



- Steelworld Research Team

Supreme Court's Ban on Odisha Mining A Major Blow to Steel Sector

In a major blow to India's mining and steel industries, the Supreme Court ordered temporary closure of nearly half of the iron ore mines in Odisha due to non-renewal of years-old leases. This was following a footsteps of similar action on iron ore mining in Goa. While the Supreme Court allowed conditional opening up of mines in Goa, suspension of mines in Odisha will hit the state economy badly in addition to further squeeze on iron ore availability for steel mills.



The Verdict

The Supreme Court on May 16 ordered temporary closure of nearly half of the iron ore mines in top producing state Odisha due to non-renewal of years-old leases, in a blow to local steel mills that depend heavily on high-quality ore from the state. Odisha, which allows exports of only half of total iron ore output, produced more than 70 mt in the last fiscal year from 56 operating mines. The move is unlikely to lift global iron ore prices given the limited flows from Odisha to international markets, but it could force Indian steelmakers to source the raw material overseas and soak up some of a forecast global supply surplus. The 26 suspended mines produced about 40 mt. The verdict could force steelmakers to cut output or import expensive iron ore.

Tata Steel Ltd and Jindal Steel and Power Ltd are some of the companies that mine and use ore from Odisha. Most of the mining in Odisha is done by state-owned Odisha Mining Corp. To curb illegal mining, the court had earlier imposed bans in Karnataka and Goa. The Goa ban imposed in September 2012, coupled with similar curbs enforced earlier in neighbouring Karnataka, have sliced India's iron ore exports by 85%, or 100 mt, over the past two years. Though the bans in Goa and Karnataka have now been lifted, output caps and procedural delays have meant iron ore production remains muted and India continues to be the tenth-largest exporter, slipping from its earlier position of No. 3. Analysts expect a gradual recovery in Indian iron ore exports over the next two years, but the pace is likely to be modest and far from a record high of more than 117 mt set in the fiscal year through March 2010. Nature's gift Orissa, situated on the

eastern seaboard of India is one of the gifted parts of the world, where a gamut of mineral resources exist in bounty. The state is endowed with large reserves of bauxite, chinaclay, chromite, coal, dolomite, fireclay, graphite, gemstones, iron ore, limestone, manganese ore, mineral sand, nickel ore, pyrophyllite and quartz.

Recent discovery of diamond in the Dharambandha area of Nuapada district by the State Directorate of Geology has added a coloured feather in the cap of the state. Other minerals of the state include copper ore, lead ore, titanium bearing vanadiferous magnetite, talc/ soap stone and high magnesia igneous rocks.

Recent boom of the mineral industry has turned the state into a hotspot, with entrepreneurs from all over the world crowding for their share of fortune. The rich mineral wealth of the state is attributed to its favourable geological setup. Situated on the eastern fringe of the peninsular India, Orissa has about 72.5% of the area occupied by Precambrian metamorphic rocks (of Archaean and Proterozoic age) which host the majority of the minerals. The Gondwanas hosting the coal resources occur over about 8% of the land mass. The Tertiary and Quaternary formations, occupying rest of the area, provide avenues for aluminous/ nickeliforous laterite and heavy minerals (in beach sand).

The Archaean rocks in northern Orissa include the Supracrustal belts of metasedimentary rocks including Iron Ore Super Group having deposits of iron, manganese, gold and base metals. These are also represented by the gneisses, granite, migmatite (Singhbhum, Bonai and

Mayurbhanj Plutons) and mafic/ ultramafic intrusives. These intrusives are associated with the chromite, titaniferous vanadiferous magnetite and PGM. The Bastar cratonic complex of Archaean age in the Western Orissa includes gneisses, granite, migmatite and Strontium-Tantalum-Niobium bearing pegmatites.

Proterozoic rocks in the western Orissa exhibit platformal sedimentary formations and associated limestone deposits. In north-western Orissa they contain metasediments of low to medium metamorphic grade classified as the Gangpur Group, which host manganese, limestone and Lead-Zinc deposits. In central and southern Orissa, the Proterozoics are represented by the Eastern Ghats granulite belt comprising of khondalite, charnockite, migmatite, anorthosite and alkaline rocks accounting for the mineralisation of bauxite, manganese, graphite and gemstones. The Mesozoic rocks of Gondwana Super Group



host the major coal resources of the state. Formations of Cenozoic age occupy the eastern coastal plains in form of alluvial sediments, ash beds and low level laterite, providing avenues for occurrence of beach sand minerals and building materials. The deltaic fans extending into offshore regions play hosts for oil and gas. Orissa has a lion's share of the country's mineral reserves. The chromite, nickel, bauxite, iron ore and coal resources of the state respectively stand at a staggering 83, 92, 55, 38 and 26% of India's total reserves. Some of these minerals also account for a visible spot in the world's mineral map. The state's mining revenue during 2009-10 amounted to Rs.2020.71 crore.

Orissa has a rich cultural heritage and is endowed with vast natural and mineral resources, which helps to build substantial industrial base. There exist large numbers of medium and small scale industries which offer the foundation for the development of a strong corporate sector. The major industries in the public sector are steel plant at Rourkela,

alumina refinery at Damanjodi, aluminium smelter at Angul, unit of Indian Rare Earth Limited at Chatrapur. In the private sector, there are several major groups who have set up medium to large industries in ferro-alloys, aluminium extrusions, sponge iron and steel etc.

Several mineral based industries have already come up in the state. The major ones include Rourkela Steel Plant, Alumina refinery and smelter of Nalco at Damanjodi and Angul, Charge chrome plants at Baminipal, Bhadrak, Choudwar and Theruvali by OMC, FACOR, ICCL and IMFA respectively, Mineral sand separation unit at Chhatrapur by IRE. Many cement and sponge iron plants have been set up. Coal based thermal power plants have been set up at Talcher, Kanihan and Banaharpali. Captive thermal power plants have also been set up by NALCO, RSP, ICCL, INDAL etc. and many more are in the pipeline. In an attempt to boost steel industry in Odisha, the state

steel capacity to 300 mt. This is despite India's growing dependence on coking coal imports which in 2013-14, stood at 33.3 mt. While the blast furnace would remain the principal steelmaking route for India, technology breakthroughs such as Finex, developed by South Korean company Posco, would allow India to make steel with iron ore fines and non-coking coal, local deposits of which are 295 billion tonnes (bt). India has iron ore resources of 30 bt and these are to rise 5-10 billion as the cut-off point of iron content in ore is reduced from 55% to 45%. So, the country's long-term self-reliance in this critical steel input is not to be doubted. India's high ore imports in recent times have resulted from significant dislocations in mining in more than one state. Unlike India, China is becoming increasingly dependent on iron ore imports to sustain its ever-rising steel production.

In 2013, as China raised its share of world crude steel production to 48.5% with

government has signed memoranda of understanding (MoU) with many steel producing companies in the state. For example, Bhushan Power & Steel Ltd proposed investment of Rs 3500 crore for its proposed steel and power plants, Aarti Steels assured. Investment of Rs 886 crore and Adhunk Metalicks inked pact for Rs 400 crore capital expenditure. Many large and small players evinced interest in setting up steel plants in India's eastern coastal state. Overall, Odisha government inked pacts with steel industry for investment worth over Rs 400,000 crore in few years.

Conclusion

Given that bans on iron ore mining in Karnataka and Goa reduce the raw material supply, imports of steel and its raw material could also rise, helping steelmakers in countries such as South Korea and China. Steel imports have seen double-digit growth in recent years as domestic raw material shortages hurt. The rich deposits of iron ore here, if properly harnessed, would enhance India's

production of 779 mt, it also imported a record 820 mt to supplement domestic supplies.

To the dismay of steel, sponge iron and pellet producers, dark clouds have started gathering over the iron ore sector in Odisha. The mineral produced in Odisha has a strategic bearing on the steel sector in eastern states, which account for 60% of the country's 80-mt annual metal output. Not only is Odisha the largest iron ore producing state in the country but domestic steel producers covet its lump ore and pellet makers its ore fines for their high quality.

Odisha ore has iron content of at least 62 % It is highly blast furnace-friendly for its hardness and low alumina, silica and Phosphorous content. But now, the proverbial sword of Damocles is hanging over the head of Odisha ore producers by a thread, as the Supreme Court will soon pass an interim order on mining in the state. A guessing game is underway on the likely ramifications of the impending court order on Odisha miners.