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INSIDE INDIA'S CURIOUS COAL AUCTIONS

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News about commercial coal auctions and how the corporates are having a steal has triggered breaking headlines, and many have even started plugging motives. So let's toss some points here: Investors and industries have a couple hundred blocks to choose from.

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A dozen coal blocks were allocated, with a single bidder for each in the fray. 23 blocks, including those northwest of Madheri, received two bids each.

Northwest of the Madheri block didn't find contenders in the earlier two trenches.

Auctions don't prohibit bidders from having commercial relationships.

Auctions were held for 93 blocks, with 106 more to go under the hammer.

India's energy sector continues to be fraught with convoluted commentaries and wild allegations, and many are finding it extremely convenient to distort and isolate facts. It does nothing but create some mild sensations. So let's get into some of the basics. In the face of mounting pressure from developed nations against the Indian government's efforts to ensure energy security for the world's most populous nation, the energy sector is one of the most vulnerable sectors of the Indian economy. Why?

Those who criticise ongoing commercial coal auctions are either sympathisers with those who lost coal blocks allocated by

the UPA government without any competitive bids, or they undermine the interests of a developing nation, which does not give away national assets without auctioning them. Due to the complexity of the energy sector, many experts are using clickbait to trigger breaking headlines.

First of all, let's put some facts on the table. I would like to discuss the issue of the North West Madheri coal block, which was up for auction in Tranches 4 and 5, but failed to generate any interest. Ultimately, Tranche 6 auctioned this block successfully, with two bidders participating. And there are many more such interesting aspects to the bidding process, which I would like to list here.

Coal Blocks With Single Bidders

After the Supreme Court cancelled the freely allocated coal blocks in favour of what the apex court felt were the favourites of the previous regime, the present government has auctioned 93 blocks in six trenches since mid-2020. Of these, a dozen blocks attracted only a single bidder. To ensure the competitiveness of the auctions, the authorities invited bids for those blocks yet again. However, these mostly unexplored or partly explored blocks failed to excite new bidders. Hence, these blocks were given away to these single bidders without competition, as per the terms of the auction.

The premium offered by these single bidders is not known since the data is not published by the auction authorities. However, one can only imagine the premium offered by the single bidders to the government in the absence of any competition.

It is also worth mentioning here that the Adani group—now in the heat for reasons good, bad, ugly, and some more—didn't get any blocks without the competition. However, many continue to attach motives to the case of the Northwest Madheri Block in isolation for some strange, ulterior motives.

Coal Blocks With Two Bidders

Now let me argue why many miss the trees for the woods and target a single block with incomplete information. And thereby implying something fishy about the Adani group bagging a coal block that attracted only two bids. Now the critics have remained silent about the fact that 22 other blocks were auctioned with the participation of only two bidders each and at least half of them were given away with a premium in the single digits percent. There are many other instances where bidders for the same commercial coal block had commercial transactions with each other.

Now let me go deeper into the case. Many raised questions against the promoters of the other bidder, Cavill Mining Private Ltd., due to past business relations with Adanis. There can't be any auction if contenders with other business relationships are disallowed from participating in the bidding process.

This goes even further. The government has not prohibited public-sector units from competing for the same coal blocks. There are multiple instances where state and central PSUs competed against each other for coal mines.

Importantly, apprehensions against any bidder don't make any sense since eligibility criteria don't limit any entity from participating in the commercial coal mining auction, irrespective of prior experience in mining or net worth, among others. This is a well-thought-out move by the government in a country that has to meet one-fourth of its coal requirements through expensive imports despite having the world's fifth-largest coal reserves. While India must encourage competition in commercial coal block auctions, it should not shy away from promoting domestic coal production due to the pressure groups dancing to the tunes of energy-guzzling developed nations.

In the past, commercial auctions conducted by the state government authorities for various minerals had allowed multiple companies from the same business house to compete in the bidding process as per prevalent terms and conditions. Again, such is not the case in the auction of the northwest Madheri block, where both bidders are unrelated to each other. Hence, there is nothing unusual about successful bidder Adani competing with only one other contender. Coal India And Competition This is not all. Bidders cannot be

blamed for the lukewarm response to certain blocks simply because many of the blocks auctioned are either unexplored or partially explored and are not promising assets for the investors. Being a central PSU responsible for coal mining, Coal India could acquire any block of its choice without paying any premium to the government. However, it didn't risk developing the blocks that are now being auctioned. If the world's largest coal miner (read: Coal India) didn't risk developing these blocks, can the government genuinely expect private firms to risk their capital for unproven reserves? Coal India had a free run due to its monopoly, and it enjoyed low-hanging fruits for decades. In the absence of any competition or motivated lobbying by experts, the PSU emerged as the world's largest coal producer to electrify the world's almost most populated nation. Now the Indian government taken a bold step to allocate all the risky coal assets through competition, unlike the previous regimes, but is still facing the music from the critics. The government must remain firm on its plans to make India self-reliant in the energy sector. India's per capita electricity consumption stands at only 1250 units annually as against the global average of over 3200 units. Coal will be the primary fuel for power generation in India for a decade or two till renewable and other emerging resources don't become viable and widespread.

Auction With Alternatives

Fierce competition is missing during the ongoing auction for commercial coal mining since the coal consumers are supremely confident of securing fuel for their energy-intensive factories. Industrialists and investors have to simply follow the transparent auction process instead of chasing fixers—the lists include some veteran, celebrated cricketers—and political powers in Lutyens' Delhi to corner coal blocks. Having closely tracked the coal sector, I am pleasantly surprised with the way it is operating today. It is heartening to see that even after the auction for 93 coal blocks, the government is going to offer over 100 mines, of which 61 are partially explored and 45 are fully explored. Such ease of accessing dry fuel is truly unprecedented in India. Unlike oil and gas, the coal mining sector has been the most complex in the Indian energy sector. This is on account of the nationalisation of coal assets, the role of trade unions and environmental activists, and, most recently, the controversial minister Shantanu Guha Ray is the Asia Editor of Central European News. He is author of 'Black Harvest: The India Coal Story' that will hit the stands in a few months.

Source & Copyright © BQ Prime

INDIA'S RARE EARTHS MINER EYES 400% EXPANSION FOR CLEAN ENERGY

India's sole rare-earths producer wants to boost its mining capacity by 400% in the coming decade to help the country lock in supplies of key minerals for its clean-energy transition.

State-owned IREL (India) Ltd. aims to mine 50 million tons a year of rare-earths bearing ore by end-2032, up from 10 million tons now, Chairman D. Singh said in an interview. That would allow it to produce 13,000 tons annually of refined rare earths, versus 5,000 tons at present.

Like other major economies, India is grappling with how to secure supplies of materials like rare earths and lithium that will be needed in bigger quantities in the shift away from fossil fuels. Geopolitical tensions also mean there's concern about China's grip over commodities used in everything from electric vehicles to wind turbines.

"In future, the non-availability of these materials could hold back India from achieving its clean energy goals," Singh said, while urging authorities to fast-track permits for the company's planned new mines.

Building a domestic rare earths industry in India faces numerous challenges: from a historically cautious approach to mine permitting, to the low quality of ore and relatively undeveloped downstream capacity. IREL's own refineries are stuck at no more than 40% of capacity because there's not enough mined ore to feed them, he said.

India holds the world's fifth-biggest rare earths reserves but is only a modest producer, according to

US government data.

China dominance

Singh also said he hoped the country could develop more downstream capacity for rare-earths, noting that this was key to China's dominance of global activity.

"While mining, processing and refining capacity is available in India, the midstream and downstream segments in this sector are absent," he said. It would cost between 30 billion rupees (\$365 million) and 50 billion rupees to develop downstream plants to absorb IREL's planned output, he said.

At the moment, Toyotsu Rare Earths India Pvt., a unit of Japan's Toyota Tsusho Corp., is the only private refiner, and takes concentrate supplied by IREL, Singh said. The quality of ore in India presents a major challenge, with China's ore grades often some 100 times higher than those present in India, according to Singh. That makes processing more demanding and costly, he said. When IREL tendered a few years ago for partners to build a downstream plant, there were no takers despite some initial interest.

IREL — a unit of India's Department of Atomic Energy — was established in 1950 to process monazite that holds rare earths and thorium used in the nuclear industry. It operates eight mines across the Indian states of Odisha, Tamil Nadu and Kerala, and is in the process of adding another three leases in the next four years.

By Swansy Afonso



INDIA'S COAL IMPORTS RISE 32 PC TO 149 MT IN APR-FEB: REPORT

Synopsis

India is among the top five coal-producing countries in the world. However, some parts of its coal requirement are met through imports as the country is also among the major consumers of the dry fuel.

India's coal imports increased by 32 per cent to 148.58 million tonne (MT) in April-February FY23 against 112.38 MT in the year-ago period, according to a report. The import of coking coal rose 7.69 per cent to 50.50 MT during April-February FY23 compared to 46.89 MT a year ago, mjunction said in its latest report.

In February 2023 alone, the non-coking coal import stood at 11.68 MT against 9.42 MT in the same month last year.

Coking coal imports were 4.40 MT against 4.03 MT imported in February 2022.

India is among the top five coal-producing countries in the world. However, some parts of its coal requirement are met through imports as the country is also among

the major consumers of the dry fuel.

For coking coal - a key raw material used in steel making - the country remains heavily dependent on imports.

Company's (mjunction) MD Vinaya Varma said, "The softening of seaborne prices coupled with high domestic demand resulted in continued buying interest among Indian traders and consumers". However, the increased domestic supply and the healthy stock position may restrict the volumes in the coming month, he added.

Kolkata-based mjunction is a business-to-business (B2B) e-commerce joint venture between Tata Steel and Steel Authority of India Ltd (SAIL).

Source: Economic Times

Coal

GMDC DEPLOYS DRONES FOR MINERAL PROSPECTING, EXPLORATION

This technology revolutionises mineral exploration and discovery, particularly in prospecting of copper, lithium, gold, lead, zinc, cobalt, nickel, manganese, REE mineral, etc.

The Gujarat Mineral Development Corporation (GMDC) in Ambaji has begun using a drone-based Airborne Magnetometer known as “Magarrow” for a Geophysical survey for mineral prospecting and exploration. Piyush Shah, GM, GMDC, said mineral prospecting and exploration can greatly benefit from this new technology, especially when conducting geophysical surveys in hilly and inaccessible areas. It will greatly benefit the mining sector as it takes drones to the next level.

The drone is being supplied by Squadrone Infra & Mining, a Bengaluru-based company involved in aerial intelligence in mineral exploration, mining & infrastructure.

“Magarrow” is a UAV-enabled drone-based technology equipped with non-radioactive laser-pumped caesium vapour with a total field scalar magnetometer to map shallow and deep-seated virgin mineral deposits ranging up to 600-800m below from the ground level.

Cyriac Joseph, Founder and CEO, Squadrone Infra and Mining, said the use of this drone-based technology would bring about a significant shift in the current methods of mineral prospecting and revitalise mineral discoveries in the country, particularly greenfield deposits of lithium, Copper, Gold, REE minerals and other Critical minerals. “We can locate mineral deposits faster and more accurately in many inaccessible areas, harsh terrains, forests, deserts, farmlands, etc., without physical human entry into these areas. As it is a drone-based technology there is no need to build approach roads or disturb the ecology and environment of the mineral prospect areas. Additionally, mineral prospecting projects which traditionally take up 3 - 4 years can be completed within 5 - 6 months, with greater efficiency and accuracy, using this technology,” he added. Squadrone is also exploring and working with GSI and other mining corporations/ companies to deploy this and other futuristic drone-based technologies for mineral discovery and exploration in India.

Source: Busniess Standard

FATALITIES FALL 31% IN 2022, HIT RECORD LOW: COAL INDIA

Synopsis State-owned Coal India on Tuesday said that fatalities and fatal accidents of its workmen came down to a record low in the calendar year 2022 to twenty deaths. Fatalities hit an all-time low in 2022, falling by nearly 31% compared to 29 recorded in 2021. The fatality rate per million tonnes (MT) of coal produced was 0.028 in 2022, down 40% against 0.047 in 2021, the company added.

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Fatal accidents came down to 18 in 2022 from 27 in 2021, the company said in a statement. The fatality rate per million tonnes (MT) of coal produced was 0.028 in 2022, down 40% against 0.047 in 2021, the company added.

Among the safety measures undertaken to prevent mishaps is ‘Root Cause Analysis Techniques,’ the process of exploring and analyzing the accident-causing factors in a bid to identify appropriate solutions. CIL also inked a Memorandum of Understanding (MoU) with the Indian School of Mines, Dhanbad

to train 100 executives to equip them with RCA techniques and solve the underlying safety hazards.

In the International Mine Rescue Competition held in September 2022, CIL’s arm Western Coalfields Limited ranked third in the mine rescue skills category. Demand for coal has seen an uptick in recent years, with India’s coal production rising by 12.94 per cent to 89.96 million tonnes in January 2023.

As per provisional data from the coal ministry, CIL registered a production growth of 11.44 per cent in January.

Coal India recently reported a 70.1 per cent rise in consolidated net profit at Rs 7,755.5 crore for the quarter ended December 2022 on the back of higher sales. The company had posted consolidated net profit of Rs 4,558.3 crore in the year-ago period, CoalIndia Ltd (CIL) said in a regulatory filing.

The consolidated sales of the company during the October-December period increased to Rs 32,429.46 crore, over Rs 25,990.97 crore a year ago.

In a statement, the PSU said the steep rise in profit came on the back of higher add-on over the notified price in e-auction sale of 14.65 million tonnes coal during the third quarter of FY23.

Source: Economic Times





GEOLOGICAL SURVEY OF INDIA STEPS UP HUNT FOR LITHIUM

Following the recent discovery of 5.9 million tonnes of inferred lithium reserves in Jammu & Kashmir, GSI conducting exploration of lithium and related materials in Rajasthan, Chattisgarh, Jharkhand, Arunachal Pradesh, Nagaland, Meghalaya, Ladakh and Gujarat.

Weeks after India announced the discovery of 5.9 million tonnes of inferred lithium reserves in Jammu & Kashmir, the first in the country, the Geological Survey of India (GSI) is conducting exploration in eight additional states and Union territories during the current field season (FS) 2022-2023.

The new exploratory move to scout for lithium reserves assumes importance given that the country's electric vehicle (EV) sector is still totally dependent on imports, particularly from China, for its lithium requirements. If these discoveries prove successful, India may be able to substantially reduce its reliance on costly imports and could even become an exporter in the long-term. In an RTI response to Autocar Professional, GSI, which is mandated with creating and updating mineral resource assessments, revealed that it is conducting exploration of lithium and related materials in Rajasthan, Chattisgarh, Jharkhand, Arunachal Pradesh, Nagaland, Meghalaya, Ladakh, and Gujarat, in addition to Jammu & Kashmir, in the field season 2022-23. "The field activities are in progress," the Geological Survey of India, which functions under the Ministry of Mines, said in its reply.

The United Nations Framework Classification for Resources (UNFC) classifies the exploration of mineral deposits into four stages: reconnaissance (G4), preliminary exploration (G3), general exploration (G2), and detailed exploration (G1).

Hunt for green energy across India

In the Nagaur area of Rajasthan, GSI is currently building on scientific evidence that suggests the presence of lithium with values of up to 6701 parts per million (ppm) in debris sheets, up to 3,400 ppm in channel samples, and up to 1,400 ppm in core samples. Previous studies have indicated that a re-

source of 2.5 million metric tons of lithium is present in the granite, although further studies have been recommended.

Besides this, the Bhabha Atomic Research Center (BARC) has also indicated the presence of lithium and topaz in the granite, which can be recovered as byproducts. The investigation has currently reached the G2 stage.

Meanwhile, preliminary exploration for lithium and associated minerals in the Katghora-Rampur area, Korba District, Chhattisgarh, has reached the G3 level. The mining site is close to the Bilaspur-Raigarh metamorphic belt and is important because it has an unusual amount of lithium, GSI said. The presence of leucogranite, a light-coloured granitic and igneous rock found in this region, has been found to contain lithium-bearing mica along with other minerals. The lithium bearing micas are pinkish to golden brown in colour with sizes ranging from 5 mm to 3 centimetres. Significantly, lithium content was found to be substantially higher in the cores of pink mica grains compared to their margins. In the same way, a reconnaissance survey for lithium, rare earth elements (REE), and related mineralisation in the Tamta, Raghunathpur, and Sureshpur areas of the Raigarh and Jashpur districts of Chhattisgarh found anomalous lithium values in composite stream samples in and around Killkila that ranged from 19.1 ppm to 137.9 ppm. In and around Raghunathpur and Diwanpur, they also found strangely high levels of lithium in stream sediment samples, up to 266 ppm.

Similarly, surveys are being conducted in and around the Tilaiya Block in the Koderma District of Jharkhand, where geochemical mapping has shown high concentrations of lithium, cesium, and other elements. The lithium value ranges were found to be from 15.57 to 122 ppm.

While still at the preliminary exploration stage, the deposits in J&K alone form 6 percent of the world's identified lithium resources. Assuming the global average reserve-resource ratio, the deposit could be more than sufficient to electrify the entire passenger vehicle and two-wheeler industry's installed manufacturing capacity in India, says a research report by consultancy firm Jefferies.

EV sales in India crossed a million units in 2022 and can only accelerate further,

which means there will be a sharply increased need for lithium in the coming years.

Why India-sourced lithium matters

Industry experts say that lithium, a soft, silvery-white metal, is one of the most important parts of rechargeable batteries. It is still hard to find around the world and most of it is found in a few places. Bolivia, Argentina and Chile make up the 'lithium triangle' of South America. The US, Australia, and China control most of the world's supply, with 6–12% of its resources, 78% of its reserves, and 96% of its 98 metric tonnes of annual production.

As India transitions to becoming a net-zero economy, it is imperative to find dependable sources of lithium. In the absence of such India-specific discoveries, the country will be compelled to remain dependent on foreign countries to source lithium, similar to the oil imports from the Middle East which see a forex outflow of over US\$119 billion each year.

India's EV industry had a record year in 2022 with over a million units sold and

210% year-on-year growth. And the going looks good this year too – with retails of 106,107 EVs, February was the fifth consecutive month that EV sales charged past the 100,000 units mark. This pace of growth also translates into increased demand for batteries and in turn lithium.

Local sourcing of lithium will, in the long run, drive down costs of batteries, which are the most expensive component of an EV and account for around 30-40% of the total EV price. High initial price of EVs remains an impediment to their greater adoption, which is why GSI's efforts to locate and unearth lithium reserves across the country are laudatory. It's the logical step towards achieving Atmanirbharta in the EV sector.

However, due caution should also be exercise in the hunt for lithium. What needs to be considered is the specific region ecosystem, the level of fragility as also the lack of consensus about the impact and risks of lithium mining. This is a project that calls for a high level of collaboration between all stakeholders.

Source: Auto Car Professional

INDIA, AUSTRALIA IDENTIFY FIVE TARGET PROJECTS FOR LITHIUM, COBALT

India and Australia have reached a major milestone in working towards investment in critical minerals projects to develop supply chains between the two countries

India and Australia have identified five target projects for mining of lithium and cobalt, said a statement from the union ministry of mines on Saturday.

“The Union Minister for Coal, Mines and Parliamentary Affairs, Pralhad Joshi and Minister for Resources and Northern Australia Madeleine King held bilateral talks on Friday and announced the partnership has identified five target projects (two lithium and three cobalt) on which to undertake detailed due diligence,” it said.

The statement noted that India and Australia have reached a major milestone in working towards investment in critical minerals projects to develop supply chains between the two countries.

Ministers from the two countries have also agreed to deepen cooperation and extend their existing commitments to the India- Australia Critical Minerals Investment Partnership.

Investments under the partnership will seek to build new supply chains underpinned by critical minerals processed in Australia, that will help India's plans to lower emissions from its electricity network and become a global manufacturing hub, including for electric vehicles, according to the statement.

“The partnership between India's KABIL and CMO Australia has reached the first mile stone in a short span of one year from signing of the MoU in March 2022 between both the organisations' said Joshi.

Minister King said: “India's goals to lower carbon emissions and boost electric vehicle production presents great opportunities and prospects for Australia's critical minerals sector, for renewable exports and for building stronger supply chains. Working together, both the nations are committed to reduce emissions, guarantee energy security and diversify global markets for critical minerals and clean technologies.”

Australia produces almost half of the world's lithium, is the second-largest producer of cobalt and the fourth-largest producer of rare earth elements. With the expected increase in global demand for low-emissions technologies over the next three decades, this partnership will go a long way towards securing mutually beneficial critical mineral supply chains, the statement said.

Joshi had visited Western Australia in 2022 and toured Tianqi Lithium Energy's Kwinana lithium hydroxide refinery. The partnership on critical minerals has taken further momentum after the visit of Joshi to Western Australia, it added.

Source: Hindu Business Line

AFTER TRADE PACT SUCCESS, AUSTRALIAN MINISTER SEEKS MORE ACCESS TO INDIAN AGRICULTURAL MARKETS, INVESTMENT IN MINING

Trade and Tourism Minister Don Farrell said Australia was offering attractive investment opportunities to Indian companies in the mining sector, especially in mining critical minerals like lithium.

Fresh from the success of signing a trade agreement with India that has lowered tariffs on several of its products, Australia is now pressing for greater access to India's agricultural markets. In return, it is inviting Indian companies to invest in mining and the development of critical minerals used in the manufacture of batteries. It is also promising to consider India's demands for a more favourable visa policy for its workers and students entering Australia. "The trade agreement (Economic Cooperation and Trade Agreement that became operational in December last year) has resulted in lots of reductions in tariffs on both sides. Just in the first month, in January this year, about 2.5 billion Australian dollars' worth of Australian trade went into India at lower tariffs. From our point of view, it (the trade agreement) is obviously a very positive outcome ... But, of course, more needs to be done," Australia's Minister for Trade and Tourism Don Farrell told a group of Indian journalists here.

"We would like greater access to India's agricultural markets. We appreciate that it is going to be a difficult issue for India, but we think it can be achieved. You have just got to see, I guess the word is chemistry, between our Prime Minister (Anthony Albanese) and Prime Minister (Narendra) Modi," Farrell said.

As a result of the Economic Cooperation and Trade Agreement, or ECTA, that became operational on December 29 last year, more than 85 per cent of Australian goods coming into India are now tariff-free, according to Australia's Department for Foreign Affairs and Trade. This is expected to rise further to 90 per cent in the next six years. Similarly, about 96 per cent of goods exported by India to Australia would be free of tariffs. In another four years, tariffs on the remaining items would also be removed.

The agreement has also resulted in a reduction of tariffs on several other items, including a few agricultural items exported by Australia to India like barley, oats, lentils, fruits and vegetables. Farrell said there was scope to do much more in the agriculture sector.

"We have a population of 26 million. But we produce food for 70 million. So,

we have a lot of food to export. Our grain crops have had a record year in South Australia ... We have had a good couple of years (of agricultural production) ... no drought, plenty of rainfall. So we think there is an opportunity (for greater exports of agricultural produce to India)," he said.

"We don't want to disadvantage your farmers and we understand the political pressures on the government from that particular group (on the issue of reduction of tariffs). Please don't think we do not understand that issue. But we think there is an opportunity through technology transfer and through particularly high-value exports to get greater access for Australian (agricultural) products into the Indian market," Farrell said.

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"There are a number of Indian companies that are already here. They already invest here, including in the mining industry. But we think there is a greater opportunity here. India has committed itself to decarbonisation as well. We are lucky in Australia to have got the world's largest or second-largest reserves of all the critical minerals. We used to be a fossil fuel superpower. We now want to be

a renewables superpower. But we are going to need some partners to get the best out of that," he said.

Farrell said Australia was willing to consider providing incentives to Indian companies willing to invest in the mining sector. "We would be happy to talk about that," he said.

He said India wanted greater access to Australia's labour markets and that could also be considered.

"It (increase in foreign workforce) is always a sensitive issue in Australia, but

we are happy to look into that. We are currently reviewing the whole structure of our visa system. There are something like 120 different visas under the Australian system and we are hoping to simplify the entire visa system. One of the things we are looking at is designing a fit-for-purpose migration system. I think, in that whole discussion, there would be good opportunities for Indian workers, particularly those in the digital space, to come to Australia," he said.

COAL BLOCKS WITHIN DENSE FORESTS FIND PLACE IN LATEST AUCTION LIST

Experts are concerned that loss of these primary forests will be a blow to the rich biodiversity in central India's forests.

The government's latest list of commercial coal mines up for auction includes at least two coal blocks in central India with dense forest cover, critical for biodiversity and wildlife in the region, according to people familiar with the matter.

On March 29, the Centre announced the 7th round of its coal mine auction, which has 101 mines, including Tara block in Chhattisgarh's Hasdeo Arand forests and Mahan coal block in Madhya Pradesh. Tara has a forest cover of 81%, of which very dense forest (VDF) cover is about 15.96sq km (1,596 ha) of the block; Mahan has a forest cover of 97% with very dense forests covering 3.72sq km (372 ha) of the block.

Both Tara and Mahan fall in the category of "inviolable" areas for mining as per an exercise undertaken by the Union environment ministry in 2012 to identify sites that are significant for conservation of biodiversity and forest types that are ecologically important.

The environment ministry through an order on March 30, 2012 constituted a committee under the chairmanship of then secretary, MoEF, to formulate parameters for identification of pristine forests where non-forestry activity would lead to irreversible damage. These were to be conserved for the larger objective of long-term conservation of forests in India and were informally termed no-go areas.

According to a list dated December 5, 2014 reviewed by HT, 32 coal blocks, including Mahan and Tara, were in the inviolable category. The decision on keeping these blocks in the "inviolable" category was not finalised thereafter according to government officials who asked not to be named.

According to the summary of coal mines available on MSTC Limited, the company which facilitates auctions of coal mines, less than 1% area (approx. 0.2sq km) of Tara block is overlapping with Lemru Elephant Reserve in the south-western boundary. Stage 1 forest clearance was granted to the mine through an MoEF letter dated July 5, 2011 and its mining capacity is 6 million tonnes per year (as per the approved mining plan). Mahan is approximately 15.7km to the Sanjay Dubri WLS from the western boundary and 24.5km to the Guru Ghansi Das Sanjay National Park from the southern boundary. Stage 2 or final forest clearance was granted to the mine through an MoEFCC letter dated February 12, 2014.

Experts are concerned that loss of these primary forests will be a blow to the rich biodiversity in central India's forests. "We must be extra careful when considering diversion of natural forest there, as this region is not only unique because of the climate, the landscape and biodiversity. This region has a great history of nature-dependent lifestyle and a larger part of the population are tribal people living in very close association with forests. There has already been massive irreversible damage to this region from mining, thermal power and damming of rivers with very few patches left with good forests and clean rivers," said Debadityo Sinha, Lead-Climate & Ecosystems, Vidhi Centre for Legal Policy.

In response to why coal blocks with such dense forest cover have been put up for auction, the coal ministry said in a statement: "The Tara mine was cleared for open cast mining based in Biodiversity study of Hasdeo Arand coal field prepared by the Indian Council of Forestry Research and Education (ICFRE). Secondly, Mahan mine has been proposed as an underground mine considering the high forest area. After the auction, the required forest and environmental clearances would have to be obtained by a successful bidder."

The ministry of coal on March 29 launched the process for the 7th round of commercial coal mines auction with a total of 106 coal blocks on offer. The mines offered are a mix of coal mines under Coal Mines Special Provisions (CMSP) Act and Mines and Minerals (MMDR) Act. Out of 106 coal mines, 101 are being put up for auction under the 17th/ 7th Tranche under CMSP/ MMDR Act and 5 coal mines are being offered under the second attempt of 16th/ 6th Tranche.

During the launch, coal minister Pralhad Joshi said coal production is expected to touch a record figure of 880 million tonnes this fiscal. Coal production exclusively from captive / commercial mines has crossed 100 million tonnes for the first time, he added.

"Coal sector is fully geared to meet the growing demand. All efforts are on to further enhance production and export of thermal coal by the year 2025-2026," he added in a statement issued by the ministry.

Hasdeo Arand is one of the largest contiguous stretches of very dense forest in central India spanning 170,000 ha and has 22 coal blocks underneath. In 2009, the environment ministry categorised Hasdeo Arand a "no go" area for mining because of its rich forest cover but opened it again for mining as this policy of inviolable zones was never finalised.

Source: The Hindu Times



CELEBRATING 172 YEARS OF GEOLOGICAL SURVEY OF INDIA AND ITS CONTRIBUTION TO INDIA'S GROWTH

Since then, the GSI has played a vital role in the development of the country's mineral resources and has contributed significantly to the growth of the Indian economy. The Geological Survey of India (GSI) is one of the oldest scientific organizations in India. It was established on March 4, 1851, by the British East India Company, with the objective of conducting geological surveys and explorations of the country. Since then, the GSI has played a vital role in the development of the country's mineral resources and has contributed significantly to the growth of the Indian economy. The establishment of the GSI was a result of the growing demand for geological information, especially with the discovery of coal in eastern India in the early 19th century. The East India Company recognized the importance of geological surveys in the exploration and development of natural resources, and thus, the Geological Survey of India was born. Over the years, the GSI has conducted numerous surveys and explorations, not just in India but also in neighboring countries. It has contributed to the discovery of many mineral deposits, including coal, oil, and gas, and has helped in

identifying potential areas for their exploitation. The organization has also played a crucial role in providing geological information for various developmental projects such as the construction of dams, bridges, and tunnels.

Apart from geological surveys and exploration, the GSI is also involved in various other activities. It has a vast collection of rocks, minerals, and fossils, which are used for scientific research and educational purposes. The organization also publishes scientific journals and books, which provide valuable insights into the geology and mineral resources of India.

The GSI has a well-established network of regional offices, laboratories, and field stations spread across the country, which enables it to conduct surveys and explorations in a systematic and organized manner. It has a team of highly trained and skilled geologists, scientists, and technicians, who work tirelessly to achieve the organization's objectives.

The formation day of the Geological Survey of India is a momentous occasion for the organization and the country. It reminds us of the contributions made by the GSI towards the growth and development of the nation. It is also an occasion to reflect on the challenges faced by the organization and the opportunities that lie ahead

Source: The Free Press Journal

BIHAR DISCOVERS DEPOSITS OF CRITICAL MINERALS, PREPARES FOR AUCTIONING MINING RIGHTS

Explorations near Patalganga in Gaya, parts of Rohtas district and Majos in Jamui district found the presence of millions of tonnes of mineral reserves: officials

The Bihar government is preparing to auction mining rights for minerals such as limestone, vanadium-bearing magnetite ilmenite, magnetite and glauconite that have been discovered in various non-forest areas of the State, a senior official said on Thursday.

Explorations near Patalganga in Gaya, parts of Rohtas district and Majos in Jamui district found the presence of millions of tonnes of mineral reserves, according to an official document seen by PTI.

“The state government will engage SBI Capital Markets (SBI-CAPS) as the transaction advisor for the auctions, and also to suggest the terms and conditions based on which the auctions would be held,” Additional Chief Secretary and Mines Commissioner Harjot Kaur Bamhrah told PTI.

“Undoubtedly, the discovery of such critical minerals in non-forest areas of the state is a matter of great satisfaction. We don’t have to seek permission from authorities concerned before initiating exploration activities as these deposits are not in forest areas,” she said.

The general exploration (G2 stage) in Jamui’s Majos has found 48.40 million tonnes of magnetite. Preliminary exploration (G3 stage) in Pipradih-Bhurwa block in Rohtas has established 88.38 mt of Glauconite over a 12.46 sq km non-forest area, Ms. Bamhrah said.

While magnetite, a rock mineral, is one of the main iron ores, glauconite is a green-colored mineral and structurally similar to mica, she said.

“Now, Bihar has sufficient mineral resources to boost its economy,” she added.

There are four stages of exploration for any mineral deposit — reconnaissance (G4), preliminary exploration (G3), general exploration (G2) and detailed exploration (G1).

Innovative exploration methods using the latest technologies have resulted in the discovery of several mineral reserves in different parts of the State, Mr. Bamhrah said.

Last month, preliminary exploration in Bhora-Kathra in Rohtas found limestone deposits across 5.60 sq km, she said, noting that 39.68 mt of limestone is estimated in the area.

Vanadium-bearing magnetite ilmenite was found northeast of Patalganga and east of Sapneri village in Gaya and Jehanabad over a 2 sq km area.

Vanadium is used in manufacturing steel, pipes, superconducting magnets, medical implants and batteries, Ms. Bamhrah explained.

The State government has also lined up two mines, worth Rs.14,048 crore, of glauconite — a common source of potassium in fertilisers, in Pipradih and Chutia-Nauhatta blocks of Rohtas for auction, she said.

Besides, the Mines and Geology Department has decided to auction iron ore deposits, worth Rs.6,000 crore, in Jamui district, she added.

Source: The Hindu

INDIA DISCOVERS RARE EARTH ELEMENTS CRITICAL FOR SELF-RELIANCE IN DEFENCE, AEROSPACE

Scientists at a research institute in India's Hyderabad discovered light rare earth elements (REE) in Anantapur district of Andhra Pradesh, about 2,000 km south of national capital New Delhi. All these elements are deemed essential components in the manufacturing of electronic devices, medical technology, clean energy, aerospace, automotive, and defence industries.

The discovery was made by Hyderabad-based National Geophysical Research Institute.

India rare earth elements discovery: What are they?

The light rare earth element minerals found in Ananthapur district include allanite, cerite, thorite, columbite, tantalite, apatite, zircon, monazite, pyrochlore, euxenite and fluorite.

What does it mean?

The discovery of these elements has implications for the country's electronics and clean energy sectors. This will reduce India's reliance on foreign imports of these critical minerals.

Rare earths are 15 elements referred in the lanthanide and Actinide series of the periodic table of elements.

How the discovery was made?

NGRI scientists were conducting a survey for non-traditional rocks like syenites when they made the significant discovery of the minerals in the lanthanide series.

NGRI scientist PV Sunder Raju said, "Zircon of varying shapes was observed in Reddypalle and Peddavadaguru villages."

"The monazite grains showed high-order multiple colours with radial cracks within grains, suggestive of the presence of radioactive elements," he added.

Raju said that more feasibility studies will be conducted by deep drilling to learn more about these REEs.

Earlier in February, India discovered 5.9 million tonnes of lithium reserves in Jammu and Kashmir.

Lithium is a non-ferrous metal and is one of the key components in Electric Vehicle batteries.

Source: wionews.com

DROP IN IRON ORE PRICES: ODISHA WITNESSES SHARP DIP IN MINING REVENUE COLLECTION IN FY 2022-23



The total amount collected during 2022-23 is also way behind the Rs 43,400 crore estimated to be generated from the mining sector in the annual budget of Odisha for the year. The fall is despite the state's iron ore dispatch during 2022-23 pegged at 138 MT, almost at par with the volume of dispatch of the previous year.

Revenue from the mining sector is being generated in the form of royalty contributed by the leaseholders on the sale value of minerals, mostly from iron ore. "Since royalty is being collected on sale value of iron ore, the drop in its market price directly affects the collection of revenue from the mining sector. The export duty on iron ore imposed by the Centre in May 2022, which was withdrawn six months later in November, is also a factor behind low revenue collection from the mining sector as

it affected the price," said a senior Odisha government officer.

Odisha's annual earnings from the mining sector was estimated at around Rs 10,500 crore to Rs 13,900 crore between 2018-19 and 2020-21. It increased substantially to Rs 49,858 crore in 2022-22 because of the auction of around 20 working mines.

Prabodh Mohanty, secretary of Eastern Zone Mining Association said the price of iron ore has drastically fallen by around 40%. "Though it's slowly picking up pace, it's yet to touch the level of last year's price. When the price of iron ore is low, it would definitely have an impact on the total revenue collection of the state," Mohanty told The Indian Express.

According to market sources, high-grade iron ore which was sold at Rs 7,500 per tonne in April-May last year now costs Rs 5,000 per tonne though it was reduced to Rs 3,500 per tonne during October last year. Similarly, the price of sub-grade iron ore, which now costs Rs 1,800 per tonne (at par with the rate in April last year) dropped to Rs 900 per tonne during October last year.

Officials in the Odisha finance department, who generally keep a close watch on revenue collection from the mining sector because of its volume of contribution, said the fall may slightly affect the state's fiscal health.

"The fall in mining revenue would have affected the exchequer. The increase in revenue from other sectors like state GST, sales tax, excise, electricity duty, motor vehicle and registration fees have compensated for the fall. Also, there has been a slight increase in Odisha's share in central tax," said a finance department officer.

Source: The Indian Express



THE COST OF CALM: THE PRICE IS HIGH YET WORTH

We say so easily and effortlessly to be calm whenever we come across someone very anxious and restless. But in fact being calm and relaxed during turbulent times is actually so much of a work. In today's hyperstimulating world, the new age word for interruption's being labelled as "notifications" and today most of us carry with them those smart phones and watches that don't rest silently but continuously buzz with the demands of others, the nervous system is constantly pitched into arousal mode. The state of being calm no longer is present but has to be actively sought. This makes being calm an uphill task, where actually we were taught that calm resides in the absence of effort. For the new age human the relief of stress itself triggers stress.

The standard prescriptions – mastering breath, meditating by chanting a mantra, can themselves spark anxiety, especially for those who tried before with no success. Yet science says there is a path through this riddle. Some form of anxiety is necessary as it keeps

us going. It's a defence mechanism to keep us alive. We are here because our ancestors acted swiftly to the threats to life that regularly emerged in the natural environment. Today those kind of stress has no merits, but the cost of constant vigilance is high, that not only exhausts us but eroding in ways ranging from stiffening of arteries and veins to hollowing out memory and senses. Even though elusive, calm remains necessary for well-being. Devoting time and energy to calming practises is an essential part of a fulfilled journey of life. A single approach won't work for everyone, but fortunately there are multiple paths from which the one that suits us can be the tool for us.

1) don't panic prematurely – we jump into conclusions and assumptions before we have the full information. Practise the habit of pressing the pause button regularly before responding.

2) understand there is a difference between a bump in the road and the end of the road. Long term goals are always achieved at the cost of setbacks and road blocks that require some extra effort which should be perceived as a lesson for our wellbeing and success in the long run.

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DISCLAIMER: This is a compilation of various news appeared in different sources. In this issue we have tried to do an honest compilation. This edition is exclusively for information purpose and not for any commercial use. Your suggestions are most valuable.

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