolled grain oriented steel (CRGO) for power sector is also in short supply. There are plans to exponentially increase investment in power projects, which will also drive steel demand.

Refocus on manufacturing

The government's plan to re-energize manufacturing. It will lead to accelerated demand from the capital goods sector and projects. The current share of capital goods in the overall steel consumption is substantially lower than China's even in ratio terms.

Challenges

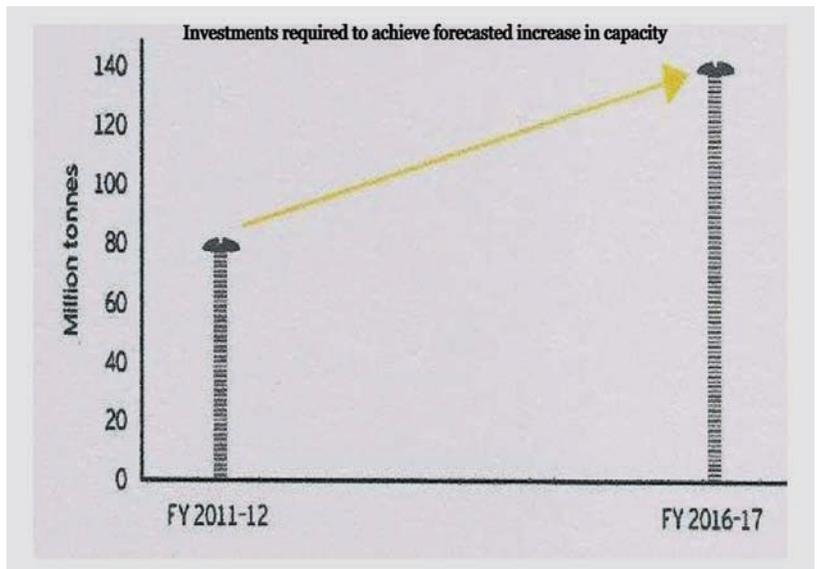
India's GDP growth has dropped from more than 9% in early 2010 to below 6% for three successive quarters in 2012. Slowing GDP growth and concerns around economic policy-making have affected overall investment in infrastructure and steel projects. Indeed, most of the steel MOUs signed in prior years remain as plans, with projects not started due to delays on environmental and forest clearance, land acquisition, mining leases and other regulatory issues.

Land acquisition and environment regulations

Setting up a steel plant requires vast tracts of land. For example, POSCO's proposed steel mill in Odisha would require around 1,600 hectares, and ArcelorMittal's proposed plant in Karnataka would require around 2,800 hectares. Acquiring these vast tracts of land for setting up mega-plants, particularly in a populous country like India, has remained challenge with steelmakers. Major greenfield steel projects such as those of POSCO, ArcelorMittal and Tata Steel have been delayed for a number of years, primarily due to land acquisition issues. Rules to calculate adequate compensation to the landowners have been unclear. Additionally, the number of approvals authorities required for land acquisition and setting up projects are the top issues in building up large new capacity.

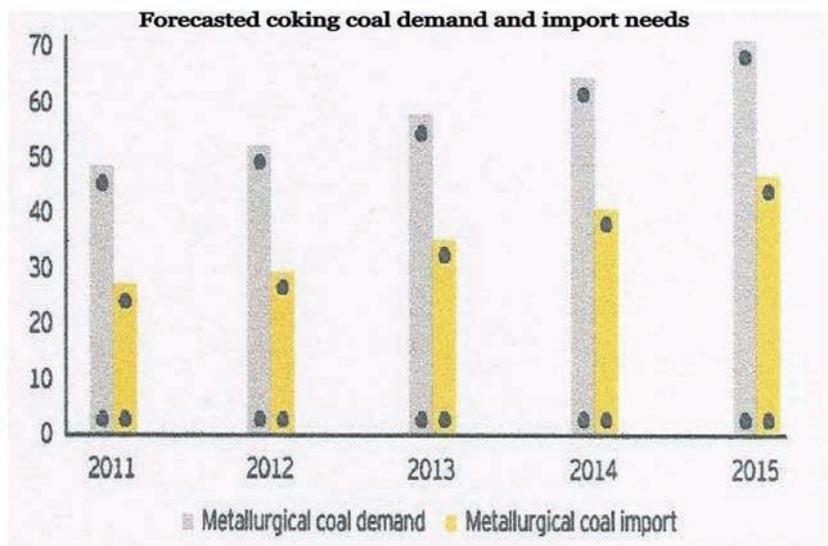
Shortage of coking coal

India is very dependent on imported coking coal. Approximately 60% to 65% of the domestic coking coal requirements are met through imports due to unavailability and poor qualities in the country. Coking coal reserves available in the country have high ash content and are not suitable for the steel industry. Planned increases in steel production capacity are likely to be through blast furnaces, so the requirements for coking coal will increase. In 2012, India imported around 31 million tonnes coking coal, and that amount is expected to rise above 41 million tonnes by 2015. Steelmakers' profitability is dependent on the international coking coal prices.



Availability and pricing of domestic iron ore

The availability of inexpensive, good-quality iron ore is one of the positive factors for growth of India's domestic steel industry. However, the sector has more recently come under the scrutiny of authorities due to widespread illegal mining. As a result, the state of Karnataka faced a ban on iron ore mining in 2011. The ban affected domestic steelmakers' annual production, with JSW Steel operating at less than 30% capacity at one point. Shortage of iron ore due to mining bans in key iron ore producing states such as Karnataka, Goa and Odisha have also led to a rise in domestic iron ore-prices that is in contrast to a falling trend. Export iron ore prices are also creating disturbances in the supply chain. There is little to no expectation of Indian iron ore exports during 2013.



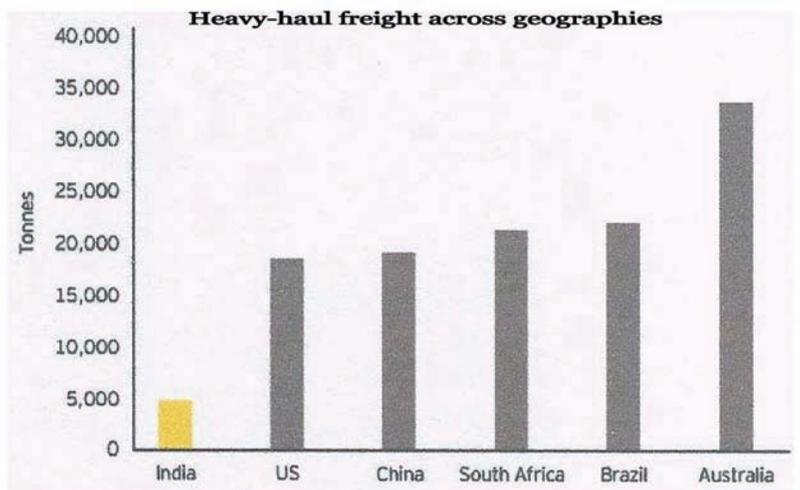
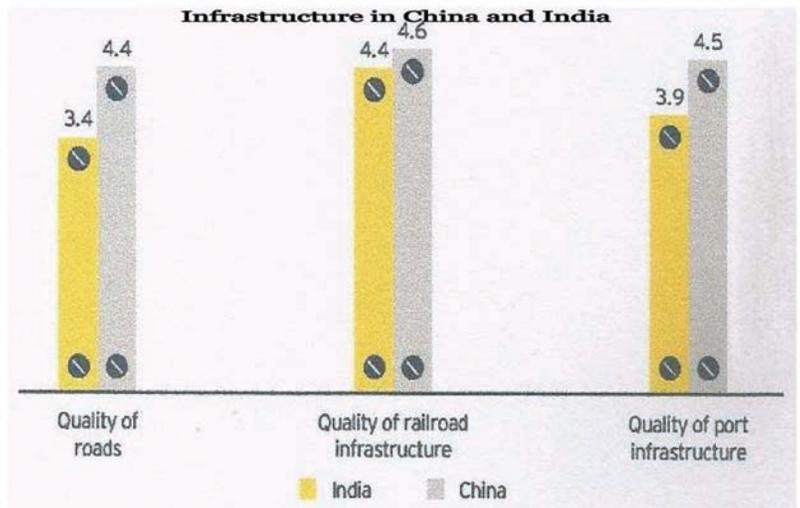
Downstream value addition

There is a recent but growing trend observed toward resource nationalism. Several iron ore-producing states like Odisha have professed a policy for preference in allotment/renewals of mining leases to actual users – thereby making downstream processing and steelmaking a condition. This has posed severe challenges to merchant miners and disruptions to the current state. However, given this stance of the local governments, global and local steel industry players can hope to get mines allotted for captive use, which has been a major deterrent for most steel multinational corporations so far.

Insufficient infrastructure and logistics

The steel industry is a major user of infrastructure resources like railways, roads and ports. Every one tonne of steel produced involves approximately 4 tonne of material movement across India. A growth in steel production will increase the burden of the country's already stretched logistics infrastructure. To meet the needs of a growing steel industry, major improvements in various infrastructure facilities are required.

The Indian railway system suffers from a lack of adequate haulage capacity and has significantly low heavy-haul freight compared to its global peers. For example, Indian Railways' heavy-haul freight at 5,400 tonnes is much lower than that of other countries such as China (20,000 tonnes), South Africa (22,000 tonnes) and Australia (32,000 to 37,000 tonnes). Indian Railways also suffers from inadequate infrastructure at various loading and unloading terminals. The freight car turn-around time is very slow by global standards. The effective freight rates continue to carry an increased burden of subsidy toward passenger traffic.



Port facilities to catch up

As steel capacity in the country grows, the industry will be increasingly dependent on domestic ports for material movement. Projected traffic handled by major and minor ports for iron ore is expected to rise from 138 million tonnes in 2011-12 to around 245 million tonnes by 2016-17, while traffic for coal (coking and non-coking) is projected to increase from 163 million tonnes in 2011-12 to around 544 million tonnes in 2016-17. Port capacity may not increase at the same pace, as there have been delays in implementing current projects, further limiting the ability to propose new projects.

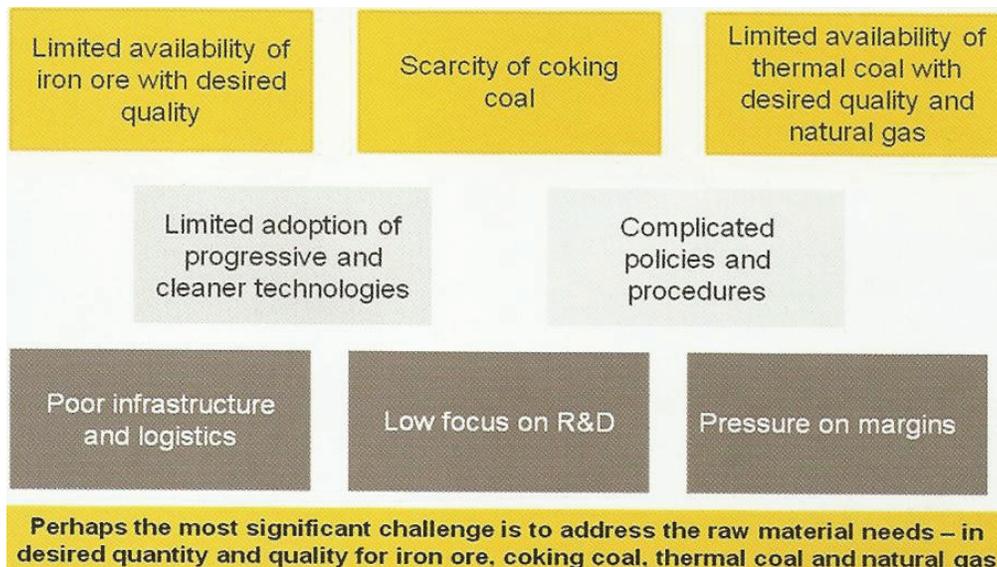
Adoption of modern technology

Performance parameters on technological levels and productivity of Indian steel plants are much lower when compared to plants in developed countries. This disparity is primarily due to the poor quality of raw materials used in steelmaking (high impurities such as alumina and silica in iron ore, high ash content and variation of quality in coal) and the use of obsolete technology (hot blast temperature below 1,000 C, lack of high top pressure operation, level of oxygen enrichment of hot blast, limited use of agglomerated feed such as sinter and pellet) by the older plants. This has affected various critical performance parameters for steel plants, including blast furnace productivity, coke rate, energy consumption and blast furnace slag volume. The use of steelmaking technologies such as FINEX and ITmk3 can make good use of abundantly available iron ore fines in the country and non-coking coal for iron-making. Many Indian steel companies have adopted newer technology, and with productivity levels of around 2 to 2.8/t/day/m³, some of their recently commissioned plants are comparable to global standards. This decision has led to an improvement

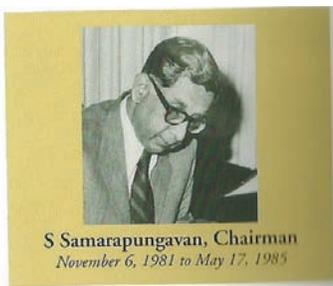
in consumption of raw material and energy, as well as compliance with environmental and pollution benchmarks such as carbon emission norms.

Performance of Indian Steel Plants as compared to Global Parameters			
Item	Unit	Global benchmark	India steel plant
BF productivity	(t/day/m ³ of working volume)	2.5-3.5	1.5-2.5/2.8
Coke rate	(kg/t-HM)	350-400	500-600
PCI	(kg/t-HM)	150-250	50-100
BF slag rate	(kg/t-HM)	200-300	300-400
Energy consumption	(G-cal/TCS)	4.4-5.5	6-6.5
SMS slag rate	(kg/TCS)	Less than 100	180-200
CO ₂ emission	(t/TCS)	1.7-1.9	2.8-3.0

If we have to summarize the challenges they can be illustrated as under:



Leaving footprints in the sands of time



Men of wisdom like the Late Mr.S.Samarapungavan are indeed rare to find. As the Chairman of SAIL, he took over as the President of IIM during 1982-83. Alongwith the then Chairman of IIM Delhi Chapter Mr.V R Subramanian, as the Chapter Hony Secy (1982-85) I also went to greet Mr.Samarapungavan. After tea and biscuits, Mr.Samarapungavan asked us what he should do for IIM. Mr.Samarapungavan concluded the discussions by saying that like The Institution of Engineers (India), Institute of Electronic & Telecom Engineers, Institute of Company Secretaries, Institute of Cost & Works Accounts etc., IIM should also have a prestigious building of its own

in the capital city. He took the proposal to the IIM Council, got it approved, sent appeal letters widely, raised fund resources, approved drawings, chaired a series of Building Committee meetings etc., When the building was inaugurated in 1991 in a mid- day function by the then Steel Minister, Shri

M.L.Fotedar, one could hear a tremendous sense of achievement and satisfaction, through the emotional address of Mr.Samarapungavan. At one time, when a bill was pending for payment, he advanced a loan from his personal fund and took the money when a donation came from a company. Such was his commitment to the cause.

A few years back, when he wanted to migrate alongwith his wife to the US to stay with his children, the US embassy wanted an English translation of his birth certificate that was in Tamil. Mr.Samarapungavan asked me whether I could do the translation for him. Instead I got him the English translation from the Delhi Tamil Sangam, on their letterhead alongwith their rubber stamp. When I rang up Mr.Samarapungavan to say that I am sending across the translation through a messenger, he persisted that he would like to come and see the building and also collect the document in person. He did come and I took him around the building, to the various floors. He said "I am happy to see the building, fully occupied and operational now". Jawahar Dhatu Bhawan stands tall now, as we bow our heads in deep reverence and gratitude to Mr.Samarapungavan who has undoubtedly left some indelible impressions in the sands of time.

May his soul rest in eternal peace!

– L.Pugazhenthay

[Meteorite takes out roof and wall of Zinc Smelter Plant, Chelyabinsk, Russia](#)

P R Chandna
Life Member, IIM DC

At roughly 9:15 a.m. local time, on 15th February 2013, a massive shock wave from the explosion blew out window glass of many buildings in Chelyabinsk region in Russia, sending thousands to hospital. One of the buildings hit was that of the Chelyabinsk Zinc Plant, which produces around 160,000 metric tons of refined zinc and alloys. Chelyabinsk Zinc is a unit of billionaire Iskandar Makhmudov's Ural Mining and Metallurgical Co.

What is a meteorite? And what is an asteroid? An asteroid is a small rock in orbit around a star – a bit like a tiny planet. Small pieces of space debris such as parts of asteroids or parts of comets on a collision course with earth are called meteoroids. When meteoroids enter the earth's atmosphere they are called meteors. Most meteors burn up in the atmosphere, but if they survive and strike the surface of the earth – as the object or objects in Russia may have – they are called meteorites. A comet, by the way, is an object consisting of a central mass surrounded by dust and gas that may form a tail, orbiting a star, usually in an eccentric orbit.

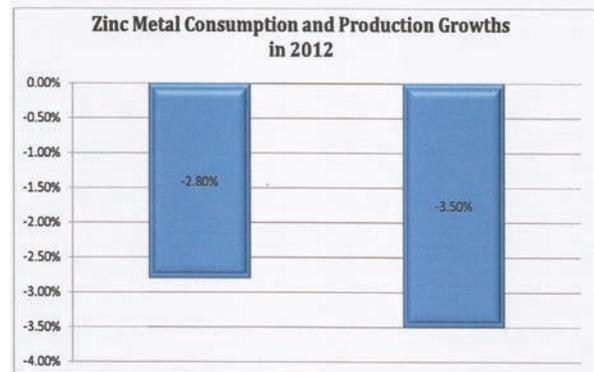
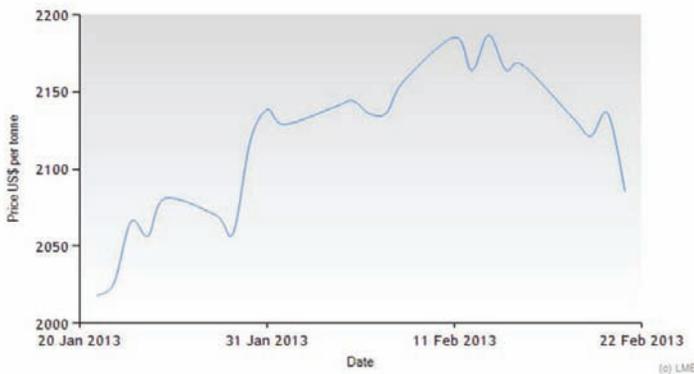
What caused this explosion? Reportedly at least one piece of the falling meteorite explosion caused damage on the ground in Russian Chelyabinsk region. It is estimated 10- ton object lit up the sky as it surged towards Earth at around 54,000 kph (33,000 mph). At some 30-50 km above ground, the meteor began to fragment. As the meteorites shot across the sky, they sent fireballs crashing to earth. The shockwave from the explosion when the meteor entered the earth's atmosphere smashed windows, injuring thousands of people.



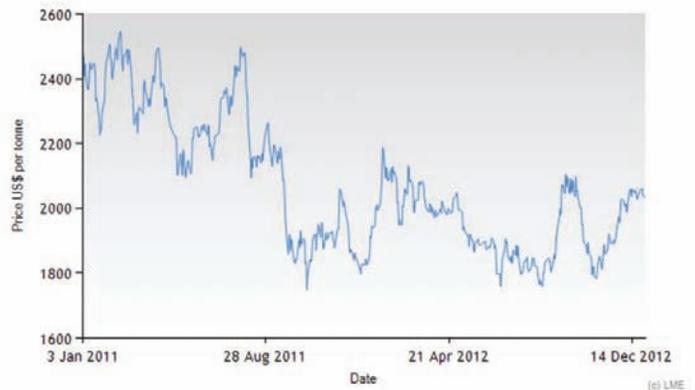
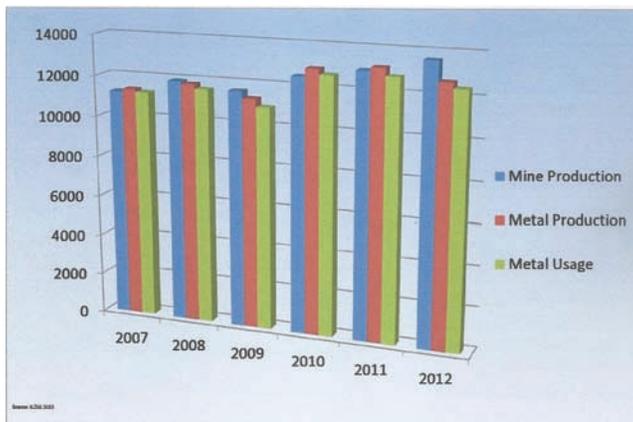
Furthermore, a shock wave from the blast destroyed a wall in a concentrate storage yard at the Chelyabinsk Zinc Plant site (see the photographs below) and smashed windows in other buildings, spokesman Evgeny Ponomarev said. However, the plant is working as usual, he said



The immediate knee-jerk reaction of the said incident had a direct impact on the Zinc prices at the London Metal Exchange (LME). Zinc for delivery in three months added as much as 0.9 per cent on the LME.



"It's proof that not only are economies vulnerable, but the whole planet." Dmitry Medvedev, the prime minister of Russia, reacted at an economic forum in Siberia.



World Refined Zinc Supply and Usage (2007-2012) All Figures in thousand tonnes)

Was it a knee jerk reaction or there was any truth in saying?

Despite so many advances in scientific knowledge, many of us still want random events and misfortunes; to derive meanings. In the backdrop of recent past worldwide recession, overcapacities,

increasing inventories and global economic slowdown in 2012 pulled down Zinc demand (fell by 2.8% and production declined by 3.5% in 2012) the above extreme reaction thus cannot be unfounded. The surplus reflected in the LME price in 2012, with the average cash settlement price declining by 11% over 2011 and the commodity market is likely to remain volatile this year too. The key drivers for Zinc industry will be macroeconomic developments, especially in China and to some extent in the European countries, and increase in supply as new projects in pipeline come on stream. These, thus are some of the likely key issues to watch out for in 2013 to know how Zinc metal will perform. An ideal situation would be one where miners continue to keep refined metal production growth under check while demand recovers to comfortable levels.

CHAPTER-LEVEL NMD CELEBRATIONS

The Chapter-level NMD celebrations were organised by IIM DC on 3rd February 2013 at Vasant Vihar Club, New Delhi.

At the outset Shri Anil Gupta, Chairman IIM DC, welcomed the members and their families to the Chapter-level NMD Celebrations.

Shri G I S Chauhan, Hony. Jt Secretary introduced the speakers and compeered the proceedings of the Celebrations.

Shri PN Sadhu, Technical Adviser, M/s Sunbeam Auto Pvt Ltd, was the Chief Guest on the occasion.

The following two talks were organised on the occasion:

“Metals in Human Body and Diseases Related to their Deficiencies”

“Utility of Aluminium in Domestic Sector”

The talk on “Metals in Human Body and Diseases Related to their Deficiencies” was delivered by Dr Manoj Sharma, MD (Physician), Artemis Health Institute, Gurgaon. The talk generated a lot of interest in the audience and was quite interactive and informative.

The second talk “Utility of Aluminium in Domestic Sector” was given by Shri Rahul Khanna, Chief Executive Officer, Mahavir Die Casting Pvt Ltd, Faridabad. The inputs given by the speaker on the subject widened the perspective of our members in the area of Aluminium.

Shri P N Sadhu also addressed the gathering and suggested that Aluminium Casters Association of India (ALUCAST) and IIM DC should jointly collaborate in the various technical programmes / workshops. He also suggested that they could use IIM DC library facilities and their personnel may attend coaching classes as and when they are organized. Shri Sadhu also promised to visit IIM DC premises to discuss further details.

Suitable mementoes were given to the Chief Guest and the Speakers on the occasion.





On this occasion Chapter-level awards were also conferred. The following two office bearers of IIM DC were awarded for Outstanding Contribution to IIM DC:

- a) Shri SC Suri, Vice Chairman IIM DC
- b) Shri MP Sharma, Hony. Jt. Secretary



As a recognition of their services to the Chapter, mementoes were given to them by the Chief Guest on the occasion.

Shri SC Suri, Vice Chairman, proposed vote of thanks

About 50 persons participated in the Celebrations along with their family members.

The Celebrations concluded with lunch.



JSPL to Invest Rs. 70,000 Cr by 2020, Eyes Rs. 1L Cr Turnover: says CEO Ravi Uppal

After his eventful stints and rise in ABB and L&T, 60-year old *Ravi Uppal* is now embarking on expansion plans of *Jindal Steel and Power Limited (JSPL)* that he joined as MD & CEO in September last year. Recently, *Naveen Jindal*, Uppal and other key team members brainstormed to set 'Vision 2020' for the company with market capitalization of over Rs 40,000 crore. In an interview with ET, Uppal shares the company's plan to raise turnover to Rs 1 lakh crore with an investment of Rs 70,000 crore.

What is JSPL's roadmap for the future?

We want to continue to grow but not to become largest and biggest. Our objective is to remain profitable with targeted turnover of Rs 1 lakh crore, up from Rs 20,000 crore. In phases, we will ramp up our steel-making capacity to 15 million tonne per annum at Odisha and Oman. In next fiscal, our steel capacity will be doubled to 7 million tonne a year and touch 11 million tonne by mid-2015. We plan to raise power generation capacity to 4,300 mw by March 2014. Our aim is to commission total 10,000 mw of generation capacity by 2020.

What is the investment that JSPL will have to put in to achieve its vision?

We will invest close to Rs 70,000 crore by 2020. Mining activities will alone cost Rs 20,000 crore. We are focusing on growing organically but also open for inorganic growth. We are a conservative company and will not do anything crazy (to grow faster). Our debt equity ratio is 1:1 and will fund majority of the projects from the internal accruals and debt.

How do you plan to market steel and power?

For steel business, we are in process of setting up two tier model of distributors and retailers who will be our partners in progress. It will enable us to supply steel products desirable by the consumers. We export half a million tonne of our steel production. We are operating merchant power capacities and open for long-term power purchase agreements with state utilities. We are open for opportunities in power distribution that can improve life of people if private players take it up. Experiences have been great in the areas where private power distributors operate.

How would JSPL fuel upcoming power projects?

At JSPL, we normally try to control all our inputs. We are always scouting for resources, minerals and mines in Africa, Europe Australia and Indonesia besides India. Our power units will need 30 million tonne of coal annually by 2020 as against 12 million tonne today. JSPL has coal mines in Indonesia and Australia and exploring for more resources as we cannot depend on India alone for fuel supplies. Coal production from mine in Botswana will commence soon while mine in Mozambique has started producing coking coal.

How JSPL will meet its requirements of fuel for steel business?

By June, we are going to start gas synthesis from country's largest coal gasification plant at Angul, Odisha. It will produce 2,25,000 cubic metres of gas through eight gasifiers. JSPL is investing Rs 3,000 crore for this project. We hope to produce this gas for less than \$ 10 per mmbtu as against \$ 14 worth of LNG. We will be using Indian coal for the project and shift later on, we will probably use petcoke to improve recoveries.

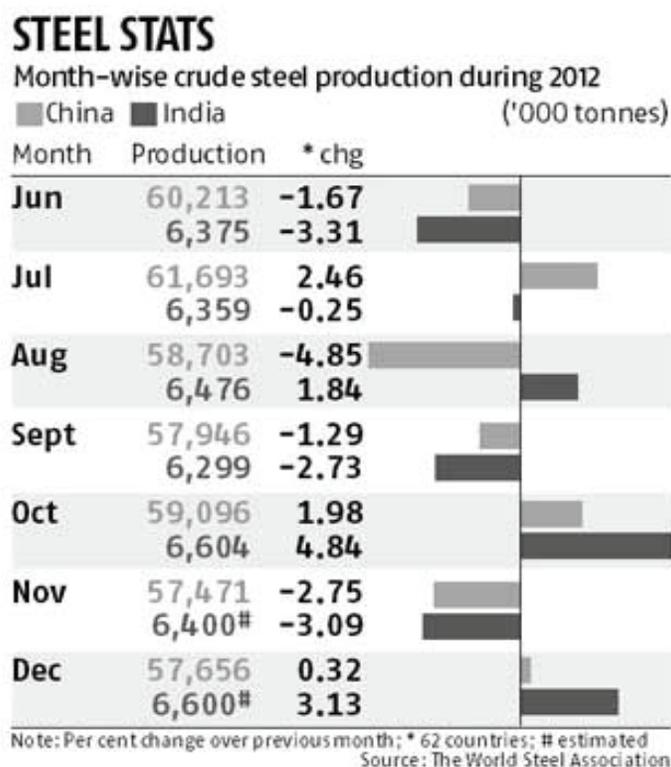
How are you dealing with concerns over environment protection?

We want to remain a responsible corporate towards environment. We also have 25 MW of wind power installations and exploring possibilities to enter solar power space in Rajasthan and Gujarat. However, we are cautious about entering into solar power business as the costs are coming down while efficiencies of equipments is improving. Meanwhile, we are manufacturing high quality bricks from the by-products generated from the steel and power plants. We make 7 crore units of bricks annually from the slag using German technology. This will fill the big void so created in real estate, given that the conventional bricks were impacting the environment.

Source: The Economic Times

Should India walk the Chinese path in growing steel capacity?

Two countries invariably to figure prominently in any steel conference are China for all its achievements, leaving the world in a state of surprise, and India as the next major capacity growth centre, despite hiccups in land acquisition and sanction of iron ore mines linkages. The practice was much in evidence at the recent 'global steel' conference. From Steel Authority of India Limited Chairman Mr. Chandra Sekhar Verma to coking coal and coke producer Mr. Arun Jagatramka, all had their presentations peppered with references to China. Not to say that foreign experts remain in awe of Chinese achievements in steel, even while its demand and new capacity creation have become much muted in the post-2008-09 global economic meltdown. Mr. Jagatramka summed up the sentiment of all participants saying, "China is obviously down but certainly not out. Its dominance will continue to be felt in the global steel market and also in pricing of steelmaking raw materials."



He obviously said this in the context of the Chinese economy growing at its slowest pace in 13 years in 2012 and steel use by some industries there was quite uninspiring, causing a fall in prices. Nevertheless, China with production of 716.5 million tonnes (mt) raised its share of world output to 46.3 per cent from 45.4 per cent in 2011. How will China fare in 2013 on output and consumption? A projection on the higher side by Credit Suisse is for a Chinese production growth of six per cent. Most other agencies are, however, pegging it at four per cent. As the Chinese economy has started

revving up after its soft landing, the country's steel use is likely to grow 3.3 per cent this year, following a 2.4 per cent gain in 2012. Not one to underestimate the achievements of Chinese steel industry, principally responsible for Asia having a whopping 65.4 per cent share of 2012 world production, Mr. Verma draws attention to some pitfalls of 'overcapacity'. The presence of too many units with unviable operations in the prevailing competitive environment and worrying levels of steel-centric pollution are the results of China creating capacity at a breakneck speed over the past decade and a half. Mr. Verma avers China remains on the job of new capacity building but is also ridding itself of small and polluting blast furnaces. Simultaneous capacity creation and elimination will see China owning one-billion tonne industry by 2020, he says.

Energy is becoming increasingly expensive and steelmaking is both highly energy and water intensive. In this context, many continue to wonder if Beijing was wise in encouraging building of a giant steel industry, when it could have met its requirements by imports to a large extent. This would have spared China a significant amount of energy imports, including coking coal. Steel imports, it is also argued, would have reduced Chinese carbon footprint. But the chairman of commodities and mining research of London-based Macquarie, Jim Lennon, is not one to agree that China would have done itself a service by becoming steel import-dependent. "On the contrary, had China been an importer, the size of its requirements would have made world steel prices so much more expensive. That would have amounted to China importing inflation and curbing its growth rate." At no stage was China ready to risk its mission to have strong infrastructure, including massive urbanisation, and also becoming a production hub for the world on steel imports.

Expect some major structural changes in the steel industry during China's 12th plan period. Beijing is giving a renewed push to capacity consolidation through mergers and acquisitions, with three clear objectives. A consolidated industry, to the extent of the top 10 groups owning 60 per cent of capacity by 2015, will have the advantage of economies of scale. It will also then be able to exercise production discipline, needed badly in a surplus situation. China has, for long, nursed a grievance that its steel industry, despite its size, has little say in the fixing of prices of iron ore. Metals researcher Wood Mackenzie says China will account for 70 per cent of global ore trade in the medium term, up from 60 per cent in 2012. Unarguably, capacity consolidation will allow China to negotiate import prices from a position of strength. According to Mr. Verma, as China is no longer inclined to volume growth at the bottom of the steel value chain, its industry leaders in alliances with foreign groups are making high-value special products, employing technologies not locally available. Mr. Verma has made it a SAIL mission to explore the possibility of using technologies like Corex, Finex and ITmk3, which allow making of steel without using metallurgical coal for which we are becoming increasingly import-dependent. Incidentally, China is also keen to induct all these technologies as it builds new capacity. Should India become the mirror image of China in its pursuit of steel capacity growth? Mr. Verma's unequivocal answer is, "While India does not need to emulate the volume achieved by China, steel production here must accelerate to meet robust demand growth", to primarily result from infrastructure building and urbanisation. Whatever the challenges in building new mills, we, like China, should stay self-reliant in steel, to avoid imports at a premium to our production costs.

Source: Business Standard

[Aluminum sees shiny future on road](#)

[Light metal helps automakers increase fuel efficiency](#)

Carmakers including Ford, Audi and Jaguar Land Rover are using record amounts of aluminum to

replace heavier steel, providing relief to producers of the metal who are dealing with excess supplies and depressed prices. Aluminum content in vehicles is rising about 5 percent a year and growth will accelerate in the next decade as drivers seek improved fuel economy and lower emissions, according to Gayle Berry, an analyst at Barclays Plc. Producers are hungry for new markets, even at the expense of steelmakers. At current aluminum prices, which are more than a third below 2008 highs, a third of aluminum companies aren't making money, according to Moscow-based United Co. Rusal, the biggest producer. Automakers like Ford, the second largest in the United States, should help pull aluminum suppliers out of a slump, said Kirill Chuyko, an analyst for BCS Financial Group in Moscow. Some 25 percent of demand is from the transportation industry, with cars and light trucks using two-thirds of that, or about 10 million metric tons a year, the International Aluminum Institute estimates.

In the U.S., changes to the popular Ford F-150 pickup truck loom as the largest automotive threat to the steel industry. The next generation of the pickup will be redesigned, with a higher aluminum content helping to reduce the vehicle's weight by as much as 750 pounds, Ford has said. "The F-150 is the best-selling vehicle in North America and would likely trigger all other truck-makers to convert" to increased aluminum content, said Kenneth Hoffman, sector head for metals and mining research at Bloomberg Industries. A switch to aluminum among U.S. carmakers could add as much as 40 percent to North American demand in coming years, said Hoffman, whose speech to steel executives in Chicago last month was titled "The Death of the Steel Industry as We Know It." The aluminum used in each car built in Europe almost tripled between 1990 and 2012 to 140 kilograms from 50 kilograms as manufacturers pursue higher fuel efficiency, data from the European Aluminum Association show.

"Tightening fuel economy regulations continue to drive the growth of the aluminum usage," said Charlie Durant, senior consultant at metals analysis company CRU in London. For each 10 percent of reduction in vehicle weight, car manufacturers achieve a 5 percent to 7 percent fuel saving, Alcoa says on its website. A car with components made of aluminum can be 24 percent lighter than one with components made of steel, saving a gallon off fuel consumption for each 120 miles, according to Rusal. Only 54 percent of potential car buyers were willing to pay for more fuel efficiency in 2008, while in 2012 the number had climbed to 83 percent, Alcoa said on a conference call in October, citing a consumer study. Global automakers may increase use of the light metal to 249.5 kilograms per car in 2025 from 148.3 kilograms in 2009, the Aluminum Association said last month. The association gave its forecast as Honda presented an Accord with increased aluminum content and General Motors, which has an Allen County truck assembly plant, unveiled the Cadillac ATS and the 2014 Chevrolet Silverado at the annual Detroit auto show. "Aluminum is an excellent material for vehicle bodies," said Christoph Lungwitz, Audi's spokesman for products and technology. Audi's 1994 A8 model was the world's first large-volume production car with a self-supporting aluminum body. The material "is roughly two-thirds lighter than conventional grades of steel, and since it is a relatively soft metal, it is easy to machine," he said. The metal's price peaked at \$3,317 a ton in 2008 and has averaged about \$2,200 in the past five years, data compiled by Bloomberg show. Prices slumped about 15 percent in 2012, while producers pared global output by 3 percent, according to the aluminum institute, a trade group in London for producers. Even so, aluminum producers may need to curb output to tackle an excess in supplies that may be the biggest in four years in 2013, according to Barclays's Berry. Demand from automakers "alone will not be enough to offset the

surplus the industry is facing over the next couple of years," she said. "To address that, producers need to show some production discipline."

Source: Journalgazette.net

The Struggling Aluminium Industry in India – NALCO & HINDALCO

Indian Aluminium Industry has witnessed substantial growth in the past decade however currently the Industry is facing lot of challenges. Similar to all other industries aluminium industry has also been hit by the global slowdown. The price of aluminium was quite high during the economic boom wherein the housing industry and industrial sector was booming however there has been fall in its prices since recession and the prices are still not as high as aluminum producers would like. The industry still hasn't recovered from the effects of the financial crisis. Though the projections for potential demand growth are strong the industry's near-term profit outlook is still gloomy. Small players in the market are finding tough enough to sustain as they are not generating sufficient returns in comparison to the huge investments made by them. The industry has been facing pressures both in terms of costs and returns. Its competitiveness has been threatened due to sharp rise in imports of aluminum. Such rise in imports is coming when the domestic industry has already been investing heavily in the industry. Many alumina refineries (for whom bauxite is the basic raw material) in India are finding it difficult to source bauxite of an appropriate quality. Vedanta, one of the major company in aluminum industry in India has shut down its Lanjigarh alumina refinery in Odisha in December 2012 due to non-availability of Bauxite. The situation is no different with other players who have been forced to curtail their production activity in the recent months due to non-availability of bauxite. The scarcity of bauxite can be attributed to delays in mine clearances and environmental clearances and the expansion of alumina refining capacity in India over the recent years. The problem has been further intensified by the export of bauxite from India. Also poor quality bauxite increases the conversion cost for refineries. Exporting this valuable resource which should first satisfy the need of domestic industry is hampering the growth of this industry. The technology has to be improved further to extract the metal from the ore. The industry will have intense competition from other materials such as steel and plastics which are the substitutes to aluminium. As the global environment is becoming eco-friendly, the industry has the pressure to reduce the greenhouse gases emissions and PFC from the production process. The industry needs to increase the energy efficiency in the aluminium production process. They have to reduce the consumption of electricity consumed in producing aluminium. The demand of the aluminium is growing exponentially from the various sectors specially the automobile industry and construction industry. They have to respond appropriately according to the changing demands of global customers.

Source: Sahara Time

US to Lead Global Recovery in 2013

Billionaire Mr. Mukesh Ambani expects the United States to lead a recovery in the global economy this year and is bullish about the Indian growth story despite the recent glitches. "I am more optimistic than most and my view is that this year we will see the beginning of the recovery, particularly in the US," Mr. Ambani said in an interview to a private television. He said US initiatives in energy would help the entire world. "For many decades we have heard that the US will be independent of the foreign imports of energy. Realistically, it is my judgement this will happen in the next five-seven years. The US has truly found non-conventional energy in shale oil and gas, which will really bring in benefits not

only for the people in the US but for (everyone) across the world," Mr. Ambani said. Reliance itself has invested \$5.2 billion in the shale business in the US and has set up joint ventures with Chevron, Pioneer Natural Resources and Carrizo Oil & Gas and a midstream joint venture with Pioneer. RILBSE 0.97 %, which operates the world's largest refining complex at Jamnagar, plans to invest 1 lakh crore in the next five years in energy and retail businesses to double its operating profit. The company has diversified into solar power business and expects solar power to become price competitive as compared with power generated from fossil fuel.

"We will transit from what I call a hydrocarbon present, which is coal, oil and natural gas, over the next many decades into a fully renewable sustainable future and solar really would be at the heart of it," Mr. Ambani said. Mr. Ambani said he was bullish about India despite slowing growth and muted investment by foreign investors due to infrastructure constraints and policy-related problems.

"India is a bottom-up story and not a top-down story. So we will adjust with what happens in the rest of the world, but we are on a long-term growth trajectory. And this is not growth only in terms of GDP numbers. This really is for the well-being of each and every Indian and that is the aspiration," Mr. Ambani said. India's economic growth rate is feared to decline to a 10-year low of 5 per cent in the current fiscal to March, dragged by poor performance of manufacturing, agriculture and services sector. "My father started Reliance with \$100. When I joined in 1980, the market value of Reliance was \$30-40 million and in 30 years the opportunities that were provided by this country have enabled us to create wealth for India," Mr. Ambani said

Source: The Economic Times

Tata Steel Kalinganagar plant on stream by Sept '14

The first module of six million tonne greenfield steel plant of Tata Steel at Kalinganagar in Jajpur district is set to go on stream by September, 2014. The Kalinganagar project, the first integrated steel plant of Tata Steel outside Jamshedpur in its over century old history, is being set up in two modules of three million tonne each. "Kalinganagar plant will start production in the second half of 2014," said Mr. Anand Sen, Vice President, Tata Steel, on the sidelines of launch of a skill training programme of the company here. The construction of the plant is now going on in full swing with engagement of about 27,000 workers. The company already procured most of the equipments and nearly 40 percent of the project work has been completed with major structural work packages being implemented by L & T.

OBITUARY



With profound grief we inform the sad demise of Shri S. Samarapungavan, former Chairman, SAIL who left for his heavenly abode on 22nd February 2013. His active association with IIM was for so many years. Shri Samarapungavan had served IIM as President from 1982 to 1983. He was respected by one and all for his depth of technical knowledge in the area of steel, friendliness, dedication and personal qualities. He always helped the needy from his core of heart. We will miss him forever.

We pray to Almighty to give his family members, near and dear ones enough strength to bear this irreparable loss. May his departed soul rest in eternal peace.

However, the cost of the project, which was estimated at Rs 15,400 crore at the time of signing of MoU in 2004, has escalated to about Rs 40,000 due to delay in taking it off the ground. A police firing at the plant site in 2006, which killed 13 tribals protesting land acquisition, had pegged back the start of work. The company is currently constructing the first module of the project on 1,700 acres of land it has in its possession with plans to scale up the capacity to six million tonne as and when it takes possession of the rest of the 3,500 acres it has been allotted. The first phase work, which includes three million tonne steel capacity and the common facilities for the full project, will cost about Rs 30,000 crore. The plant, which will employ indigenous as well global technologies to convert iron ore and fines into steel, will produce only flat steel products meant for use in automobile sector. Launching the skill development programme, Tata Steel vice president, Mr. Anand Sen, who has recently been put in charge of the Kalinganagar project, said, "The programme will encapsulate skill development on steel fabrication, enrolment of rural entrepreneurs into Pradhan Mantri Employment Generation Programme (PMEGP), hand-holding support to the rural youths from concept development to sustenance of the business." The programme is being implemented in association with Kolkata-based Institute of Steel Development and Growth (INSDAG). The company has selected 50 persons from different parts of the state to impart the skill development and entrepreneurship training. The duration of the course is 13 months. INSDAG will collaborate with local ITI centers such as Konark Institute of Science and Technology to provide practical training. "The initiative will also support the entrepreneurs to register their units in PMEGP and help in setting up the fabrication units," said the company in a statement.

Source: Business Standard

Indian steel industry may see rise in operational cost – FIMI

The Indian steel industry may see further rise in its operational cost along with the already high financing cost in the near future as they are forced to use low grade iron ore as raw material due to halting of operations in high grade mines. Federation of Indian Mineral Industries vice president Mr Basant Poddar said that "Steel producers are forced to use low grade iron ore to run reasonable capacity. This may increase their operational cost due to higher power consumption." FIMI said that following the halting of mining in many other states like Karnataka and Odisha availability has become an issue. It further said that many steel companies have to use low grade iron ore with high grade for converting it to steel as high-grade ore is unavailable due to halting of mining operations in many producing regions. Mr Poddar however said that it would be better for steel plants to blend low grade with high grade iron ore for better use of the resource. On the opening of category A mines in Karnataka, Mr Poddar said that 7 mines had already opened in the state and others will follow soon. He also said that the state is now producing around 3 million tonne of ore. He added that Karnataka would not be able to produce more than 15 million tonne ore in the next financial year while the plants in the state alone need 30 million tonne for running at optimal capacity.

Source: Steel Guru

World Crude Steel Production: 2012 (Prov)			
Rank	Country	Qty (MT)	% YOY Change
1	China	716.5	3.1
2	Japan	107.2	-0.4
3	United States	88.6	2.5
4	India	76.97	4.6
5	Russia	70.6	2.5
6	South Korea	69.3	1.2
7	Germany	42.7	-3.6
8	Turkey	35.9	5.3
9	Brazil	34.7	-1.4
10	Ukraine	32.90	-6.8
	Top 10	1275.4	2.1
	World	1547.8	1.2
Source: WSA, JPC			

Macroeconomic indicators - Indian growth to plunge to 5pct

Belying hopes of recovery, India's economic growth rate is estimated to slip to a decade's low of 5 per cent in 2012-13, pulled down by poor performance of manufacturing, agriculture and services sectors. India's Central Statistical Organization, releasing the first official estimate of growth for the current financial year, said that it would decline from 6.2% in 2011-12 to 5% in 2012-13, much lower than the projections of the Reserve Bank and other agencies. CSO's advance estimate lowered the growth in agriculture and allied activities to 1.8% in 2012-13, compared to 3.6% 2011-12. Manufacturing growth is also expected to drop to 1.9% in this fiscal, from 2.7% cent last year. Noting that the growth estimates, which are based on data for April to November, were below expectations, Finance Ministry said that it will continue efforts to revive economic growth and hoped that final figures would show better results. The previous low at 4% was recorded in 2002-03. Since then the Indian economy has been expanding at over 6%, the highest rate being 9.6% in 2006-07.

Source: Steel Guru

Tata Steel Europe investing in high-strength steel for automobiles

Tata Steel Europe said it is investing 2.3 million euros at its Ijmuiden facility in the Netherlands to develop next-generation steels for the auto industry that are lighter, stronger and better able to withstand crashes. The Indian company's European branch, Tata Steel UK Ltd, is Europe's second largest steel producer. European steelmakers have been struggling to make profits in the last couple of years, in a fast shrinking market. "The R&D investment follows close collaboration between Tata Steel and three major European car manufacturers to understand their requirements for future car models," Tata said in a statement. The automotive sector, a major market for the steel industry, has come under pressure to produce lighter and more environmentally friendly cars and this has pushed steelmakers to invest in developing new, lighter materials. Tata and other producers are speeding up a switch to products that add more value and help them withstand aggressive imports of basic grades of steel.

Source: Business Standard

Exclude steel products from Free Trade Agreement from Japan, Korea: Assocham

Amid growing concerns of Indian steel companies arising out of Free Trade Agreements (FTAs) with Japan and Korea, apex industry body Associated Chambers of Commerce and Industry of India (Assocham) sought immediate exclusion of steel products under Chapter 72 of the International Trade Centre (ITC) code from the Indo-Korea and Indo-Japan Comprehensive Economic Partnership Agreement (CEPA), in order to ensure the sustainability of domestic steel industry. "Reinstate import duty rates for exports of all steel products from Republic of Korea and Japan to India under Chapter 72 of the ITC code as per the normal prevailing import duty rates," appealed Assocham in a communication to the Union Steel Minister, Mr. Beni Prasad Verma. According to Secretary General of Assocham, Mr. D S Rawat, the industry body has time and again registered the growing concerns of the domestic steelmakers towards the unabated rise of steel imports from Japan and South Korea thereby taking undue advantage of concessional duty rates under the CEPA FTAs. "The FTAs should be evolved on the spirit of complementing the need and necessities of partner economies rather than exploitation for self-centric objectives," said Mr. Rawat. Unfortunately, with large surplus floating steel capacity together with rising steel production and declining demand for steel both Japan and South Korea have amply utilised the concessional duty rates under the CEPA FTA for salvaging part of their surplus steel thereby flooding steel exports into India, he added. In its submission, Assocham has also stated that CEPA FTAs are extensively committed to the trade aspects which majorly favour the needs and necessities for exports of surplus manufactured and engineering goods by these countries and have no specific commitment to investment which is the major requirement by India. "It is imperative that FTAs should focus on investment into manufacturing sector along with infrastructure development in India instead of encouraging import of manufactured goods from partner economies to salvage their surplus into India," said Mr. Rawat.

Further, Assocham has strongly recommended for exclusion of steel products under Chapter 72 from negotiations of the ensuing Indo-Australian FTA. For all ensuing and "under discussion" FTA proposals, India should not negotiate any duty concessions for steel products under Chapter 72 with all the partner economies having surplus steel and/or the country is reeling under economic slowdown, said Assocham.

Source: Business Standard

India, Brazil to increase cooperation in steel, mining sectors

India and Brazil have decided to increase cooperation and encourage investment opportunities in the steel and mining sectors. The decision was taken during a visit of Steel Minister Mr. Beni Prasad Verma-led Indian delegation to Brazil last week, in which a letter of intent (LoI) was signed to strengthen cooperation between the two nations in steel and mining sectors, an official statement said. The LoI was signed by Steel Secretary Mr. D R S Chaudhary and Executive Secretary (Mines and Energy), Government of Brazil on February 7, it added. The LoI aims to focus on strengthening the supply chain and facilitating exchange of technical know-how for the growth of the steel industry, including pelletisation plants, in both the countries, besides promoting and expanding bilateral relations, it said. The Steel Minister-led delegation also explored the possibility of signing a memorandum of understanding during the forthcoming visit of the President of Brazil to India as the two countries have been showing robust growth in the consumption of steel, the statement said. The two countries have emerged as large markets after China in terms of their growth potential among the developing countries.

Source: The Economic Times