



# GEONESIS

*Indian Mining & Exploration Updates*

Volume 10 - Issue 4

## *WHO WILL MINE THE LITHIUM RESERVES?*



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# WHO WILL MINE THE LITHIUM RESERVES?



**H**aving found a massive lithium reserve, the government has a fresh problem.

Who will mine the reserves?

At one level, the answer appears straightforward.

India allows 100 per cent foreign investment in the mining sector, so it should be possible for an Indian company to tie up with a foreign company or the latter going solo to mine it.

But this exercise is more difficult than it appears even after an expected tweak in the mining law.

Faced with one setback after another in expanding the scope of mining in the country, almost all the major miners of the world have wound down their operations in India.

Except Vedanta, which, too, is mired in more than one controversy.

The others have representative offices but no mining operations.

Rio Tinto, for instance, which had discovered large diamond nodes in Madhya Pradesh, had to withdraw due to strident opposition from civil society.

The objection was that the mining, even if underground, will destroy large tracts of forest land.

Last month, the Geological Survey of India announced it has established the presence of 'lithium inferred resources' for a massive 5.9 million tonnes (MT) in the Reasi district of Jammu and Kashmir.

Of course this is the G3 stage, which means just the establishment of the reserves.

The mining will only begin once the reserves are classified as G1.

Experts reckon that the size of the extractable reserves is often whittled down to a third by then.

Still, this is a huge find. To put it in context, Chile has the world's

largest known lithium reserves at 9.3 MT (in 2023).

Next is Australia with 3.8 MT, Argentina a little less at 2.7 MT and China has 2 MT.

The total global reserves are estimated at 26 MT; if India adds even 2 MT to this highly prized element, which powers the entire world's electronics, the impact will be huge.

There are enough people cheering the news.

Principal Scientific Advisor to the Government of India Ajay K Sood commended government research body CSIR's efforts to market lithium-ion and sodium-ion batteries.

On the same lines, Pratik Kamdar, co-founder, Neuron Energy, which makes these batteries for e-bikes and e-rickshaws, saw a lot of promise in the news.

'The discovery of this indigenous supply of lithium reserves will help the EV ecosystem reach the masses at reasonable and affordable costs. This will also support the government's vision of EV mass adoption by 2030.'

But the problem still remains: Who will mine these reserves?

A high-level government source said they would expect the private sector mining companies to explore the deposits.

"They keep telling us how effective they are, so it is time they stepped up to the plate," the official said.

The government will need to amend a schedule in the Mines and Minerals (Development and Regulation) Act.

While lithium reserves are usually in deep-seated rocks unlike minerals such as coal, iron ore or even bauxite that yields aluminium, the technology to extract the former is not difficult.

Often, large multinational companies use the expertise of Latin American companies that mine many of these critical minerals in-

cluding copper as technology support.

India is a late entrant to the field of mining these metals.

For the first time, the National Mineral Exploration Policy of 2016 recognised the need to explore these minerals.

The document noted that the government-run MECL, which is supposed to carry out detailed exploration, has not been up to the task.

‘The promotional work done by MECL is negligible,’ it notes.

Yet the discovery of mineral exploration programmes for base metals, noble metals, diamond, rare earth and platinum group minerals are ‘vital for national security given the requisite priority’.

So, who will mine all these vital minerals and metals?

The procedure is for the GSI to hand over the reports to the respective state governments.

For instance, this time, data sets for 52 mineral blocks containing not only lithium but also gold, potash, molybdenum and base metals spread across 11 states were handed to the states.

This is because mineral mining leases are administered by the respective states, except atomic minerals.

In the case of coal, the auctions are conducted by the Centre, but are then handed over to the states. But this is hardly an optimum approach.

For years, Jharkhand, blessed with an abundant store of minerals, has not had an auction for its mines.

J&K’s department of geology and mining has been sort of headless for a long time.

The department accustomed to handling only sand, stone, gypsum and marbles (according to its Web site), now has to draft lithium mining rules involving potentially multi-billion dollars of investment.

Adding to the challenges, there are no Indian companies in the private sector other than oil and gas, with the scale to run such an operation.

The company will also have to scour the money from abroad keeping in mind that the source cannot be from China on geostrategic considerations.

At the Centre, too, the policy environment for mining critical minerals is scarcely better.

The National Mineral Development Corporation is under the Ministry

of Steel.

The mines ministry only has the puny MECL (total revenue Rs 237.6 crore as of March 2022) to develop deposits.

A government press release from July 2022 notes that it was instead the ‘Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of the Department of Atomic Energy that was carrying out exploration for lithium in the potential geological domains of the country’.

A three-company venture under the mines ministry, Khanij Bidesh India Ltd. (KABIL) -- involving National Aluminium Company Ltd, Hindustan Copper Ltd and Mineral Exploration Company Ltd -- has only gone to the stage of signing a non-binding memorandum of understanding with three state-run organisations of Argentina, ‘for the purpose of information sharing about prospective mineral acreages of lithium’.

GSI, under the ministry of mines, suddenly appeared in the fray with its discovery.

This is possibly the opportunity for India to develop a ministry of minerals, combining the ministries of mines, coal and steel.

Since Independence, realising the significance of steel and therefore of iron ore for the nation, there has been a steel ministry.

Since the private sector steel companies -- Tata Steel, JSW et al -- have become massive and government-run SAIL does not need hand-holding, it may be wise to wind down the ministry of steel and merge it with a larger minerals ministry.

The budgets of all these ministries are meagre at less than Rs 2,200 crore (Rs 22 billion).

A minerals ministry, like the ministry of natural resources in China, can reverse the conditions.

India imports both copper and aluminium in large quantities despite having abundant reserves of both.

An integrated ministry with its realm in setting up policies that make India’s push for critical minerals smarter is what the country needs badly.





## THE MINING RULES

- Availability and free accessibility of comprehensive, pre-competitive baseline geoscience data.
- MMDR Act amended for mining companies to retain the reconnaissance data with themselves in contrast to the earlier requirement of mandatorily sharing information with the state.
- All allotments only through auctions
- Revenue sharing as percentage of royalty/premium throughout a 50-year concession period
- State also need to build up exploration capabilities of their staff with the central government providing suitable incentive
- Policy recognises there are “procedural complexities for obtaining clearances from a number of different authorities”

**Source: Rediff.com**



# 16 COS SHOW INTEREST IN 2ND PHASE OF MINING E-AUCTION: GOA

**T**otal 16 companies have so far shown interest in the second phase of iron ore mining e-auction. Total five mining blocks from North Goa have been put up for e-auction in the second phase. Directorate of Mines and Geology (DMG) Director Suresh Shanbhogue said that total 16 companies participated in the pre-bid meeting held, on Tuesday. He said that firms had raised certain queries with regards to auction, which were discussed. In the second phase, the leases identified are -- Advalpale-Thivim Mineral Block, Cudnem-Cormolem Mineral Block, Cudnem Mineral Block, Thivim-Pirna Mineral Block and Surla-Sonshi Mineral Block. Shanbhogue said that the last date for purchase of tender documents is March 17, and the last date for

submission of bids is March 27. “We have to complete the auction process by April 27,” he said. The e-auction will be conducted through the Metal Scrap Trading Corporation (MSTC). In the first phase of e-auction held in December, last year, total four leases -- Kalay Mining Block in Sanguem, Bicholim-Mulgo Mining Block, Shirigao-Mayem Mining Block and Monte-de-Sirigao Mining Block in Bicholim. Vedanta Ltd has won the bid for Bicholim-Mulgo Mining Block while Goa-based Salgaocar Shipping Company Pvt Ltd won the bid for Shirigao-Mayem Mineral Block. Goa’s Rajaram Bandekar Pvt Ltd got its hold over Monte-de-Sirigao Mining Block and Kalay Mining Block went to Sociedade de Fomento Industries Pvt Ltd.

## Goa

**Source:** [heraldgoa.in](http://heraldgoa.in)

## MOEF'S EXPERT COMMITTEE RECOMMENDS GRANT OF ENVIRONMENTAL CLEARANCE FOR OMDC BAGIABURU MINE

**O**rrisa Minerals Development Company said that the expert appraisal committee of the Environment Ministry has recommended for grant of environmental clearance (EC) for Bagiaburu iron ore mines of the company.

In an exchange filing made on Saturday (11 March 2023), the company announced that the expert appraisal committee (EAC) (non-coal mining), Ministry of Environment, Forest and Climate Change (MoEF&CC), has considered and recommended for grant of environmental clearance (EC) for Bagiaburu iron ore mines of OMDC.

The Orissa Minerals Development Company (OMDC) is a schedule-B CPSE. OMDC was operating six iron ore and manganese ore mining leases at Barbil in the district of Keonjhar, Odisha. Out of which, three leases, namely Dalki Manganese Mines, Kolha-Roida Iron & Manganese mines, Thakurani Iron & Manganese Mines are in the name of Bharat Process and Mechanical Engineers' (BPMEL), were being operated by OMDC under Power of Attorney.

The other three mines Belkundi Iron & Manganese Mines, Bagiaburu Iron Mines and Bhadrasahi Iron & Manganese Mines are in the name of OMDC. The mining lease validity of all these three OMDC Mines have been extended by Govt of Odisha, till 15th Aug 2026, 10th Oct 2041 and 30th Sep 2030 respectively.

All the mines have been inoperative for want of statutory clearances, for which necessary actions have been taken by the company to start mining. All the six mines together have an estimated reserve of about 201 million tonnes of iron ore and 27 million tonnes of manganese ore.

The company reported a standalone net loss of Rs 8.89 crore in the quarter ended December 2022 as against net loss of Rs 4.78 crore during the previous quarter ended December 2021. Sales declined 73.39% to Rs 7.91 crore in Q3 FY23 over Q3 FY22.

**Source: Business Standard**

## INDIA, AUSTRALIA IDENTIFY FIVE TARGET PROJECTS FOR LITHIUM, COBALT MINING

**I**ndia 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: Mint**



# A BETTER DEAL FOR COAL USERS

**A** single window e-auction system could simplify price discovery and link it to quality rather than factors like distance

The Coal Ministry recently put in place the mechanism of single e-auction for sale of coal instead of the sector-specific window. This is meant to ensure steady supply and a single rate for all consumers, while also making domestic coal more attractive for buyers.

This comes at a time when the government is taking several steps to increase coal production, as there's a fear that supply from public sector giant Coal India Ltd (CIL) may not be adequate to meet the rising domestic demand and volatility in global prices may impact imports.

The Coal Minister, Pralhad Joshi, had informed Parliament that the government has approved the fading away of the existing Letter of Assurance-Fuel Supply Agreement regime and introduced the Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India (SHAKTI) in 2017, which was amended in 2019.

SHAKTI policy is a transparent way of allocating coal to power plants, including the stressed ones.

To address the issue of coal supplies to the power sector, an Inter-Ministerial Sub-Group comprising representatives from the Power, Coal and Railway Ministries, the Central Electricity Authority (CEA), CIL and Singareni Collieries Company Ltd (SCCL) meet regularly to take various operational decisions to enhance supply of coal to thermal power plants as well as for meeting any contingency situation. In addition, an Inter-Ministerial Committee has been constituted to monitor augmentation of coal supply and power generation capacity. Secretary, Ministry of New and Renewable Energy, and Chairperson, CEA, are co-opted into the committee as Special Invitees as and when required.

Coal Ministry data reveal that domestic production has shown impressive growth during the past few years, rising from 730.87 million tonne (mt) in 2019-20 to 778.19 mt in 2021-22 — a growth of 6.47 per cent. The rising trend of coal production has gained pace in fiscal 2022-23. This has helped the country curb coal imports to a large extent in spite of the spike in demand due to the continuous rise in power consumption.

The Coal Ministry has fixed the production target of 1.31 billion tonne for FY25 and 1.5 billion tonne by FY30. The Ministry has been actively engaging with various Central/State government agencies both for starting new coal mines and for boosting production in the currently operational mines.

According to reports, the country aims at partnering private companies to restart mines that have been shut or had their production discontinued by CIL on a revenue sharing model.

## **Smoother supply?**

The e-auction will hinge on CIL and SCCL meeting the coal linkage requirements against existing linkages so that supplies to power and non-power sectors at the existing contracted prices are not disrupted, according to a Coal Ministry statement. Besides, clubbing of the e-auction windows would not involve any additional cost to the coal companies. Selling coal through a single e-auction window would enable companies to sell coal at market discovered price and also supply to gasification projects.

The e-auction move is no doubt a much needed one. But to truly boost the domestic supply, the larger challenges of logistics and financing of mining projects must be addressed.

The e-auction mechanism also raises another issue: for optimal discovery of price, the market needs multiple buyers and suppliers which is not possible in this case as there is only a single seller, and the supply can be fully controlled

by the seller. And in the current shortage situation, it will only drive up coal prices further.

Says Deepak Kannan, Head of Global Coal Pricing, S&P Global Commodity Insights, "As per our understanding, 90 per cent of CIL's production is going to state owned power utilities under long term agreements, thus there is not much price fluctuation. And the rest is auctioned through auction platform."

For long-term agreements, there is no linkage to international prices, however in the auction, maybe international trend will dictate how prices will move, says Kannan. However, when commercial mining operations come into the picture, then probably the scenario might change and there might be a need for proper assessment or index which can reflect the current market prices suiting the demand-supply fundamentals, he points out.

The single window e-auction will definitely ensure that the supply side is not affected, says Kannan. "It also cuts across bureaucratic hurdles," he adds.

But the challenge of logistics still remains. In the "past few years logistics have improved and coal evacuation has become smoother but still not optimum enough. Like the South still finds it tough to source coal from the North," he said, adding that quality is another challenge which the domestic coal faces.

Though there is a push for renewables, coal still fuels 65-70 per cent of India's

power production.

According to power sector stakeholders, Power Purchase Agreement holders and other power generators have no problem as long as the guidelines laid down by Union Cabinet while approving the unified auction scheme are adhered to fully.

There are advantages in single window mode agnostic auction. It provides a level-playing field for all sectors of the economy; uniformity of bid price irrespective of sector and mode of supply. Customers also have the option to choose mode of transport.

The auction price discovered is primarily grade-wise rather than source-mode wise, removing the possibilities of curtailment, said a participant in the auction.

While these are happening for easing the stress on the sector, logistics and financing are a big issue for the sector. Today, one hears many banks are walking away from financing coal projects because of green commitments. So, to promote the sector, not only logistics have to be worked out but also a mechanism to encourage financing in the sector.

**By Richa Mishra**

**Source: Hindu Business Line**

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## ODISHA COLLECTS RS 28,973 CR MINING REVENUE IN CURRENT FINANCIAL YEAR

**T**he Odisha government has collected a total of Rs 28,973.43 crore revenue from mining up to January 17 of the current financial year, state Steel and Mines Minister Prafulla Mallik here on Friday

The Odisha government has collected a total of Rs 28,973.43 crore revenue from mining up to January 17 of the current financial year, state Steel and Mines Minister Prafulla Mallik here on Friday.

As against Rs 11,020 crore and Rs 13,791 crore of mining revenue collected during 2019-20 and 2020-21, the state has been able to collect Rs 49,858 crore of mining revenue during 2021-22, he said.

Mallik said this while addressing at the Minerals, Mining and Metals Conclave being organised by the Bengal Chamber of Commerce and Industry here.

From an installed capacity of about 4 million tonnes per annum (MTPA) of crude steel in the year 1999-2000, the state has progressed to have, as of now, 47 steel industries with total capacity of over 33 MTPA which is about one fourth of the country's total installed capacity, Mallik said.

Besides, he said, the pellet plants in the state have an installed capacity of about 29 million tonnes per annum (MTPA) and the sponge iron plants have an installed capacity of around 15 million tonnes.

During 2020-21, the total production of minerals was to the tune of 293.648 million tonnes with despatch of 325.495 million tonnes, which has increased to 362.40 million tonnes and 358.88 million tonnes, respectively, during 2021-22, the minister said.

During the current year, the total production and despatch of minerals up to January 17, 2023 stand at 302.06 million tonnes and 295.07 million tonnes, respectively, he said.

Informing about the steps taken by the state government, he said the state has ensured a timely and effective implementation of the amended provisions of law and as has been presented, Odisha has become the leading state in successfully conducting auction of the 37 mineral blocks so far including 22 expired mining leases.

In regards to the minor mineral sector, he said, the state is also taking adequate steps for identification of new minor mineral sources and bringing them to the process of operation. The revenue from the minor mineral resources stood at Rs 680 crore in the previous financial year.

Mallik said one of the major challenges for the mineral industries of the country is to properly utilise lower grade minerals which are never put to use because we do not have a requisite technology to use.

"By utilising these lower grade minerals, we can protect the environment and prevent misutilisation and non-use of these minerals," he suggested.

Only 7 to 8 years ago, Odisha used to get approximately Rs 5,000 crore revenue from the mining sector but last year it became Rs 50,000 crore which in return led to quality education, healthcare and better infrastructure, said Vivek Bharadwaj, Secretary, Ministry of Mines.

**Source: Hindu Business Line**



# COMMODITIES IN 2023: EXPLORING FIVE KEY THEMES

**A**fter the whirlwind of 2022, how will commodities perform in 2023? We enlist Fitch Solutions' Sabrin Chowdhury to provide some commodity predictions for the year ahead.

The global resources sector has had to become accustomed to volatility, with the market in a constant state of flux due to compounding occurrences.

When mining companies aren't navigating supply chain disruptions, they're weathering labour shortages or extreme weather events that bring operations to a halt.

Then there's the broader geopolitical and economic uncertainty which is largely out of a miner's control. All of these happenings have an effect on commodity prices.

So how will commodities perform in 2023? We take a look at five key themes that could play out in the year ahead, focusing our gaze on metals and energy commodities.

## Iron ore's redemption

Iron ore prices largely hinge on the situation in China. When China is driving stimulus and development then it requires more iron ore as a foundation of steel, which is the backbone of new infrastructure.

According to the Australian Government's Resources & Energy Quarterly: December 2022, China comprises 69 per cent of global iron ore imports, with Japan and the European Union (7 per cent each) and South Korea (5 per cent) other buyers of the commodity.

After a tumultuous 2022 that saw prices bottom out below \$US80 per tonne (t) in late October before surging in the last few months of the year, iron ore continued its run into 2023, scaling a six-month high of more than \$US125/t in January.

This is still lower than 2021 levels, where iron ore rose above \$US200/t, and even early 2022 when the metal was buoyed by the Russia-Ukraine conflict and reached \$US150/t.

Fitch Solutions head of commodities analysis (global) Sabrin Chowdhury said the outlook for iron ore prices was strong due to China's easing of COVID-19 restrictions and subsequent reopening of the economy. But it won't ramp up until the second quarter (Q2) of 2023.

"The easing of COVID restrictions means factory activity should gear up by

Q2 or so, because in Q1, we're still seeing a lot of disruptions due to the rise in COVID cases and also the seasonal lull due to the Chinese New Year," Chowdhury told Australian Resources & Investment.

"We're still expecting to see iron ore demand or metals demand still weak compared to the sentiment in the market. The sentiment is very strong towards metal prices due to China, so things should gear up by Q2 and the latter half of the year."

But continued economic uncertainty will remain a headwind.

"We also must take into account that there are many risks surrounding the global economy so global demand is set to remain weak as the economy slows," she said.

"China is obviously the outperformer and dictates most of the metal prices, so our outlook remains positive, but we are wary of global risks that could cap price strength going forward."

The Conference Board forecast US economic weakness to intensify through the first months of 2023, plagued by persistent inflation and a hawkish Federal Reserve.

The non-profit US research organisation expected real GDP growth to slow from 2 per cent in 2022 to 0.2 per cent in 2023.

When asked whether there was a risk China would return to a COVID lockdown in the future, Chowdhury said "it's so hard to tell".

"For now, I think they will stick to this policy shift that they have taken up," she said.

"We do see less lockdowns than we have seen last year, but there is a risk if they reinstate these policies once again, if healthcare facilities are struggling to cope with the number of cases, then there could be a return to previous strict lockdowns. But for now, we're positive."

How will copper perform?

While copper prices reached an all-time high in early 2022 as the Russia-

Ukraine war began, the base metal cooled during the second six months of the year, affected by weaker economic activity in China.

But the outlook has improved, with Fitch Solutions recently revising up its 2023 price forecast from an average of \$US8400/t to \$US8500/t.

“The outlook for copper is ... strong,” Chowdhury said. “It’s not only because of a weaker US dollar or a rebound in mainland Chinese demand, but also because there are significant supply issues to copper.

“The copper market is ... in deficit and the deficit will only get deeper over the coming years. There are so many issues to copper supply, especially in Latin America. In countries like Chile, Peru, we have seen so many strikes as well as resource nationalism, disputes with governments for which production has remained halted. These issues are not going to subside any time soon.

“We do expect resource nationalism in Latin America only to get worse in the coming years, especially this year, as well as the global economy slowing. This will definitely place a floor under copper prices, so the outlook for copper is definitely strong even in the short term.”

Fitch forecasts copper to edge higher year by year, reaching \$US9100/t in 2024, \$US9400/t in 2025 and \$US9800/t in 2026. By 2031, copper could reach \$US11,500/t.

While there is a significant pipeline of copper projects to come online in the coming years, particularly in Chile, Peru, Australia and Canada, Fitch expects supply improvements to be outpaced by demand growth from around 2026, primarily driven by the electric vehicle (EV) market.

“Our Autos team forecasts global EV sales to increase 279 per cent from 2021 to 2031 and reach 24.7 million units per year by the end of the forecast period,” Fitch said in a recent report.

Any more battery metals surprises?

Battery metals such as lithium, cobalt, nickel, graphite, manganese and vanadium will become increasingly important raw materials in the global green transition.

That narrative hasn’t changed in recent times and Chowdhury doesn’t expect any big surprises from battery metals in 2023.

“The (battery metals) market is gearing up once again, especially from the auto sector in China,” she said. “But lithium prices have risen to such high levels just last year, and they are on a weakening track since November, so I don’t think prices will spike much higher than they already have last year. “A lot of supply is ... coming online in Australia and other markets, so I think supply strength is likely going to cap lithium prices.”

Emerging Australian lithium projects include Core Lithium’s Finnis project in Northern Territory, Liontown Resources’ Kathleen Valley project in WA and Covalent Lithium’s Mt Holland project in WA.

Core began shipping a direct shipping ore (DSO) product from Finnis in early 2023 as a precursor to spodumene concentrate production, which commenced in late February. A 2021 definitive feasibility study indicated Finnis would have the capacity to produce 173,000 tonnes per annum of lithium concentrate.

Liontown expects to achieve first production at Kathleen Valley in mid-2024, with an initial production capacity of 500,000 tonnes per annum of

spodumene concentrate, while the Mt Holland is forecast to achieve first production in the first half of 2025, with 45,000 tonnes per annum of a refined lithium hydroxide product to follow.

Chowdhury said the outlook was similar for cobalt, with prices to be affected by new supply coming online in the coming years, such as Cobalt Blue’s Broken Hill project.

While there are varying grades of nickel produced around the world, a class one (high grade) nickel product is required for EV manufacturing. Chowdhury expected class one nickel prices to rise amid continued Russian supply concerns.

“I can only expect high-grade nickel prices to keep going up,” she said. “Russia was one of the largest producers of high-grade nickel and there’s such a limit on high-grade nickel production globally.

“So I would expect high-grade nickel prices to continue being high until the tensions with Russia subside, which could take years.”

A July 2022 report from Fitch indicated that Russia ordinarily accounted for about 21 per cent of the global class one nickel production, with Canada comprising 17 per cent, Australia 14 per cent and China 10 per cent.

Russian company Norilsk Nickel (Nornickel) – the world’s largest producer of high-grade nickel – produced 59,000 tonnes of the base metal in the third quarter of 2022, a 22 per cent rise from the quarter before.

However, in December the company said it was considering reducing nickel output by about 10 per cent in 2023 as European buyers refuse Russian supplies. The US has sanctioned top Nornickel shareholder, Vladimir Potanin, but the company itself hasn’t been hit with any penalties.

But Nornickel has still been affected by the Russia–Ukraine war, with disruptions to logistics, insurance and shipping. Finland’s state railway ended freight traffic from Russia at the end of December, cutting off Nornickel’s transport route to its Harjavalta refinery in Finland.

Will the coal boom sustain?

Last year was the year of coal, with the energy commodity benefiting from the advent of the Russia–Ukraine war, which quelled energy supplies from Russia, a leading exporter of oil, gas and coal.

As European nations scrambled to access alternative energy supplies amid sweltering summer conditions, coal prices surged, benefiting the Australian coal sector. This saw the likes of Whitehaven Coal and Yancoal enjoy record coal prices and soaring profits. Whitehaven’s average coal price for the September quarter of 2022 was \$581/t, while Yancoal’s average coal price was \$481/t across the three months. But windfalls were quelled by extreme La Niña-induced rainfall, with production affected at many New South Wales and Queensland coal mines throughout 2022. Chowdhury said she expected coal demand to remain high in 2023 as the energy crunch continues.

“The energy crisis isn’t resolved yet,” she said. “And as summer comes (in the northern hemisphere) coal will remain the fuel of choice for most of Asia, which is the case anyway, but also for quite a large part of western nations as well.

“I think coal demand is set to remain strong for at least 2023, if not also 2024. But it should ease a little bit compared to late 2021 and 2022.”

Another interesting development that could affect coal demand is the partial lifting of China’s ban on Australian coal.

News emerged in early January that as China was seeking more coal for its power and steel plants amid disruptions caused by the Russia–Ukraine war, it was plan-

ning to partially lift the ban and allow three central government-backed utilities and the country's top steelmaker to resume imports.

The Resources & Energy Quarterly: December 2022 forecast Newcastle thermal coal futures to decline from \$US360/t in 2022 to around \$US200/t in 2024, but prices are not expected to drop to pre-COVID lows anytime soon.

The report also forecast prices for Australian premium hard coking coal to decrease from \$US377/t in 2022 to around \$US230/t in 2024.

Is it uranium's year?

As more and more countries turn to nuclear power amid the Russia-Ukraine war, uranium is becoming increasingly popular.

The uranium price hovered around \$US50 per pound (lb) during 2022, which is significantly higher than pre-COVID levels, where the energy commodity averaged below \$US30/lb between early 2016 and early 2020.

The Resources & Energy Quarterly: December 2022 expects uranium prices to rise to almost \$US60/lb in 2024 but increased global uranium supply is forecast to contain prices long-term.

Boss Energy is looking to bring Australia's next uranium mine online in late 2023

with the restart of the Honeymoon project in South Australia. And with the US, Europe and Japan looking to boost their nuclear capacity, looks like Boss has timed its run nicely.

The Vogtle plant in Georgia, US is expected to start up in 2023, making it the first new US reactor in 30 years, while Sweden, Germany, Poland and France are either expanding their nuclear strategy or extending the life of nuclear plants that were originally scheduled to close.

It was announced in late 2022 that Japan would adopt a new policy promoting greater use of nuclear power to reduce carbon emissions and ensure stable power supply amid global fuel shortages.

This is a significant change from previous anti-nuclear sentiment, which was influenced by the 2011 nuclear disaster at Fukushima.

By : Tom Parker

Source: Australian Resources & Investment. February Issue

## BIHAR GOVT INITIATES AUCTION PROCESS FOR IRON ORE MINES WORTH RS 20,000 CR

Once the report is submitted, the state govt will initiate the process of granting permission to allow mining of glauconite and iron ore reserves worth Rs 20,000 cr, in Rohtas and Jamui districts

The Bihar government has initiated a process for auctioning of glauconite and iron ore reserves worth Rs 20,000 crore in Rohtas and Jamui districts and will engage SBI Capital Markets to prepare a report for the same, an official said on Saturday.

The government held a meeting with several stakeholders recently to initiate the auction process, Additional Chief Secretary-cum-Mines Commissioner Harjot Kaur Bamhrah said.

The state government will shortly issue an order for engaging SBI Capital Markets as the transaction advisor and also to suggest terms and conditions based on which the auctions would be conducted, Bamhrah told PTI.

The state government has asked SBI CAPS, the investment bank and project advisor, to submit a detailed report, she said.

Once the report is submitted, the state government will initiate the process of granting permission to allow mining of glauconite and iron ore reserves worth Rs 20,000 crore, in Rohtas and Jamui districts on a lease basis, the mines commissioner said.

Glauconite, a common source of potassium in fertilisers, is useful in increasing soil fertility, while iron ore is the essential raw material for making

steel.

Earlier, there was a perception that Bihar lost its mineral wealth following the creation of Jharkhand in 2000, she said.

"In fact, Bihar has sufficient mineral resources to boost its economy," Bamhrah said. This is for the first time since the creation of Jharkhand, the Bihar government has initiated a process of allowing mining activities for the state's mineral reserves.

Besides, the state government has also decided to amend its industrial promotion policy by including provisions to encourage private participation in the mining sector, she said.

The decision to make suitable changes in the Bihar Industrial Promotion Policy to encourage private participation in the mining sector, as it has been done by the Odisha, Chhattisgarh and Jharkhand governments, was taken in a recent meeting chaired by the state chief secretary, Bamhrah said.

The state government has earmarked two glauconite mines worth Rs 14,048 crore in Pipradih and Chutia-Nauhatta blocks of Rohtas district for auction.

Besides, the Mines and Geology Department has decided to allow mining activities in iron ore deposits, worth Rs 6000 crore, in Jamui, she said.

The SBI CAPS will decide modalities of the mineral auction by way of demarcation and assessment of blocks, tender process, reserve price fixation and eligibility criteria among others, Bamhrah said.

The state has seven blocks of rare minerals that are ready for the auction, she added.

Source: Business Standard

**6th Tranche of Auction for Commercial Mining of Coal – Results  
(25/133 Coal Mines- 6th Tranche ), 4/8 Coal Mines- 2nd Attempt -5th Tranche )**

By: S N Chawla, Email: sn\_chawla@yahoo.com, M. No. 9560530077

#	Name of Coal Mine/Block	State	Coalfield/ Lignite Field	Area (Sq.Km)	Exploration Status	Exploration Category (G1/G2/G3)	Mine Plan available	Geological Resource (MT)	PRC /Tentative Mine Capacity (MTPA), Not Assessed- NA	Coal Type	Mine Type (OC/UG/ Mixed), Not Assessed-NA	No. of Bidde rs	Name of Technically Bidder	Preferred Bidder
1	Namchik Namphuk	Arunachal Pradesh	Namchik Namphu	0.92	Explored	G1	No	14.970	0.20	Semi-Coking Grade-1		6	1. Assam Mineral Development Corporation Limited 2. Platinum Alloy Private Limited 3. Arunachal Pradesh Power Corporation Pvt Ltd 4. Star Cement Limited 5. Coal Puls Pvt Ltd 6. Prachi Infra and Roads Pvt Ltd	Coal Puls Pvt Ltd
2-3	Bana-Bhalumuda*	Chhattisgarh	Mand Raigarh	33.30	Explored	G1		1376.070	12.00	Non-Coking	OC	5	1. N.I.C India Limited 2. Gujarat Mineral Development Corporation Limited 3. Jindal Power Limited 4. Raigarh Natural Resources Ltd 5. JSW Steel Limited	JSW Steel Limited
4-5	Gare Palma IV/2 & IV/3*	Chhattisgarh	Mand-Raigarh	10.00	Explored	G2		186.864	7.00	Non-Coking		15	1. Jaganath Corporation Projects Pvt Ltd 2. Power Mech Projects Ltd 3. Siddhi Vinayak Power and Steel Pvt Ltd 4. Sivan Steel and Power Limited 5. Gujarat Mineral Development Corporation Limited 6. MB Power (Madhya Pradesh) Limited 7. Jindal Power Limited 8. Raigarh Natural Resources Ltd 9. SG Air Travel Pvt Ltd 10. Sachin Bis Power Pvt Ltd 11. Kineta Global Limited 12. OPG Power Generation Pvt Ltd 13. Essar Construction India Ltd 14. JSW Steel Limited 15. Bharat Aluminium Company Limited	Jindal Power Limited
6	Gare-Palma, Sector-I (East)	Chhattisgarh	Mand-Raigarh	30.20	Explored	G1		965.000	15.00	Non-Coking		3	1. Gujarat Mineral Development Corporation Limited 2. Jindal Power Limited 3. Raigarh Natural Resources Ltd	Jindal Power Limited
7	Purunga	Chhattisgarh	Mand-Raigarh	5.20	Partially Explored	G2	No	260.000	NA	Non-Coking	NA	2	1. Power Mech Projects Ltd 2. CG Natural Resources Pvt Ltd	CG Natural Resources Pvt Ltd
8	Datima	Chhattisgarh	Bisrampur	8.08	Explored	G1	No	13.3	0.36	Non-Coking	UG	5	1. Assam Mineral Development Corporation Limited 2. Kishory Private Limited 3. Shree Cement Limited 4. Duruplas (India) Pvt Ltd 5. Saubard Properties Pvt Ltd	Shree Cement Limited
9	Binja	Jharkhand	South Karanpura	1.30	Partially Explored	G3	No	50.000	NA	Non-Coking	NA	3	1. Dwevedi Consultancy Services Pvt Ltd 2. Rungta Metals Pvt Ltd 3. Assam Mineral Development Corporation Limited	Assam Mineral Development Corporation Limited
10	Patal East (Eastern Part)	Jharkhand	South Karanpura	3.40	Explored	G1	Yes	35.000	0.30	Non-Coking	OC	2	1. Dwevedi Consultancy Services Pvt Ltd 2. RCR Steel Works Pvt Ltd	RCR Steel Works Pvt Ltd
11	Burakhap Small Patch	Jharkhand	Rajmahal	0.58	Explored	G1	No	9.610	0.40	Non-Coking		3	1. JISL Irrigation Pvt Ltd 2. Shreesatya Mines Private Limited 3. Bull Mining Pvt Ltd	Shreesatya Mines Private Limited
12	Parbatpur Central	Jharkhand	Jharia	8.95	Explored	G1	Yes	234.520	1.24	Coking	Mixed	2	1. JSW Steel Limited 2. Vedanta Limited	JSW Steel Limited
13	Sitala	Jharkhand	Jharia	3.20	Explored	G1	Yes	108.850	0.30	Coking	UG	1**	<b>JSW Steel Limited</b>	JSW Steel Limited
14	Choritand Tiliaya	Jharkhand	West Bokaro	2.49	Explored	G1	Yes	97.035	0.78	Coking	NA	1**	<b>Rungta Metals Private Limited</b>	Rungta Metals Private Limited
15	Arjuni (Eastern Part)	Madhya Pradesh	Sohagpur	10.50	Explored	G1	No	106.120	1.36	Non-Coking	NA	4	1. Rama Cement Industries Pvt Ltd 2. Shri Rajang Power and Spac Ltd. 3. Ultratech Cement Ltd 4. Shreesatya Mines Private Limited	Ultratech Cement Ltd
16	Arjuni (Western Part)	Madhya Pradesh	Sohagpur	11.10	Partially Explored	G2	No	110.170	NA	Non-Coking	NA	3	1. Thirveni Earthmovers Pvt Ltd 2. Ganga Khanij Pvt Ltd 3. Ambuja Cements Limited	Ganga Khanij Pvt Ltd
17	Gondbahera Ujhani	Madhya Pradesh	Singrauli	20.40	Explored	G1	Yes	672.870	4.12	Non-Coking	Mixed	3	1. Gujarat Mineral Development Corporation Limited 2. Cavill Mining Private Limited 3. MP Natural Resources Pvt Ltd	MP Natural Resources Pvt Ltd
18	Mandla North	Madhya Pradesh	Pench Kanhan Valley	10.30	Explored	G1	Yes	195.378	1.50	Non-Coking	UG	2	1. Wimsuill Metals Pvt Ltd 2. Dalma Cement (Bharat) Limited	Dalma Cement (Bharat) Limited
19	Marwatola Sector VI	Madhya Pradesh	Sohagpur	7.63	Explored	G1	Yes	79.000	1.50	Non-Coking	OC	3	1. Mahavir Coal Resources Pvt Ltd 2. Inspire Construction and Coal Pvt Ltd 3. JSW Cement Limited	JSW Cement Limited

20	Marwatola Sector VII	Madhya Pradesh	Sohagpur	12.00	Explored	G1	Yes	188.700	1.50	Non-Coking	OC	4	1. Rama Cement Industries Pvt Ltd 2. Shyam Sel and Poser Limited 3. Ambuja Cements Limited 4. Gujarat Mineral Development Corporation Limited	Rama Cement Industries Pvt Ltd
21	Dongeri Tal-II	Madhya Pradesh	Singrauli	30.05	Explored	G1	Yes	158.454	2.90	Non-Coking	OC	3	1. Mahavir Coal Resources Pvt Ltd 2. Gujarat Mineral Development Corporation Limited 3. Ultratech Cement Ltd.	Mahavir Coal Resources Pvt Ltd
22	Dahegaon Gowari	Maharashtra	Kamptee	15.62	Explored	G1	No	162.800	0.50	Non-Coking		2	1. Ambuja Cements Limited 2. Gangaramchak Mining Private Limited	Ambuja Cements Limited
23	Kalambi Kalmeshwar (Western Part)	Maharashtra	Katol Basin	6.42	Partially Explored	G3	No	47.782	NA	Non-Coking	NA	2	1. Samlok Industries Pvt Ltd 2. Bull Mining Pvt Ltd	Samlok Industries Pvt Ltd
24	North West of Madheri	Maharashtra	Wardha Valley	36.61	Partially Explored	G2	No	200.000	NA	Non-Coking	NA	2	1. MH Natural Resources Private Limited 2. Cavill Mining Private Limited	MH Natural Resources Private Limited
25	Baitarni West	Odisha	Talcher	11.96	Explored	G1	No	1152.110	15.00	Non-Coking		2	1. NLC India Limited 2. Gujarat Mineral Development Corporation Limited	Gujarat Mineral Development Corporation Limited
26	Burapahar	Odisha	Ib Valley	6.06	Explored	G1	No	547.890	6.00	Non-Coking	OC	4	1. Gujarat Mineral Development Corporation Limited 2. Hirakand Natural Resources Ltd 3. JSW Steel Limited 4. NTPC Limited	Gujarat Mineral Development Corporation Limited
27	Chendipada (Revised)	Odisha	Talcher	12.83	Partially Explored	G2	No	513.000	NA	Non-Coking	OC	3	1. Rungta Sons Private Limited 2. Jindal Steel and Power Limited 3. Hirakand Natural Resources Ltd	Rungta Sons Private Limited
28	Sakbigopal-B Kankili	Odisha	Talcher	7.76	Partially Explored	G2	No	500.000	NA	Non-Coking	NA	2	1. TANGEDCO 2. Rungta Sons Private Limited	Rungta Sons Private Limited
29	Khagra Joydeb	West Bengal	Raniganj	15.20	Explored	G2		178.270	3.00	Non-Coking		2	1. Orissa Metallurgical Industry Pvt Ltd 2. MSP Mines and Minerals Limited	Orissa Metallurgical Industry Pvt Ltd
** Provided however that in the event that there is only one Technically Qualified Bidder, then the Technically Qualified Bidder shall be considered as the Qualified Bidder. (in Second Attempt only)														



Courtesy: **S.N. Chawla**

**MMDR Amendment - Exploration License for Deep Seated & Critical Minerals**

On 7<sup>th</sup> February 2023, Ministry of Mines (MoM) publishes a notification seeking comments against the introduction of Exploration License (EL) for Deep Seated Minerals & Critical Minerals, to be made in Mines and Minerals (Development and Regulations) Act, 1957.

No	Additional Amendment Suggested in the MMDR proposal
1#	<p><b><u>What are the present provisions available for obtaining Exploration License (EL) for deep seated minerals &amp; critical minerals?</u></b></p> <p>a) Exploration of deep seated &amp; critical minerals is highly capital intensive, difficult to locate, time consuming and has it feasibility for extraction dependent on metal content it possess</p> <p>b) The MMDR Act provides two (2) types of mineral concessions to private entities through auctions</p> <ul style="list-style-type: none"> <li>▪ Mining Lease (ML) for undertaking mining operation</li> <li>▪ Composite License (CL) for undertaking prospecting operations followed by mining operations</li> </ul> <p>c) Presently there is no provision for grant of mineral concession for undertaking full range of exploration starting from reconnaissance to prospecting operations</p>
2#	<p><b><u>What is the present exploration regime for deep seated &amp; critical minerals is followed by other mineral rich nations that India also needs to adopt?</u></b></p> <p>a) Exploration for deep seated minerals is done by junior mining companies or exploration agencies who gets the exploration rights over large area based on available baseline survey data to explore the area from reconnaissance stage and bring it up to the level required for starting mining operations</p> <p>b) These junior mining companies or exploration agencies are the allowed to transfer the mineral concession in full or in part during the exploration period or at the conclusion of exploration</p> <p>c) These exploration agencies bring in advanced technology and expertise in exploration for deep seated minerals. Hence, there is a need to bring similar provisions in the act, within the auction regime, to allow private exploration agencies to undertake exploration from reconnaissance stage</p>
3#	<p><b><u>Why there is a need to bring in Exploration License (EL) for deep seated minerals &amp; critical minerals?</u></b></p> <p>a) Deep seated minerals such as Gold, Silver, Zinc, Lead, Copper, Nickel, Cobalt, Platinum group of minerals. Diamonds etc. are high value minerals and it is difficult and expensive to explore and mine these minerals as compared to surficial / bulk minerals</p> <p>b) These minerals are extremely critical for new age electronics, transition to clean energy (Solar &amp; Wind), electric vehicles &amp; batteries as well as in traditional sectors like infrastructure, defense, etc.</p> <p>c) Resource identification for these minerals in the country is very limited as compared to surficial/bulk minerals. Therefore, the share of deep seated and critical minerals in India's total mineral production is meagre and country is mostly dependent on imports of these minerals</p> <p>d) Thus, there is a need to provide policy to expedite exploration and mining of deep seated and critical minerals</p> <p>e) The MoM has constituted a committee of MECL, GSI &amp; IBM for suggesting measures to facilitate, encourage, and incentivize private sector participation in all spheres of mineral exploration in pursuance of provisions of NEMP 2016</p> <p>f) To insert a provision of Exploration License (EL) in the MMDR act 1957 under the newer section 10D and make consequential amendment in section 3, 4, 4A and 6 of the MMDR act</p>

4#	<p><b>How India can be leveraged from introducing the policy for Exploration License (EL)</b></p> <p>a) Only ~28% i.e., 1.97 lakh sq.km of high potential G4 level area out of 6.88 lakh sq.km of total OGP area has been identified so far. Currently only around 1% of worldwide budget for exploration is spent in India. Therefore, there is a huge potential for mineral exploration in India</p> <p>b) Exploration in mineral rich nations are being done by junior mining companies which focuses on discovering newer deposits of minerals of high demand or high value and has risk taking abilities along with bringing in newer technologies for exploration. However, there is no presence of junior mining companies in India as there is no enabling policy to attract them</p> <p>c) The proposed Exploration License (EL) process is foreseen to create an enabling mechanism to bring in exploration agencies across the world to India. The blocks explored by these agencies will be brought under the auction regime which will fetch better revenue to the states</p>
5#	<p><b>What is the proposed mechanism?</b></p> <p>a) The key features of the Exploration License (EL) would be under Section 10D of MMDR Act</p> <ul style="list-style-type: none"> <li>▪ EL should be a mineral concession granted through auction for undertaking reconnaissance and prospecting operations only</li> <li>▪ There will be a new schedule in the act for which the EL will be applicable. The minerals are Copper, Tellurium, Selenium, Lead, Zinc, Cadmium, Indium, Gold, Silver, Diamond, Rock Phosphate, Apatite, Potash, Elements of the Rare Earth Group, Lithium, Cobalt, Molybdenum, Rhenium, Tungsten, Graphite, Vanadium, Nickel, Tin, Platinum group of elements, columbite, tantalite, lepidolite, scheelite, cassiterite etc.</li> <li>▪ Max. area for EL shall be 1000 sq.km &amp; max. area limit for a person to acquire EL in a state is 5000 sq.km. Also, a person may suggest an area to the state government for the auction</li> <li>▪ Bid criteria shall be the % of revenue share that the holder of EL would take from the auction premium payable by the lessee of such area to the state government on successful auction for the mining lease</li> <li>▪ Preferred bidder for the EL shall be selected through the reverse bidding for share in auction premium payable by the mining lease holder. Bidder quoting the lowest % shall be the preferred bidder for the EL. The EL holder shall be entitled to receive revenue share only for the minerals listed in the schedule of the act</li> <li>▪ Period of EL – 5 years (extendable to 1 year). The EL holder to relinquish 75% area so that only 25% area remains with the holder after 3 years</li> <li>▪ Upon completion of exploration the state government to auction the area for ML within 1 year from the submission of GR by EL holder</li> </ul>

Amidst the program for building Atmanirbhar Bharat the Ministry of Mines (MoM) has finally started contemplating resource augmentation for non-bulk deep-seated and critical mineral deposits. The committee under the aegis of MoM comprises MECL, GSI, and IBM has taken cognizance of exploration needs for future dependent minerals required for clean energy, electric vehicles, energy transition, batteries, fertilizer minerals, and electronic minerals in line with rich mineral nations. The amendment proposed is going to introduce a new section 10D in the MMDR act for Exploration License (EL) for exploration agencies regarding deep-seated and critical minerals. The comments have been sought by MoM against the proposed reforms from the stakeholders. Here is a snapshot of the same.

**Implication 1#**

*In case of deep-seated minerals, the revenue share will happen only after the successful operationalization of blocks. Generally, these deep-seated minerals deposits are mined through underground mining and the development time for the mining activity is very high. Thus, the realization of revenue will be very delayed*

**Implication 2#**

*The amendment proposed is neither providing financial support to the exploration agencies during the progress of exploration work nor it is supporting the agency for the risk undertaken through suitable options like first right of refusal during the auction of mining lease to mine and mechanism for the exit route in case of no discovery*

**Implication 3#**

*The government should also simultaneously start focusing on building infrastructure facilities towards building mineralogy laboratories required for sample analysis, digitization of old exploration database or preliminary surveys, and empanelment of Geological Report writing agencies for deep-seated and critical minerals. These could be bottlenecks for early auctioning*



Courtesy: **Abhinav Sengupta**

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# IN MAHARASHTRA, 19 MINING BIDS CALLED, 50% IN FORESTS

In a significant move, the directorate of geology and mining (DGM), Maharashtra, has invited bids for granting leases for 19 mines in the state on nearly 10,200 hectare. At least 50% mines will be on forested land, mostly in Gadchiroli and Chandrapur districts, where man-animal conflict is at its peak.

On February 3, 2023, the DGM floated tenders inviting bids from parties for grant of mining leases for bauxite, limestone, iron ore, manganese, copper, base metal, platinum, nickel-chromium, gold etc. For some mines, like the controversial Surjagadh mine, composite licenses will be issued. The last date to submit tenders is March 14.

Of the 19 mineral blocks, five (3 limestones, 1 each bauxite and copper) include granting mining lease, while 14 blocks (3 for gold-chromium-nickel, 2 bauxite, 1 each for base metal, copper, nickel-chromium, and 6 iron ore) are for issuing composite licenses. Of these mines, 11 are in Vidarbha and 8 are in Western Maharashtra. Earlier, bids for seven sensitive mines were invited on September 16, 2022. However, the DGM on November 14, 2022, annulled the auction without specifying reasons. Now, again bids have been invited for these mines.

The DGM officials failed to reveal how much revenue the state will generate from these 19 bids. Composite license means prospecting license-cum-mining lease, which is a two-stage concession granted under rules for the purpose of undertaking prospecting operations followed by mining operations in a seamless manner. The fresh bids for mining leases and composite licenses will spell doom for tigers and wildlife in Gadchiroli and Chandrapur districts, where 104 people have lost their lives in 2022. It may also stir up trouble in Surjagarh, where many tribals are opposed to mining and a further extension to mining firms.

Apart from existing iron mining by Llyods Metals in 348 hectare, the fears of



tribals have come true with bids being invited for six blocks, whose area comes to nearly 47sq km (4,700 hectare), 2.5 times the area of the entire Gorewada Zoo and Rescue Centre (19.14sqkm) at Nagpur. Some sensitive mines like Minzhari, Bamhani in Sindewahi, Bhisi in Chimur in the Tadoba landscape, and Savli in Parsheoni threaten to destroy tiger habitats. "It is clear that there is an urgent need to reform the current processes for activities which involve forest land diversions," says wildlife biologist Aditya Joshi. "The inclusion of mines like Bamhani in Tadoba buffer shows that there is a clear lack of involvement of various stakeholders before the conceptualization of these projects. Such haphazard proposals in sensitive ecological areas act against the government's commitment to act in the light of climate change, and to preserve India's forests and wildlife," adds Joshi.

"The forests of eastern Maharashtra, which are known for their rich wildlife and visited by thousands of tourists world over to sight tigers are under attack from large-scale mining operations," said Uday Patel, former honorary warden. TOI highlighted the associated impact of these mines on tiger corridors and habitats. However, no action has been initiated by authorities.

Source: Times of India





# REDEFINING SUCCESS: A WINNING LIFESTYLE FOR A LONG TERM

Journey of success is a marathon not a sprint, pace yourself accordingly. Society today has set a benchmark for a person to be called successful which is Sp- power, position, popularity, performance and possessions. In today's culture being busy and being overworked is glorified and glamourized. Phrases like "hustle until you don't have to introduce yourself" have become the sole motivational lines. The more you dream, the more you work the more rewards you'll receive is a mindset which is impacting the wellbeing of everyone in the society. naturally everyone wants to succeed, and to a certain level, some degree of stress is good for peak performance. Maintaining a long term successful journey doesn't mean sacrificing things that keep our lives balanced, like seeing friends and family, eating healthy diet, getting enough sleep, making time to rest, and prioritizing self-care. Obsession with regard to achievements is shared with a real life incidence. There was this farewell program of two retired university professors in a college. As is the tradition the announcer introduced the first professor and detailed each and every accomplishments the professor achieved throughout his professional journey. now the professor was invited on the stage to say a few words on his successful journey. He took on the stage and started describing

his achievements for such a long time that people got bored, and started talking to each other, rather than listening to the retired professor. Finally he ended his extremely lengthy speech, but unfortunately received very less applause. Next retired professor was invited to address the gathering. the anchor gave a similar brief of his accomplishments too. Now the audience was worried that this old retired professor will start all over again, like the first one and will be a torture for everyone. With a slight limp due to age related health issues, the professor took the mike, thanked everyone and said only one line. just now you heard what i did in my professional career, "i wish i could do more, thank you." The whole audience stood up and gave a huge round of applause.

This is what a successful journey must be redefined in real sense. winning is not about numbers, winning is not about sizes, winning is not about a particular time, it's a perspective of being in a state of bliss throughout, and not in an overwhelmed state.

To ensure a winning lifestyle for a long term, we need to readdress the equilibrium, and reevaluate what success means by creating the strongest foundations to keep moving forward.

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