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INDIA NEEDS MORE FOREIGN INVESTMENT IN MINING SECTOR

India's mining sector will attract huge investments from within the country and abroad and generate additional employment in the next few years, said Vishnu Deo Sai, Minister of State for Steel & Mines.

"We must start looking overseas for mining assets acquisition to gain global competitive advantage. There should be more of exchange visits and participation in international mining events to increase the exchange of information, best practices and technology transfer while promoting the skill development and joint ventures" Sai said at a conference on 'Indian Mining Industry: A Landscape of New Opportunities' in New Delhi on Thursday.

This will fulfill the demand for various

metals and minerals enhancing their growth by 4-5times over the medium term perspective in the country, besides also mounting the mining industry's contribution to the country's GDP to the level of 5-6%, he added.

The conference that was held in the backdrop of the Amended Mines and Minerals (Development and Regulation) Act 2015 witnessed key announcement regarding auctioning of minerals in the country.



The government to start auctioning of minerals by year-end with approximately 70 leases planned for the first phase and the states are now finalizing the modalities for the process, said the Minister.

He also said that the Mineral Exploration Corporation Limited (MECL) has prepared nearly 58 geological reports of detailed exploration, which will be offered to state governments to help them expedite the auction process.

Speaking on governmental initiatives, Balvinder Kumar, Secretary, Ministry of Mines, said that the draft exploration policy, which is in public domain would be revised soon to include some critical aspects. Kumar said that the government was also gearing up for MECL and GSI to give more blocks for auction.

Besides, concession on customs duty was also being considered to allow import of exploration equipment in the country, said the Secretary, adding that MECL and state PSUs would be encouraged to enter into joint ventures with global players for exploration.

FIRMS STRUGGLE TO GET CLEARANCES AT 'READY TO MINE' COAL BLOCKS

The 34 "ready to mine" coal blocks that were auctioned earlier this year will only become fully operational by the end of the current fiscal year as companies struggle to get clearances before they can start operations.

When auctioned, these mines were operational, but mining stopped after 1 April as clearances for transfer of land and mining infrastructure had to be transferred to those who had bagged the mines. These clearances have taken longer than expected.

"Mining has started in seven of the 'ready to mine' blocks auctioned so far. Some clearances need to be given by the

state government. All central clearances have been given. The coal ministry is already coordinating with these state governments; the schedule II mines in all 34 of them which were either auctioned or allotted will start mining before 31 March 2016," coal secretary Anil Swarup said over the phone on 9 October.

Jaiprakash Power Ventures Ltd's Amelia (North) mine is one the seven operational blocks.

"It took us longer than expected; it took us two months to start mining again for the state and centre were to transfer clearances. (Continued on Page 2)..."

The block was with our parent in a joint venture, there were no issues between the prior allottee and the old allottee," said Suren Jain, managing director at Jaiprakash Power.

GMR Chhattisgarh Energy Ltd, Sunflag Iron and Steel Ltd, CESC Ltd, Jaiprakash Associates Ltd and Rajasthan Rajya Vidyut Utpadan Nigam Ltd have also started operations at the coal mines they won in the first round of auctions in February, according to coal ministry data.

However, others such as Hindalco Industries Ltd, Essar Power Ltd, JSW Steel Ltd, Bharat Aluminium Co. Ltd, Ultratech Cement Ltd and Reliance Cement Co. Ltd are yet to start operations at blocks they won in February, according to the data.

Emails sent to these six companies remained unanswered.

The delays in restarting mining may also cost the state govern-

ments. States such as Chhattisgarh, Jharkhand, Odisha, Madhya Pradesh, Maharashtra and West Bengal will lose out on the royalty to be earned from mining operations.

For instance, Hindalco Industries had agreed to pay the Chhattisgarh state government Rs.3,001 per tonne of coal mined from the Gare Palma IV/4 block, which has a rated capacity of 1 million tonnes per annum. Operations are yet to start at this mine, according to data shared by the coal ministry.

"The states lose immediate revenues from delays in commencement of mining operations. More importantly, companies will value new mines to be auctioned in these states lower than in states that are faster on approvals," said Kameswara Rao, leader (energy, utilities and Mining) at PricewaterhouseCoopers Pvt. Ltd.

With the delay, companies may find it difficult to meet the performance target agreed upon as part of the bidding agreement. However, states may need to waive those performance targets for the current year, said coal secretary Swarup.

"There is a clear cut provision made out which will determine whether the fault is at their end; if the state governments have delayed it, they cannot be penalized. All of these will be looked into before determining what would be the penalty," he said.

Swarup agrees that execution has been slower than expected.



"In India, it is a difficult job, it involves transfers of assets from one entity to the other, which cannot happen overnight. It takes a while before things happen on ground. The auctions happened quickly, but that was more of paper work. Here the action has to happen, which will happen within this

financial year," he said.

According to a September 2014 Supreme Court order, prior allottees were allowed to continue mining at these operational blocks up to 31 March. The new allottees, chosen through the auction process, were to start mining 1 April onwards.

Debasish Mishra, senior director, consulting, Deloitte Touche Tohmatsu India Pvt. Ltd says the rush to complete the online auction process is also partly to blame.

"The central government could have sought more time from the Supreme Court to complete the bid process for operating mines. In their endeavour to avoid disruption in coal production from operating mines, they rushed through certain preparatory work and consultation with state governments," said Mishra.

GSI FOR KIMBERLITE CLAN ROCKS IN C'GARH

The Geological Survey of India (GSI) has taken up exploration work for Kimberlite clan rocks in Mahasamund, Baloda Bazar and Janjgir-Champa districts of Chhattisgarh.

The Kimberlite clan rocks are sources of diamonds.

State-wise and investigation programme had been taken up by GSI for Kimberlite clan rocks during the XIIth Plan period, officials stated.

Notably, Deobhog region of insurgency-infested Gariaband district had been found to be rich source of Kimberlite rocks.

Meanwhile, the GSI will be taking up exploration of limestone deposits in Kharri-Parsadih block of Raigarh district of Chhattisgarh.

It has also decided to outsource drilling work for exploration of limestone in Kharri-Parsadih block, officials stated.

It may be recalled that GSI will also be making an assessment of bauxite ore deposits existing in Damchun block of Balrampur district in Chhattisgarh.

Limestone and dolomite deposits are located in Raigarh, Janjgir-Champa, Kabirdham, Bilaspur, Raipur, Durg, Rajnandgaon districts forming part of Chhattisgarh basin and in Jagdalpur district within Indravati basin and in Dantewada district in Sukma basin, according to the officials of Chhattisgarh Mining Department.

Notably, the Chhattisgarh Government has targetted to carry out survey and mapping for 1,000 square kms of State's area during 2015-16 for geological exploration during the 12th five year plan (2012-17).

The minerals to be explored as bauxite, limestone, iron ore, coal, dolomite, manganese and granite, officials stated.

The Chhattisgarh Directorate of Geology & Mining is the State agency engaged in exploration of mineral resources as well as minerals development and regulation work in Chhattisgarh.

The Directorate has the facility of remote sensing, cartography, survey, drilling and petrological techniques for geological investigations supported by the chemical laboratory (conventional and instrumental techniques of analyses) to assess the mineral resources. The mineral exploration works are being carried out through three Regional Offices, Raipur, Bilaspur and Jagdalpur, officials stated.

The grant of mineral concession, collection of revenue and regulation of mineral concessions are being carried out through District Offices under the control of Collector, district concerned.

The Directorate also provides technical and legal advice, related with grant and regulation of mineral concession to the State Government.

Explorations had been promised for Bauxite in Dandkesra and Murdadand area of Surguja and Darai and Bhuski-Pakri/Pandripani area of Kabirdham

districts (two areas), Iron ore in notified areas of Kanker and Narayanpur districts and Pavaras and Kachhora area of Bastar district.

Moreover, explorations are being proposed for Limestone in Raipur, Rajnandgaon, Janjgir-Champa and Dantewada districts, Manganese in Raipur district, Dolomite in Janjgir-Champa district, Granite in Kanker, Bastar and Narayanpur districts, Coal in Saidu area and West of Mainpat Plateau of Surguja district.



GOVT TO AUCTION 12 COPPER MINES, EXPECTS 15 MT OF ORE SUPPLY

The Government plans to auction 12 copper mines in the next one year in order to ensure ore supply of 10-15 million tonnes (mt). Currently, Hindustan Copper is the only

company that has a captive copper mine while other companies import copper concentrate, which is converted into copper cathode and rods.

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Speaking at the India Copper Forum here on Wednesday, Balvender Kumar, Secretary, Ministry of Mines, said the Government has identified five copper mines in Gujarat, three in Rajasthan, and four in Maharashtra for auctioning.

Of these, he added, prospecting licences have been issued for two blocks in Maharashtra and one in Rajasthan with 11 million tonnes of copper ore, which will be auctioned by February.

This would result in supply of 10-15 million tonnes of copper ore in India. In addition, another 15 coal blocks have been explored and will be auctioned in one year, he said.

"The Government is keen to attract private investment in exploration and will be finalising the new national exploration policy by January," said Kumar.

The Government will have Rs 450-500 crore in the National Mineral Exploration Trust by the end of next year. According to the new Mines and Mineral Development Act mining companies have to contribute two per cent of royalty to the Trust for facilitating exploration.

"The Government has identified a copper mine with 26.3 mt reserve and trace of 1.3 to 1.5 mt of gold and silver in Alwar district in Rajasthan. This will be auctioned in one year. We have found mineral trace over



60,000 square km in Rajasthan, Madhya Pradesh and Jharkhand. Of this, 1.5 mt of copper reserves have been established over 20,000 sq km and more mineral ore can be extracted if the remaining area is explored," he said.

The Government is also considering an amendment to the new Mines and Mineral Development Act to allow transfer of captive mines in case there is an asset sale.

JP Group's bid to sell its two cement plants to UltraTech Cement and Birla Corp has been delayed as the new law

does not allow transfer of limestone lease with the sale of asset.

"Though the amendment would not happen anytime soon, it is being discussed at various levels," said Kumar.

On the industry demand for anti-dumping duty on

copper, Ravi Capoor, Joint Secretary, Ministry of Commerce and Industry, asked the industry to push for safeguard duty as was done in the case of steel.

Going by the import data, Capoor said there is a clear case for safeguard on copper plates and tubes and if the industry can bring up their case to Government "we will respond to it in two months".

Instead of pressing for safeguard, the industry should work on various quality and energy efficiency standards which the exporting countries were not meeting and convince the Government to notify them, he said.

RARE EARTH DIPLOMACY: INDIA AND JAPAN MAKES STRATEGIC PARTNERSHIP TO EXPLORE STAKES IN DEEP-SEA MINING

At a time when the momentum and stakes in exploring sea-bed minerals are gaining ground, the technological innovations in deep-sea exploration in the Indian Ocean region hold immense potential for Indo-Japanese collaboration.

Amid the larger framework of the Indo-Japanese strategic partnership, Tokyo and New Delhi have signed a significant agreement in September 2014 on the commercial contract between Indian Rare Earths Limited (IREL)

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and Toyota Tsusho Corporation (TTC) for the exploration and production of rare earths and are working towards finalising the commercial contract and commencement of commercial production at the earliest.

Advantage

Producing almost 95 per cent of the world's rare earth elements (REEs) until 2011, China continues to restrict exports by means of quotas and export tariffs.

Chinese policies seemingly aim at lowering prices for Chinese firms through which they can obtain an unfair competitive advantage.

When it comes to securing new non-Chinese supplies of rare earth elements, Japan has taken the lead since the September 2010 incident of the Chinese supply embargo of these elements.

In fact, heavy dependency of rare earth imports from China can be gauged from the fact that Japan receives 82 per cent of its rare earth elements from China and for Beijing, rare earth elements being exported to Japan stand at just 40 per cent.

By earmarking a \$1.5-billion corpus for developing alternative sources of rare earths, there is an effort to notch up joint venture partnerships to secure supplies of rare earth elements, with Japanese firms backed by the government entering into partnerships including between Sumitomo Corp and the Kazakhstan National Mining Co - Kazatom-prom; Toyota Tsusho and Sojitz partnering with Vietnam's Dong Pao project; Japan Oil, Gas and Metals National Corporation (JOGMEC) partnering with India to explore for REEs and establish a processing facility; and JOGMEC seeking investments in Australia's Lynas Corporation.

Indo-Japanese collaboration in the field of rare earths holds immense potential in the backdrop that Japan is the second largest consumer of rare earths globally and a

vital component of Japanese policy of regional integration has been its 'rare earths diplomacy initiative' as part of which, Japan has been the key in building capacities including opening a Rare Earth Research and Technology Transfer Centre in Hanoi, Vietnam.

Moreover, Japan's Natural Resources and Energy Agency has commissioned Japan Oil, Gas, Metals National Corporation to develop robotic deep-sea mining technology to evacuate minerals.

The primary aim is to stabilise the supply of rare metals used for high-tech equipment.

Frontier

Deep-sea mining has officially been recognised as a future frontier of scientific research in India.



This explains the recent acquisition of deep-sea exploration ship Samudra Ratnakar from South Korea, equipped with sophisticated deep-sea survey instruments like doppler profilers multi-beam sonars, acoustic positioning systems, marine magnetometers and a marine data man-

agement system.

All these provide it with a qualitative edge over other survey ships when it comes to oceanographic research and enable it for an accurate survey of the seabed, and analysis of the excavated material.

India has secured an exploration contract from the International Seabed Authority to mine polymetallic nodules in the Central Indian Ocean over 1,50,000 sq km.

According to an estimate, the total mass of nodules in the area allocated to India in the Indian Ocean region is 380 million metric tonne.

However, the Samudra Ratnakar alone will not be

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sufficient to find and extract materials and, therefore, India should seriously consider a proposal for deep-sea mining and production technology from Tokyo under the strategic dialogue framework as well as acquisition of more deep sea exploration vessels.

The Industrial Development Corporation of Orissa Limited (IDCOL), and Indian Rare Earth Limited (IREL), operating under the Department of Atomic Energy, have signed an MoU to set up a mineral separation plant in the Ganjam district of Odisha that will undertake Beach Sand mining and mineral processing to produce Limonite, Garnet, Sillimanite, Rutile, Zircon and Monazite.

Moreover, a subsidiary of Japan's Toyota Tsusho Corporation is already based at Visakhapatnam, Andhra Pradesh, and is involved in the production of REEs while also operating a monazite sand rare earth production base.

Recently, the Indian Rare Earths Ltd has sought

clearance for rare earths mining from sand in the coastal stretch of around 2,500 hectares at Brahmagiri (Puri district), and Japanese collaboration in this sphere could prove vital.

Collaboration

Besides, areas identified for deep-sea mining in Japan are the hydrothermal deposits in the Okinawa Trough, northwest of Okinawa Islands, and the Bayonnaise submarine caldera – believed to contain among the world's richest seabed deposits of gold, silver and rare earth elements.

The economic viability of deep-sea mining has been under the scanner for a while, given that the cost for a single mining site is \$1.6 billion and more.

As Japan remains committed to increase R&D investments into material use efficiencies, it is only prudent to argue that joint collaboration between India and Japan in the Indian Ocean to explore and produce rare earths is the way to go forward.

FIVE STATES ISSUE NOTICES TO AUCTION 28 OF 70 MINES IN FIRST PHASE

Taking forward the auction process for mines like iron ore and limestone, five states including Chhattisgarh, Andhra Pradesh and Odisha, have issued notices inviting tenders for 28 of the proposed 70 mines to be auctioned in the first phase, the government today said.

It also said four other states will come out with notices for mine auction in a fortnight while an attractive mineral exploration policy will be launched soon to attract investment in India's vastly untapped mining sector.

"After amendment in the MMDR Act for transparent allotment of mines, the auction process is going forward. Five states have issued notices inviting tenders for 28 blocks. The government is hopeful of auction of 70 mines by states by January in the first phase," Steel and Mines Minister Narendra Singh Tomar said on the sidelines of a CII event here.

"Very soon, there will be a new National Mineral Exploration Policy, the draft of which has been prepared for seeking suggestions from stakeholders and industry experts," he said.

Regretting that India lagged far behind in exploration of minerals as against developed nations, the minister said the new exploration policy will attract private players in large numbers.

According to mines secretary Balvinder Kumar, things are "looking up" in the mining sector. He said that out of the 28 blocks, notices have been issued for 15 by Karnataka, 5 by Gujarat and 1 by Jharkhand.

"We are expecting another four states to issue notices for auction in the next 10-15 days," the secretary said.

While most states have set up National Mineral Funds, rules for the National Mineral Exploration Trust have been identified, he said, adding that mineral concession rules have been drafted too.

Major challenges facing the sector include attracting private sector players, capacity building, procedural delays, lack of data availability and duplication.

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He said the system of reconnaissance licence (RL) did not work between 2001 and 2015. Out of 405 such licenses issued, barely 15 were converted into prospecting leases (PL) or mining leases (ML).

ML is granted for undertaking operations for extracting minerals while PL is for the purpose of exploration. RL, on the other hand, is granted for preliminary prospecting of a mineral through regional, aerial and geophysical surveys.

RARE EARTH MINERALS DISCOVERED IN RAJASTHAN DESERT

Area-wise Rajasthan is largest state in India with varied geographical features. Major part i.e. 61% area is covered with desert or semi desert including 11 districts. Climate in this part is dry with scanty rainfall. Despite these negative aspects nature has been very kind to this state in the sense that it has showered state with rich mineral wealth.

State is at par with other mineral rich states like MP, Karnataka, AP, Chattisgarh, Jharkhand. Total 79 minerals are reported out of which 59 are produced commercially in this state. Except high grade iron ore/high grade coal all other minerals are found here. The state government receives Rs. 3000 crores annually as royalty, mining industry gives direct indirect employment to 2 lakh people.

Mineral search is a continuous activity in any country. Central as well as state governments are engaged in mineral survey work. After change in mineral policies now private companies can also go for mining of oil, gold and tungsten. Due to this methodology a private company was able to discover oil & gas in 2004 in Barmer district area, which shares its border with a neighbouring country. Geologically desert has Mesozoic and younger rock formations.

To a layman rare earth metals could be like any other metal. But to a student of science it means a lot, like the fact that these are a group of 17 elements in periodic table of elements. These elements have been studied in detail like any other chemical research and what we know today is due to scientific research only. General properties of rare metals are that they are silvery to gray in colour, ductile and malleable.

Rare earth elements are used in several hightechnology industrial products. Their presence in alloys, ceramic and glass compounds and in oxide compounds provide special material properties. In metallurgy, alloying and addition of rare earth elements to steel increase strength and thermal stability. The cracking

of petroleum requires catalysts containing various rare earth elements to increase the amount of short hydrocarbon molecules in the product.

In the ceramic and glass industry rare earth elements containing compounds are used for high temperature materials, for coatings, polishing, colouring, decolouring and as glass additives. The main other uses of rare earth elements are in permanent magnets, phosphors in color television tubes, x-ray tubes, fluorescent lamps, high quality magnets, medical lasers, electronic and computer screens, ipods and energy efficient fluorescent lamps. For all these applications two types of REE products are used:

1. "Mischmetall", a mixture of rare earth oxides and
2. "high purity" compounds containing at least 90% of an individual rare earth element.

In last one decade rare earth elements are also being used in wind turbines, hybrid vehicles, fibre optics. Large number of metallic and non-metallic deposits have been discovered in state during last 60 years. Both before and after independence the possibility of rare earth elements were indicated in many technical papers. Earlier rare earth mineral mining was reserved for government PSU, the liberalisation in policies has now opened this field for private entrepreneurs. But credit for a clear cut discovery goes to a private mineral mining company viz. M/S Ramgarh Minerals & Mining, based in Bellary Karnataka.

In the year 2012 this company signed an MOU with Rajasthan government to carry out mineral exploration in large area in border district of Barmer. Company vigorously carried its work and first indication was found in 2013, this was followed by drilling and the sub surface rocks gave proof of occurrence of rare earth minerals.

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The main discovery is located near village Kamthai, 30kms, South East of Barmer. As per the scientific paper published by company advisor Dr. S.K. Bhushan in 2015, rare earth minerals are associated with carbonatite rock. There is bimodal distribution of rare earth elements. A wide spectrum of calciocarbonatites and associated alkaline rocks are exposed around Kamthai, Rajasthan.

The mineralogical studies exhibit a bimodal distribution of REE minerals. The southeastern block has carbocernaite and the eastern block has bastnaesite (+/-) ancylite/synchysite as the dominant REE minerals followed by parisite and other accessory minerals. Calcite is the most abundant of the gangue phase, followed by biotite, albite, k-feldspar and iron oxide/hydroxide.

Minor and trace gangue phases include pyrite, ilmenite, apatite, siderite, ankerite, amphibole, pyroxene, strontianite, barite, ilmenite/pyrophanite, celestine, clay minerals, sphalerite, pyrochlore, fluorite and Mn-rich phases including hollandite and Mn-Fe oxides. Calciocarbonatite occurring as intrusive veins, sills/dykes and plug, is perhaps a product of crystallization of a primary carbonatite melt generated at upper mantle.

The first phase magmatic calciocarbonatite is alvikite

type, rich in carbocernaite whereas second hydrothermal phase, sovite type, is enriched in bastnaesite. The absence of supergene activity and minerals (crandalite, florencite, gorceixite) indicate minor role of secondary enrichment. A rift-related mechanism, thermal equivalent to Deccan flood basalt (65 (+/-) 2 Ma), invoking "Reunion plume - continental hot spot" might have triggered Tertiary alkaline magmatism.

The company has submitted its technical report to Rajasthan government. And is in the process of acquiring mining lease for the explored area. If this project materialises then it would be first mine of rare earth minerals in state. India is not very rich in terms of rare mineral deposits so this discovery has long term implications.

Apart from saving foreign exchange, it would also provide employment to locals, and add to state by way of mineral royalty. Apart from this discovery the only mining processing of such minerals is being carried out along Kerala coast by government of India PSU, Indian Rare Earths Ltd.

It is not out of question to mention that China dominates the mining and trading of rare earth minerals in world. It supplies 95% of all rare minerals consumed by world.

COAL INDIA SEEKING CONSULTANTS FOR STUDY ON COAL MINING PROJECTS

Looking at utilising underground mines more efficiently, CIL has invited bids from consultants for preparing a study on a range of issues, including raising output, as the state-owned firm gears up to meet the ambitious production target of 1 billion tonnes.

There are 227 working underground mines and 28 mixed mines under Coal India Ltd.

"CMPDI, on behalf of Coal India Ltd (CIL), invites offers/bids through e-tendering from academic/research institutions and/or consultancy firms/organisations of India or abroad for providing consultancy services for 'study on underground coal mining in CIL - problems, potential, technology, modernisation, production and safety'," according to a tender document dated November 2, 2015.

About Rs 762 crore is likely to be invested in the underground coal mines in the ongoing fiscal. Coal and Power Minister Piyush Goyal had earlier said that as against the output target of 37.6 million tonnes (MT) from the underground mines last fiscal, CIL had produced a little over 35 MT.

The scope for augmenting production from the underground mines, he had said, was limited on account of difficult geo-mining conditions, non-availability of large size deposits for adopting mass production technologies, inadequate experience in mechanisation of underground mines.

He had said that the major constraints in increasing coal production from underground mines, include lack of appropriate technologies to mine coal from thick and

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steeply inclines and multiple seams, heavy pumping out of water and adverse roof conditions.

The government has set an ambitious 1 billion tonnes

coal production target for CIL by 2020. It accounts for over 80 per cent of the domestic coal output.

INDIA'S MINERAL PRODUCTION UP 3% IN SEPTEMBER

India witnessed 3% rise in mineral production in September 2015. The index of mineral production of mining and quarrying sector for the month of September 2015 at 118.8. The cumulative growth for the period April- September 2015-16 over the corresponding period of previous year stands at (+) 1.5%.

The total value of mineral production (excluding atomic & minor minerals) in the country during September 2015 was Rs 174.96 billion. The contribution of coal was the highest at Rs 64.27 billion (37%). Next in the order of importance were: petroleum (crude) Rs 55.29 billion, natural gas (utilized) Rs 21.9 billion, iron ore Rs 16.46 billion, limestone Rs 4.74 billion and lignite Rs 4.33 billion.

These six minerals together contributed about 95% of the total value of mineral production in September 2015.

Production level of important minerals in September 2015 were: coal 449 lakh tonnes, lignite 32 lakh tonnes, natural gas (utilized) 2648 million cu. m., petroleum (crude) 30 lakh tonnes, bauxite 2300 thousand tonnes, chromite 131 thousand tonnes, copper conc. 9 thousand tonnes, gold 103 kg., iron ore 108 lakh tonnes, lead conc. 23 thousand tonnes, manganese ore 152 thousand tonnes, zinc conc. 137 thousand tonnes, apatite & phosphorite 212 thousand tonnes, limestone 232 lakh tonnes, magnesite 22 thousand tonnes and diamond 3010 carat.

RS 500 CRORE HAS BEEN EARMARKED FOR CAPACITY BUILDING FOR MINERAL EXTRACTION, SAYS MINES SECRETARY

To take forward the auction process for mines like iron ore and limestone, five states including Chhattisgarh, Andhra Pradesh and Odisha, have issued notices inviting tenders for 28 of the proposed 70 mines to be auctioned in the first phase, the government on Thursday said.

It also said four other states will come out with notices for mine auction in a fortnight while an attractive mineral exploration policy will be launched soon to attract investment in India's vastly untapped mining sector.

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"Very soon, there will be a new National Mineral Exploration Policy, the draft of which has been prepared for seeking suggestions from stakeholders and industry experts," he said.

The minister regrets that India lagged far behind in exploration of minerals as against developed nations and said the new exploration policy will attract private players in large numbers.

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Major challenges that the sector faces include attracting private sector players, capacity building, procedural delays, lack of data availability and duplication. He said the system of reconnaissance licence (RL) did not work between 2001 and 2015. Out of 405 such

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ML is granted for undertaking operations to extract minerals while PL is for the purpose of exploration. RL, on the other hand, is granted for preliminary prospecting of a mineral through regional, aerial and geophysical surveys.

The secretary said Rs 500 crore has been earmarked for capacity building.

The Parliament passed the Mines and Minerals (Development and Regulation) Amendment Act, 2015 in March, which stipulates auction as the only means to

allow extraction of minerals.

On November 10, Gujarat said it was going to start the mines auction by putting five blocks of limestone -- the key ingredient in used to make cement -- under the hammer, to make it the first one to get off the block.

On November 18, Rajasthan said it will soon start e-auction of three limestone blocks and plans to conclude the entire process by the end of January next year.

The Mines Ministry has identified 199 mines that can be allocated through the auction route. These are located in mineral-rich states such as Rajasthan, Jharkhand, Madhya Pradesh, Chhattisgarh, Karnataka and Odisha.

SIXTEEN COAL INDIA MINING PROJECTS GET GREEN NOD IN CURRENT FISCAL

A total of 16 mining projects of Coal India have received green nod in the current fiscal, Parliament was informed on Thursday.

The clearances come at a time when the government has set an ambitious one billion tonne production target for Coal India Ltd (CIL) in the next five years.

"During the year 2015-16 (as on 1.12.2015), 12 projects have been accorded environment clearance (EC) and four projects have been accorded Stage II forestry clearance (FC)", Coal and Power Minister Piyush Goyal said in a written reply to the Lok Sabha.

Of the 12 projects granted environment clearance, five belong to Western Coalfields Ltd (WCL), two are under Eastern Coalfields and two others belong to South Eastern Coalfields (SECL), Goyal said.

The four projects given Stage-II forestry clearance include one each of Mahanadi Coalfields Ltd, SECL, Central Coalfields Ltd and WCL, the minister said.

In a separate reply to the House, the minister said the focus of the government is to increase coal production to the extent possible by facilitating EC and FC expeditiously, pursuing with the states for assistance in land acquisition and coordinated efforts with Railways for movement of coal.

"Further, structural factors such as problems in expanding the capacity arising from difficulties in land acquisition, R&R...difficulties in obtaining EC, restrictions arising out of the imposition of Central Environment Pollution Index guidelines and non-availability of FC in time, have constrained the growth of domestic coal production", he said.

BAUXITE MINING WILL BENEFIT CORPORATE BIGWIGS ONLY: CPM

The white paper on bauxite mining released by N Chandrababu Naidu-led state government is nothing but a lie, CPM national leader Brinda Karat alleged, adding that both the chief minister and Prime Minister Narendra Modi are making efforts to go ahead with bauxite mining in the Agency to appease corporate bigwigs.

Addressing a public meeting organised by the AP Girijan Sangham here on Monday, Karat said the CM had released the white paper only to tell a big lie that the

Jerrela region was not inhabited by tribals and that the panchayat had passed a resolution approving the mining. The CM is wrong on both the counts, the CPM leader said.

She alleged that the JC Kala Committee members did not visit any of the 244 villages that would be affected by the mining and submitted a false report claiming that no tribals lived in the villages. "People will offer stiff

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resistance if the government goes ahead with the mining as it would be against the wishes of the local people," Karat warned.

Karat said that though the central government had spent Rs 2 crore on a discussion on the Indian Constitution and its greatness, not a single issue pertaining to the scheduled caste or scheduled tribe communities came up for the discussion during the two days.

She reminded that under the Fifth Schedule and the

1/70 Act, non-tribals, including the government, were not entitled to property ownership in tribal areas. As per the Forest Rights Act, all tribals must get the title deeds of their land to enjoy cultivation rights.

CPM party state committee member Ch Narsinga Rao said that the government was misleading the people by announcing that bauxite mining would benefit the tribals. He alleged that tribals never benefited by such decisions as it is always the private sector that reaped all the benefits.

PSUS TO GET COAL INDIA SUPPLY TILL CAPTIVE MINES BEGIN OPERATIONS

Power plants of public sector undertakings will get coal supply from Coal India till their captive coal mines become operational, coal secretary Anil Swarup said.

"In-principle decision has been taken for grant of bridge linkages to power plants of central or state government enterprises that have been allotted coal blocks under government dispensation route," he said on Monday

Bridge linkage shall act like a short-term linkages to bridge the gap between requirement of coal by a thermal power plant and the start



of production from the linked coal block till such time the production actually starts, he said. Such supply could be granted for a period of three years only to blocks where development of may take time.

Coal India estimates a coal requirement of 25-40 million tonnes per annum in the next three years on this account.

NTPC's Ramagundam plant in Telangana has already been granted such coal supply till the time its Mandakini-B mine in Odisha begins operations.

INDIA FINALIZES URANIUM DEAL WITH AUSTRALIA

Despite not signing the nuclear non-proliferation treaty, India will be allowed to import uranium from Australia for civilian purposes.

On Sunday the two countries finalized a deal that has been in the works for three years, with Indian Prime Minister Modi and Australian PM Malcolm Turnbull making statements on the sidelines of the G20 summit in Turkey and on social media.

"PM @narendramodi thanked PM @TurnbullMalcolm and described the nuclear agreement as a milestone & source of trust & confidence," tweeted Vikas Swarup, from the Indian foreign ministry. "With the completion of procedures, including administrative arrangements, the #IndiaAustralia Civil Nuclear Agreement will enter into force."

The seeds of the agreement were sown by then-Australian PM Julia Gillard, who promised during a state visit in 2012 to supply uranium to India, which faces severe shortages of electricity and has limited nuclear capacity. Two years later Gillard's successor, Tony Abbott, signed a memorandum of understanding for "Cooperation in the Peaceful Uses of Nuclear Energy" whereby Australia would become a long-term supplier of uranium to India.

The agreement means India is the first country to buy yellowcake from Australia, that has not signed the international treaty to prevent the spread of nuclear weapons.

While India faced Western sanctions in 1998 after

(Continued on Page 12)...

testing nuclear weapons, the sanctions were lifted after a deal with the United States in 2008 that included safeguards against using the nuclear fuel for weapons production.

According to the World Nuclear Association, India currently has 21 operating reactors with a capacity of 4,780 megawatts, or 2 percent of India's total power supply. The country plans to increase its nuclear capacity to 63,000 MW by 2032, by adding close to 30 reactors at a cost of \$85 billion, Hindustan Times reported.

India is actively seeking agreements with foreign powers in order to reach that goal, on top of the nuclear agreements it currently has with 11 countries and deals to import uranium from Russia, France, Kazakhstan and Canada.

Concerned about running out of nuclear fuel, in July India created a strategic uranium reserve to ensure that its atomic reactors can keep producing electricity without interruption.



The finalized supply deal with Australia could be quite lucrative for Australian uranium producers and uranium mines, which include BHP Billiton's (NYSE:BHP) Olympic Dam, Ranger, Beverley, Four Mile and Honeymoon.

An Australian parliamentary committee that supported the deal said in September the arrangement could increase export revenues by \$1.75 billion.

Mark Chalmers, chair of the Australian Uranium Council,

told ABC News that Australia could double or triple its uranium production to meet India's needs, although for that to happen, the price of uranium would have to almost double, he added.

Australia currently has about 40 percent of the world's uranium reserves, and is the number three producer of the nuclear fuel, behind Kazakhstan and Canada.

INDIA AND AFGHANISTAN WON'T PURSUE MINING, STEEL PROJECT

India and Afghanistan have called off all talks on a proposed \$11-billion iron-ore mining and steel mill project by a consortium of Indian metal companies. According to a senior government official, the Indian government, which had been supporting the Indian consortium through bilateral talks with the Afghan government, had decided that it would be futile to hold any further negotiations to advance the project in view of spread of Taliban control close to the proposed iron-ore reserves and steel mill site at Hajigak. He said that the Afghan government appreciated the issues raised by the Indian government in deciding not to negotiate further and even acknowledge that the Taliban forces were recipient of revenues from small unorganised mining in the region and the security concerns of prospective investors. The project was first conceived in 2011 after India bagged the iron-ore mining rights at Hajigak. Even though several rounds of government-to-government talks on furthering the project did not yield any positive results, resulting in the project being placed on the

backburner, both governments have now conceded that mere governmental-level talks would not change the ground realities. According to an official of Steel Authority of India Limited (SAIL), the main consortium member, the steel major had halted work at the project although it had not officially scrapped it. At the same time, the tripartite transit agreement between India, Afghanistan and Iran had also failed to fructify, which would have offered transportation and logistical facilities to the project through the Iranian port of Chabahar. As per an agreement between the India and Afghanistan in 2011, the Indian consortium, Afghan Iron and Steel Company Limited (Afisco), would invest \$11-billion for construction of a one-million-tonne-a-year steel mill and develop the 1.8-billion-tonne iron-ore reserves at Hajigak, partly to supply to the steel plant and export the balance to India. The Indian consortium isled by SAIL and included iron-ore miner NMDC Limited and other steel producers, including JSW Steel, Jindal Steel & Power Limited and Monnet Ispat.

IN A FIRST, KARNATAKA TO E-AUCTION IRON ORE LEASES



11 MINING LEASES READY FOR E-AUCTION

- Two leases of Tungabhadra Minerals Pvt. Ltd.
- Channakeshava Reddy ➤ Nidhi Mining Company
- Rama Rao Poal ➤ M. Srinivasalu Mines
- S.B. Minerals ➤ V.S. Lad & Sons
- Ramgad Mines & Minerals Pvt. Ltd.
- Lakshminarayan Mining Co.
- B.R. Yogendranath Singh

Mineral Exploration Corporation Ltd. carried out exploration of the 11 'C' category mining leases

- The exploration was done to ascertain the exact quantity of iron ore reserves left in these mines
- The move came after the Supreme Court allowed the State to auction 15 mining leases in the 'C' category

Karnataka will be the first State to auction iron ore leases after the NDA government at the Centre amended the Mines and Minerals (Development and Regulation) Act, 1957 recently.

Come February 2016, Karnataka will, for the first time in the country, e-auction 'C' category iron ore mining leases, following the direction of the Supreme Court. The State government has announced February 9 as the date for starting the process.

Karnataka will be the first State to auction iron ore leases after the NDA government at the Centre amended the Mines and Minerals (Development and Regulation) Act, 1957 recently. The amendments mandate e-auctioning of

natural resources.

Over 31 months after the apex court directed Karnataka government to re-allot 'C' category iron ore mining leases to end users (steel and allied industries), the Department of Mines and Geology has commenced the process of e-auctioning 11 of the 51 such leases by inviting bids for e-auction in Ballari and Chitradurga districts.

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According to sources in the industry, these 11 mines together possess around 127 million tonnes of iron ore reserves.

The Supreme Court, in its final order on illegal mining in Karnataka in April 2013, had asked the State government to cancel 51 'C' category leases for involving in rampant illegal mining and re-allot them to end users through a transparent bidding mechanism.

Sources said that the State-owned Metal Scrap Trade Corporation (MSTC) Ltd. will conduct e-auction between February 9 and 11.

The financial and technical bids are expected to be submitted online. Interestingly, consortiums of end users are not eligible to participate in the auction.

Kudremukh Iron Ore Company Ltd., a PSU, and JSW Steel, which do not have captive mines, are learnt to have expressed their interest in participating in bidding. Other giant in the steel sector, ArcelorMittal, which is in the process of setting up a steel plant in Ballari, will also be a bidder.

Sources said 24 mining leases in categories 'A' and 'B' in the State are producing an average of 21 million tonnes of iron ore.

FOUR MINES MAY FETCH STATE GOVT 8,300 CRORE

Starting off the process of allotting mineral resources through competitive bidding, the state government has invited bids for four mines with limestone, bauxite, iron ore and tungsten reserves. The mines are located in Chandrapur, Kolhapur, Sindhudurg and Nagpur respectively. The total value has been pegged at Rs8,300 crore, said sources.

This is the first batch of mines being given through competitive bidding, after the law was amended to do away with discretionary allotment. Another four mines having manganese, copper, bauxite and limestone will go under the hammer this month. The bids have to be submitted till December 16 with the final results to be out by January.

Except limestone mines, which are being offered for captive purposes, rest of the resources are open for commercial exploitation, a source said.

The bidders will have to quote an amount to be shared with the government on the basis of production and dispatches of the mineral. This will be over and above the royalty to be charged on mining. The government's share on the minerals will only be payable after the commodity is sold. But at the same time, a minimum quantity of production has been prescribed for each of the mines. One per cent of the mine's value has to be submitted as security deposit by the successful bidder, which is divided into performance deposit and upfront money.

The iron ore mine is located at Sindhudurg district in Konkan, though there are substantial iron ore deposits in Vidarbha also. So far none of the iron ore mines in Vidarbha are in the list. This is because the mines have been already allotted to 6-7 companies under the earlier system. Even as competitive bidding has been introduced, any mine already allotted cannot be touched, says the new law.

This excludes the mines in Surjagarh area of Naxal-hit Gadchiroli district. Most of the companies have been granted a prospecting licence in Surjagarh, with Lloyds Steel among the major players having a mining lease, which is the next step. However, the company's activities did not take off due to Naxal violence. Two years ago one of the senior managers of Lloyds was killed by the rebels. JSW Ispat is learnt to have finished prospecting in the area and has got central government's recommendation to get the mining licence. The approval is pending with the state government, said a source.

The BJP regime is encouraging private companies to start mines in the Surjagarh area. There have been steps to build confidence with union home minister Rajnath Singh also visiting the district. Chief minister Devendra Fadnavis said he wooed Mittal Group to invest in Surjagarh. However, a source in the steel industry said it may be not an appropriate time to start an iron ore mine due to a slump in the price of steel.

IN A NUTSHELL

Bids invited for 4 mines having limestone, bauxite, iron ore and tungsten

Mines located in Chandrapur, Kolhapur, Sindhudurg and Nagpur

Another four to be taken up later this month

Bidders will have to quote an amount to be shared with government on the basis of dispatches

Minimum level of production prescribed



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ULTRATECH CLOSING IN ON R-INFRA'S CEMENT UNITS

The Aditya Birla Group's cement company, UltraTech, is in talks to take over the cement units of the Anil Ambani-owned Reliance Infrastructure.

A source close to the development said Reliance Infrastructure's cement units were likely to fetch an enterprise valuation of Rs 5,000-5,500 crore. Reliance Infrastructure put up its cement units for sale last month to reduce its Rs 25,766 crore debt.

The source said UltraTech was conducting due diligence and negotiating the price. A decision is likely next month. There were a few private equity players in the race as well, but UltraTech is leading the race, the source added.

A Reliance Infrastructure spokesperson declined to comment on "market rumours", while the UltraTech spokesperson said the news was not true.

Reliance Infrastructure has three cement plants with a combined capacity of 5.8 million tonnes in Maharashtra, Madhya Pradesh and Uttar Pradesh. The plant in Madhya Pradesh has commenced commercial production. Reliance Infrastructure's cement business posted sales of Rs 541

crore and made a loss of Rs 114 crore in the 2014-15. Besides, Reliance Infrastructure has won in an auction the Sial Ghogri coal mine with reserves of 5.69 million tonnes. An analyst said the takeover of the units made sense for UltraTech, which wanted to expand capacity

from 69 million tonnes now to 100 million tonnes by 2020. With the acquisition of the Jaypee Group's cement units, UltraTech's cement capacity will touch 74 million tonnes by 2016-17. Kumar Mangalam Birla, chairman of the Aditya Birla Group, is also inheriting Century Textiles, which has 13 million tonnes of cement capacity.

Reliance Infrastructure is trying to reduce its debt by selling non-core assets. Earlier this month, it announced the sale of a 49 per cent stake in its Mum-

bai electricity distribution business to Canadian investment fund PSP Investment Board. Reliance Infrastructure also plans to sell 11 road projects.

The company is shifting its focus from infrastructure to defence as the Narendra Modi government is expected to issue billions of dollars of defence contracts to Indian companies under the Make In India campaign. Reliance Infrastructure has taken over Pipavav Defence.

CONCRETE FINANCIALS

UltraTech Cement

■ FY14 ■ FY15

| Sales turnover | Total assets |
|------------------|-------------------|
| 21,651.50 | 36,177.72 |
| 24,348.96 | 43,345.66 |
| Profit after tax | Total liabilities |
| 2,206.03 | 24,680.59 |
| 2,098.34 | 29,083.74 |

Reliance Cement

■ FY14 ■ FY15

| Sales turnover | Total assets |
|------------------|-------------------|
| 71.83 | 3,149.83 |
| 541.96 | 3,529.34 |
| Profit after tax | Total liabilities |
| -9.85 | 2,301.66 |
| -114.60 | 2,707.51 |

Figures in ₹ crore; figures prefixed with a negative sign indicate losses.
Total assets include gross block+investment+capital work in progress+other assets
Compiled by BS Research Bureau Source: Capitaline

GLOOM IN GOA AS ORE PRICES CRASH, LEVIES SQUEEZE MINERS' MARGINS

When the Supreme Court allowed mines in Goa to reopen after a gap of three years, hopes were high.

Shares of Sesa Sterlite Ltd, the state's largest miner, rose nearly 5% to close at Rs.201.80 on 21 April 2014, the day the mining ban was lifted. Brokerages cheered the development, expecting miners' revenues to grow. Better days are here, asserted chief minister Laxmikant Parsekar, at the reopening of Sesa's Codli mine on 10 August.

For Vedanta and other miners in the state such as Fomento Resources Ltd and V.M. Salgaocar Brothers, mining and exports were supposed to bring back the good old days of a commodity boom.

Perhaps the celebrations were a little premature. On 3 December, Sesa Sterlite, now called Vedanta Ltd, closed trading on BSE at Rs.92.15, less than half its April 2014 value. The companies that resumed mining in August and exports in October after the state government renewed their mining leases have been pumelled by the meltdown in ore prices and a raft of new levies.

Benchmark spot iron ore prices delivered at Qingdao, China for 62% Fe grade iron ore touched a record low of \$42.24 per tonne on Tuesday, according to Bloomberg data. This was 5.6% down from a week ago, 14.6% down from a month ago, and around 40% down from a year ago.

Analysts said the price of lower quality 58% Fe grade – which is mined in Goa – is around \$2-3 per tonne less, although it varies for different mines. With the fall in the benchmark price of ore in the international market, the price of the Goa grade iron ore too has fallen.

"Since mining activities in Goa started after a long time and with a very low production base, the numbers have

not come out, but my guess would be that if excluding royalties and taxes etc., they can make \$15 per tonne on the selling price, then they will make money. But this might not be the case," said Rakesh Arora, head of research at Macquarie Capital Securities Ltd, a brokerage.

The price of the benchmark 62% Fe grade was \$40.6 per tonne and Goa's 58% Fe grade was \$38.4 per tonne on

Wednesday, Arora pointed out. He said royalties and other levies add up to almost 30% to the cost of the production.

Bloomberg did not have iron ore price data for Wednesday.

According to public data shared by lobby group Goa Mineral Ore Exporters' Association, mining in

Goa attracts a 10% export duty on 58% Fe grade iron ore and below, a 15% royalty on the selling price paid to the state, a 30% levy on the royalty charged in the form of a district mineral foundation tax and a 10% levy on the export price of iron ore under the Goa Mineral Ore Permanent Fund Scheme.

Miners are worried that the prices seem to be steadily falling, creating further unpredictability. "I would guess that the bottom is not far. However, in the short run, it is difficult to predict," Arora said.

Despite early excitement over the resumption of mining, reality set in by July, when all permissions to restart were in place. Analysts predicted that the profits of these companies will be stretched. Domestic brokerage IIFL Ltd had pointed out in a 30 July report that in the absence of cut in several regulatory charges imposed by the state and the central government, iron ore mining cannot be profitably sustained in Goa.

(Continued on Page 17)...



In July, however, the price of 58% Fe grade was still \$50 per tonne and Tom Albanese, chief executive officer of Vedanta Resources Plc., had indicated during a teleconference with the media that he expected Goa ore to fetch around \$45 per tonne. Vedanta Ltd, the Indian subsidiary of Vedanta Resource Plc, is the biggest iron ore miner in Goa. Apart from iron ore mining, Vedanta Ltd also has interests in oil and gas, zinc, aluminium, copper and power.

An email sent to Vedanta Ltd on Wednesday remained unanswered.

S. Sridhar, executive director, Goa Mineral Ore Exporters' Association, said miners are selling the iron ore that was auctioned in the last two years and no fresh ore is being exported as of now.

"We expect that the 10% export duty levied on exports will be lifted soon. Then, it will offer some relief. Till then, the situation is worsening each day as mining fresh

ore and exporting is a loss-making proposition currently," he said.

"With the price of iron ore now coming down to below \$38 per tonne for the Fe grade of 58%, viable operations in Goa is a big question mark," said Goutam Chakraborty, analyst with brokerage Emkay Global Financial Services Ltd, another broking house.

He said the average cost of production for miners in Goa, who produce iron ore with Fe grade of 58% and below, is around \$20-25 per tonne. When royalties and other levies are added to it, the price goes up to \$35-40 per tonne. However, with the benchmark price of iron ore, or 62% Fe grade, itself ruling around \$42 per tonne, the price for lower grades are much below \$40 per tonne. This makes exports from the state unviable, he explained.

He did not wish to comment on any individual company operating in Goa.

MAOIST REBELS TORCH 22 VEHICLES CARRYING IRON ORE

Maoists on Wednesday set ablaze 22 heavy vehicles deployed for transporting iron ore in Chhattisgarh's Kanker district, about 220 km south of Raipur, police said.

Kanker police said the ultras thrashed the drivers before setting the vehicles, which were engaged in the Hahaladdi mines, on fire. The drivers and helpers of the trucks fled from the area.

The Maoists are reportedly opposed to iron ore mining in the area and the attack in Kanker came on the eve of a one-day 'bandh call'.

No security forces have been deployed in the three functional iron ore mines in Kanker, officials posted at the site told HT on condition of anonymity.



During the last 30 days, around 95 vehicles have been set on fire by the Maoists in strife-torn Bastar zone.

As many as 35 vehicles deployed for road construction work at Tarlaguda in Bijapur were burnt down on October 23. A week later, on October 30 they set ablaze 29 vehicles at Chargaon iron ore mines in Kanker.

The ultras also torched a bus in Bijapur district on October 24 after asking all passengers to get off the vehicle and on the previous day, the rebels burnt five trucks work-

ing for the railways near Geedam in Dantewada.

On Monday, they torched a private bus in Sukma after asking its passengers to alight.



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