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Indian Mining & Exploration Updates

Amendment in mineral auction rules will encourage more participation: Govt



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The amendment rules have been framed after extensive consultations with the states, industry associations, miners, other stakeholders and general public.

The government on Thursday said that amendment in mineral auction rules will encourage competition that will ensure more participation in sale of blocks.

The Ministry of Mines has notified the Minerals (Evidence of Mineral Contents) Second Amendment Rules, 2021, and the Mineral (Auction) Fourth Amendment Rules, 2021 to amend the Minerals (Evidence of Mineral Contents) Rules, 2015 (MEMC Rules) and the Mineral (Auction) Rules, 2015 (Auction Rules), respectively, the mines ministry said in a statement.

The amendment rules have been framed after extensive consultations with the states, industry associations, miners, other stakeholders and general public.

Amendment in the MEMC Rules will enable any person, who is intending to participate in auction, to propose suitable blocks for auction

for composite licence where mineral potentiality of the blocks has been identified based on the available geoscience data, the ministry said.

A committee constituted by any state will assess the mineral potentiality of the blocks so proposed and recommend the mine for auction, it said.

Further, amendment in the 'Auction Rules' provide that in case the blocks proposed by any person are notified for auction, the said person would be provided incentive of depositing only half of the bid security amount in auction of the blocks proposed by him, the statement said.

"These amendments would encourage more participation in auction and promote competition," the ministry said.

This will facilitate state governments in identifying more blocks for auction of composite licence.

The Minerals (Evidence of Mineral Contents) Rules, 2015 have been recently amended in June, 2021, inter alia, to provide for auction to grant a composite licence in respect of areas where at least Reconnaissance Survey (G4)

level has been completed or where mineral potentiality of the block has been identified based on the available geoscience data but resources are yet to be established, the government said.

These amendments were aimed at identifying more mineral blocks for auction and thereby increasing pace of exploration and production resulting in improving the availability of minerals in the country and increase employment in the sector, it added.

Simultaneously, the Mineral (Auction) Rules, 2015 were amended, inter alia, to prescribe bid security, performance security and other eligibility conditions to enable auction of such blocks for composite licence, as per the statement.

The present amendment in the rules will supplement the recent policy reforms taken in the mineral sector and facilitate auction of more blocks, thereby increasing production and mineral supply in the country, the statement said.

-Source : Business Standard

Current round of commercial coal block auction got good response: Coal secy

Anil Kumar Jain says COP26 brings some uncertainty particularly to developing countries, but the silver lining is that the Net-Zero year set by India is 2070, which is 50 years away

The current round of commercial coal block auctions is drawing a good response with India's commitment to Net-Zero still about 50 years away.

Addressing the 'Minerals, Mining and Metals e-Conclave' organised by the Bengal Chamber of Commerce & Industry, Anil Kumar Jain, secretary, Ministry of Coal, said that COP26 brings some uncertainty particularly

to developing countries because now the result is out.

But the silver lining in the cloud, Jain said, is that the Net-Zero year set by India is 2070, which is 50 years away.

"Fifty years now gives a lot of comfort and I am already noticing it," said Jain pointing to the current round of commercial coal block auctions.

The previous round of commercial coal block auctions did not elicit the kind of response that the first round did. I took it that the interest is now waning. But I am happy to say



that the current round for which sale applications closes today we have already received two or more bids for 18 mines," he said.

In October, the coal ministry launched the auction process of 40 new coal mines; with coal mines rolling over from the previous tranche, a total of 88 coal mines were on offer. Total geological resources of about 55 billion tonnes of coal was on offer from 88 mines, of which 57 are fully explored mines and 31 partially explored mines; 4 coking coal mines are also on offer.

Jain said, "The quality of some of our mines are legacy mines which people have not accepted in the past few years. There were few mines which we added which have got a good

response."

"In the future rounds when we come up with more new explored mines, the response would be better. And the indication to that is that even in the current round we have got a good response," he added.

Jindal Steel & Power chairman, Naveen Jindal, who had also joined the event virtually, hailed the opening up of commercial coal mining.

"With the opening up of commercial coal mining I feel the opportunity is now with us, who ever wants to tap it," he said.

However, Jindal also flagged concerns around land acquisition in mining. Obviously there are going to be challenges with the land acquisi-

tion, he said.

Jindal said that India has 17 per cent of the world's population living on two per cent of the world's land.

"So, obviously there is a huge pressure on land. And land is a very emotive subject. But still we have to progress to create a \$5 trillion economy. To make our people prosperous and happy, we have to have economic development," he said.

On the clearances, Jindal said that there should be a single window mechanism for getting all the clearances.

-Source : Business Standard

Govt may push more reforms in mining sector 'very shortly': Joshi



Coal and Mines Minister Pralhad Joshi on Thursday said the government might come out with some more reforms in the mining sector "very shortly".

Coal and Mines Minister Pralhad Joshi on Thursday said the government might come out with some more reforms in the mining sector "very shortly".

Joshi said that with the time several amendments have been made in rules concerning

the mining sector as well and the mines ministry will continue to bring reforms further as per the demand of the industry.

"Very shortly, we may come out with some more reforms and I think some of them we are going to put in the public domain also and we will consult with the states and stakeholders," said.

He was speaking during the International Mining Summit, organised by the Confederation of Indian Industry (CII) in association with the Ministry of Mines

The government, he said, brought the Mines and Minerals. (Development and Regulation) Amendment Act, 2015, which provides for the actual resources through the auction route and further major amendments were brought this year also.

"We have resolved the legacy issue by amending Section 10(a)2b. This has made available about 500 potential mineral blocks... We have taken the decision and brought them (the blocks) to auction," he said.

This year, in comparison to the previous years, a lot of mines have been brought into auction, he added.

The minister further emphasised that the government is keen to promote the best use of the country's mineral reserves, a sustainable domestic mining industry, reduce imports and increase the mineral sector's contribution to India's gross domestic product (GDP) from the current 1.75 per cent to at least 2.5 per cent.

India's mining sector contributes in many ways to the country's economy, he said, adding that a little push to this sector will push the entire economy.

The minister highlighted that the Minerals (Evidence of Mineral Contents) Second Amendment Rules, 2021, and the Mineral (Auction) Fourth Amendment Rules, 2021, have been amended wherein the state governments concerned will be bound to consider and approve exploration proposals within 120 days.

-Source : Business Standard

Steel ministry panel calls for exploration of manganese ore reserves

A consultative committee on Tuesday suggested CPSEs to explore of reserves manganese ore and other minerals in states like Jharkhand, Odisha and Karnataka, an official statement said.

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The Consultative Committee of Parliament for Ministry of Steel also suggested for a research and development (R&D) team to be constituted to work out the possibility of usage of manganese in battery-powered vehicles.

During the meeting of the committee, Steel Minister Ram Chandra Prasad Singh who is the Chairman of the body along with Minister of State (MoS) for Steel Faggan Singh Kulaste directed the CPSEs under his ministry to

take up the issue of manganese ore exploration with state governments and explore possibilities of new manganese bearing areas in India, the steel ministry said.

"Members of the committee suggested for exploration and survey of minerals in Jharkhand, Odisha and Karnataka and that a Research & Development team to be constituted to work out the possibility of usage of manganese in E-vehicles batteries," it said.

The committee also discussed a "wide gamut of issues" including usage of manganese ore, its production in India and contribution of state-owned MOIL in country's manganese production. MOIL is contributing around 45 per cent of domestic production and has drawn up plan to increase production up to 1.8 million tonne (MT) by year 2024-25 and 3.5



MT by year 2030.

Speaking on steel output, Minister Singh said as per the current progress, the production is likely to achieve a record production of 115 MT this year.

-Source : Business Standard

Year-end Review-2021: Centre takes measures in mining sector to facilitate ease of doing business

Mineral Exploration norms further relaxed: MPs, MLAs and MLCs included in District Mineral Foundation Fund Governing Council. NALCO's Net Profit increased by 840 % to Rs1299.53cr

The Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act) has been amended through the Mines and Minerals (Development and Regulation) Amendment Act, 2021, which has been notified on 28.03.2021, for giving boost to mineral production, improving ease of doing business in the country and increasing contribution of mineral production to Gross Domestic Product (GDP). Some of the major reforms brought in the Amendment Act, 2021 are as under:

- Removed the distinction between captive and merchant mines. It allows all captive mines to sell up to 50% of the minerals produced during the year after meeting the requirement of attached plant subject to the payment of additional amount as prescribed under sixth schedule of the MMDR Act. Further, all future auctions will be without any end use restrictions.
- Resolved all pending cases under section 10A (2) (b) of the Act.
- Statutory clearances to be valid even after expiry or termination of mining lease and shall be transferred to the successful bidder in the auction.
- To ensure ease of doing business,

restriction on transfer of mineral concessions are removed and now mineral concession can be transferred without any transfer charge.

Relaxation of Exploration Norms-ML for limestone, iron ore and bauxite having surficial deposit can be granted at G3 level of exploration.

Reassessment of resources in respect of expired, terminated, surrendered or lapsed mines on the basis of available reports of exploration before auction.

Auction of composite licence (PL-Cum-ML) at G4 level for all minerals.

Definition of various stages of exploration, etc., exploration norms for different types of



→ deposits and reporting template.

Mineral (Auction) Rules, 2015 amended through Mineral (Auction) Third Amendment Rules, 2021.

The MCR, 2016 has been amended through Minerals (Other than Atomic and Hydro Carbons Energy Mineral) Concession (Fourth Amendment) Rules, 2021 on 2nd November, 2021.

During the year 2021 (Till Nov-21), MECL has submitted 39 nos. of Geological Reports of different minerals commodities e.g. Coal, Lignite, Copper, Limestone, Iron ore, Manganese, Magnesite etc. and added 10,414.36 million tonnes of resources to National Mineral Inventory out of which 17 Geological Reports have been submitted to NMET.

- MoU has been signed with Odisha Mineral Exploration Corporation Limited (OMECL), Bhubaneswar for carrying out detailed exploration and allied works in the state of Odisha.
- MoU signed with Department of Mines & Geology (DMG), Rajasthan and Rajasthan State Mines and Minerals Limited (RSMML) for taking up feasibility study for solution mining of potash and pilot plant construction in Rajasthan.
- MECL signed MoU with Central Mine Planning and Design Institute (CMPDIL), Ranchi for detailed Energy & Non-Coal exploration in CMPDIL blocks.
- MECL signed MoU with Directorate of Mines & Geology (DGM), Goa to expedite assessment of mineral resources and take-up exploration of mineral acreage for carrying out mineral block for its auction.
- MoU signed with Directorate of Geology and Mining (DGM), Madhya Pradesh and Madhya Pradesh State Mining Corporation Limited (MPSMCL) for carrying out exploration and allied works for Mineral Acreages in the state of Madhya Pradesh.
- Under modernization program, MECL has taken steps on advent of Technological Innovations and adoption of advanced software and equipment etc. such as

DATAMINE Studio-RM, Geovia Minex & Geo SURPAC (Dassault System, France), Arc GIS, ERDAS IMAGINE, Slimhole Geophysical logging system, Core scanner, XRF, ICP MS, ICP OES etc

- Under strategic diversification program, to increase sustainability and profitability MECL is diversifying its activities in both areas viz. business level and corporate level diversification. MECL has been engaged as Program Manager for carrying out various activities at BGML including appointment of Consultant for its techno-commercial feasibility studies and future action plan of BGML.

Union Minister of Coal, Mines and Parliamentary Affairs, Shri Pralhad Joshi inaugurated the 5th National Conclave on Mines and Minerals-2021 in November and felicitated 149 mines obtaining five-star rating under star rating of Mines for the performance year 2017-18 to 2019-20. The Minister also handed over 52 potential mineral blocks carved out of G4 stage mineral investigations to the State Governments. This was in addition to hundred mineral blocks handed over to different state governments earlier in September this year.

A technical session with panel discussions was conducted during the Mines and Minerals Conclave to present and discuss about the recent amendments in Mining Laws for easing the process of auctions of Mineral Blocks and mineral exploration. An online portal of Accreditation Scheme developed by Ministry of Mines through QCI-NABET for Exploration Agencies in Mineral Sector has also been launched during the Conclave.

Indian Bureau of Mines (IBM)

Besides IBM's core charter of functions, i.e. carrying out various field inspections, Ore Dressing investigations, some of the major achievements are;

- Union Minister of Coal, Mines and Parliamentary Affairs, inaugurated 5th National Conclave on Mines and Minerals-2021 on 23.11.2021 and felicitated 149 mines obtaining five star rating under star rating of Mines for the performance year 2017-18 to 2019-20.

- Mining Surveillance System (MSS) is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration by curbing instances of illegal mining activity through automatic remote sensing detection technology.
- Under Mining Tenement System, Modules of MTS Project viz. PMKK-KY, Registration and Daily Returns were already launched. Daily Return and Monthly Return are live to view and submit the returns.
- During the current year, Average Sale Price (ASP) for Minerals up to September, 2021 and of Metals up to October, 2021 have been hosted on IBM website.
- IBM has brought out important publications like Indian Minerals Year Book 2019 (vol. I to III), Half Yearly Bulletin on mineral Information for the period Oct.19 to Mar.20 & April 2020 to September, 2020 issues, Statistical Profiles of Minerals for the Year 2018-19 issue, Indian Mineral Industry at a Glance 2016-17 and 2017-18 issues, Bulletin on Mining Lease and Prospecting Licenses 2019 and Monthly Statistics of Mineral Production (MSMP) up to March 2020 issue to disseminate the technical data for interest of all stakeholders.
- As part of the capacity building of human resources, conducted 8 online training courses for IBM employees through VC-NIC wherein a total 292 IBM officials participated.
- During 2020-21, the IBM offices observed Swachhata Pakhwada during 16th-30th November 2020 in office premises as well in mining site areas, nearby villages and schools.
- Initiatives Towards Self-Reliance in Strategic Minerals.

→ Khanij Bidesh India Limited (KABIL)

Under the aegis of Ministry of Mines, a Joint Venture company namely the Khanij Bidesh India Ltd. (KABIL) of NALCO, HCL & MECL has been established. With the objective to ensure mineral security of the country, KABIL is mandated to identify & acquire overseas mineral assets of critical & strategic minerals so as to ensure supply side assurance of energy minerals – primarily the critical & strategic minerals such as Lithium, Cobalt & others.

It is foreseen that securing supply side assurance of the critical & strategic minerals such as Lithium, Cobalt etc. to start with will offer the intended impetus to the “Atma Nirbhar Bharat” initiative of Government of India and will cater to several sectors such as e-mobility, renewable energy, medicine, aerospace, aviation, etc.

National Aluminium Company Limited (NALCO)

Performance Highlights for FY 2020-21:

- Despite the adverse conditions prevailing due to Covid pandemic, NALCO's Net

Profit for FY 2020-21 has jumped by 840% to Rs.1299.53 crore compared to Rs.138 crore in FY2019-20.

- Achieved highest ever Bauxite production (73.65 Lakh tonne) since inception in FY 2020-21.
- Highest ever export metal sale of 1.92 lakh tonne achieved surpassing the previous best of 1.47 lakh tonne achieved decade back in 2009-10.

Hindustan Copper Limited (HCL)

Physical Performance Highlights for FY 2020-21:

- Total copper metal sales of the company were 32,997 tonne in 2020-21.
- Financial Performance Highlights for FY 2020-21:
- During 2020-21, the turnover of the Company was Rs.1760.84 crore as against Rs. 803.17 crore during FY 2019-20 registering an increase of 119%. The Profit/(Loss) After Tax from continuing & discontinuing operation during FY 2020-21 was Rs 109.98 crore.

Research & Development (R&D) Initiatives

Jawaharlal Nehru Aluminium Research Development & Design Centre (JNARDDC)

During 2021 JNARDDC was granted one patent for novel R&D process. Patent no. 340231 dated 02.07.2020 (Inventor – Dr Md Najar PA) for “Development of process for selective in-situ dissolution of alumina & silica bearing mineral phases in bauxite at room temperature for geo-analytical application”. The selective and self-sustained dissolution of alumina (Al₂O₃) and silica (SiO₂) bearing mineral phases in bauxite such as gibbsite and kaolinite at room temperature enable rapid determination of the mineral constituents both at the exploration site as well laboratory with comparable accuracy. The distinguished advantage of the process is its easy flexibility and portability to remote mining sites for quick assessment of bauxite and laterite samples and need of minimum infra-structural support.

-Source: india info line

Brazil's Vale sells coal assets to Jindal's Vulcan Minerals for \$270 mn

Vulcan is a private company and part of \$18-billion Naveen Jindal Group

Brazilian mining company Vale has entered into a binding agreement with Jindal's Vulcan Minerals to sell the Moatize coalmine (Mozambique) and the Nacala Logistics Corridor (straddling Mozambique and Malawi) at \$270 million.

Vulcan is a private company and part of \$18-billion Naveen Jindal Group. The deal comprises \$80 million, which Vale will receive immediately, followed by the balance \$190 million at the close of the transaction.

“I am pleased to announce this important step for the responsible divestment of Moatize and NLC (Nacala Logistics Corridor), in a transaction that benefits the communities and

governments where those operations are located and offering a sustainable future for the operations. This is another accomplishment on our commitment to reshape our company, focusing on our core businesses,” the release quoted Eduardo Bartolomeo, chief executive officer of Vale, as saying.

Alongside, there will also be a 10-year royalty agreement subject to certain conditions in mine production and coal prices. “The closing of the deal is expected to take time because many approvals are needed from local authorities,” said an industry source close to the development.

The transaction is subject to the approval of the Ministry of Mineral Resources and Energy of Mozambique, Vale said in its release.

The Moatize coalmine is one of the world's

biggest metallurgical and thermal coalmine sites and will help Jindal Steel become self-reliant in its coal supplies for its domestic steel operations. Metallurgical coal is used in making steel.

Currently, Jindal Steel sources nearly 60 per cent of its coking coal from Australia, some of its thermal coal comes from Mozambique, and the rest of the coking coal from the open market. There are, however, no details regarding funding arrangements. Calls made to Jindal Steel went unanswered.

In April 2021, Jindal Steel & Power (Mauritius), an arm of Naveen Jindal-led Jindal Steel & Power (JSPL), sold its balance stake in an Oman unit to Vulcan Steel. Jindal Steel owned 48.99 percent in the unit via

→ Jindal Steel & Power (Mauritius). The former had made the deal to exit the Oman business in September 2020.

Vale said it was committed to working with both the Mozambique and Malawi governments to ensure a smooth transition to the

new operator. In early 2021, Vale announced it would no longer own coal assets, and focus on its core businesses and on becoming a leader in low-carbon mining.

Over the past 15 years, Vale has worked in partnership with the Mozambique and Malawi

governments in working the Moatize mine and NLC's 912-km railway for coal transportation, in addition to the revamp of general cargo operations and passenger transportation.

-Source : Business Standard

Centre gets bids for Neelachal Ispat, sale moves to 'concluding stage'

The central government has accepted most demands made by potential buyers for the joint venture steel company.

The central government has received bids for the sale of Neelachal Ispat Nigam Ltd (NINL), marking the "concluding stage" for the strategic disinvestment of the state-owned steel company.

The Centre seeks to divest 93.7 per cent stake held by four central public sector enterprises (CPSE) and two Odisha government companies. CPSEs MMTC and NMDC own 49.78 per cent, and 10.10 per cent in NINL, respectively while MECON and Bharat Heavy Electricals hold 0.68 per cent each. Odisha government-owned Industrial Promotion and Investment Corporation of Odisha (IPICOL) and Odisha Mining Corporation (OMC) own 12 per cent and 20.47 per cent stake in NINL,

respectively.

For a successful sale of the stressed joint venture company, the central government has accepted most demands made by potential buyers.

These include lowering the lock-in period for sale of assets to one year and allowing the new buyer to undertake the amalgamation of a special purpose vehicle (SPV) into NINL. Last month, the core group of secretaries on divestment (CGD) headed by Cabinet Secretary Rajiv Gauba decided that the lock-in period for the buyer can be reduced to one year from the date of completion of sale, from the earlier three years proposed by Dipam. This would exclude land and mining leases. The lock-in restriction for the sale of land and mining leases would continue to be three years.

"...The process now moves to concluding

stage," Tuhin Kanta Pandey, Secretary in the Department of Investment and Public Asset Management, said on Twitter about bids for NINL.

The Centre has also agreed to the bidders' demand that some members of the consortium of buyers may just be financial investors and would not have a joint liability over dues.

The receipt of financial bids may help in closing the transaction in the ongoing financial year as targeted by the government. Besides Air India, the government is aiming to privatise BEML, Shipping Corporation of India (SCI), Pawan Hans, Central Electronics, and NINL this year.

-Source : Business Standard

Bihar govt to allow exploration of mineral reserves worth Rs 14,594 cr

The Bihar government is all set to grant permission for exploration of recently discovered mineral reserves of magnetite and glauconite worth Rs 14,594 crore in Jamui and Rohtas districts, an official said on Wednesday.

The Mines and Geology Department has decided to allow exploration of mineral deposit of around 48.40 million tonne of magnetite, a form of iron ore, in Majos block of Jamui district, according to a document, a copy of which was reviewed by PTI.

The resource is spread over a three-square kilometre area and tentatively valued at Rs 6,000 crore, it said.

The department will soon grant permission for exploration of around 130.11 million tonne of glauconite, a common source of potassium in fertilisers, in Pipradih and Chutia-Nauhatta blocks of Rohtas district.

The total estimated value of the mineral reserves is around Rs 8,594 crore, according to the document.



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

"Now, Bihar has sufficient mineral resources to boost its economy. We will soon grant permission for exploration of mineral deposits in Rohtas and Jamui districts. This will also help the state government create new employment opportunities," Principal Secretary-cum-Mines Commissioner Harjot Kaur Bamhrah told PTI.

The government has also decided to revive its Directorate of Geology under the Mines and Geology Department after the recent discovery of mineral reserves in the state.

The Geological Survey of India has already indicated deposit of other minerals in the state and the mines department is working on it, she said.

The decision to give permission for the exploration of mineral deposits in the two districts

was taken in a Joint Working Group (JWG) meeting held here on December 15, and GSI officials were present there.

The state department is also planning to sign an MoU with the Mineral Exploration Corporation Ltd to expedite such exercise in the state.

-Source : Business Standard

Govt offering up to 50% discount to commercial miners for coal gasification

As per the original auction methodology for commercial coal mining — approved by the Cabinet in May 2020 — miners were provided a 20% rebate on the agreed revenue share for using the fuel for gasification or liquefaction.

Companies winning coal blocks in the forthcoming auctions for commercial mining will be eligible to get as much as 50% discount on the revenue-share quoted by them during the bidding process if they earmark at least 10% of the fuel output for coal gasification or liquefaction projects.

As per the original auction methodology for commercial coal mining — approved by the Cabinet in May 2020 — miners were provided a 20% rebate on the agreed revenue share for using the fuel for gasification or liquefaction.

The higher incentive for coal gasification comes soon after a blueprint for the 'National Coal Gasification Mission' — prepared by the Union coal ministry — proposed a 15% methanol-blending target with petrol to encourage investments in the nascent sector. As FE recently reported, the ministry has also proposed massive tax waivers to incentivise coal gasification, which can lead to eco-friendly alternate

utility of the fuel abundantly available in the country.

Experts said that a typical gasification facility needs about \$2 billion of investment and can produce between 1 and 2 MT of methanol a year, and it is estimated that 5-6 MT of coal would be required to produce 2 MT of methanol. The coal auction methodology has been amended by the Centre on the recommendation of the empowered committee of secretaries.

"The aforesaid modification shall be applicable for ongoing and successive tranches of auction for sale of coal," the order issued by the coal ministry stated. Commercial coal mines are being auctioned off through the market-determined revenue share model that replaced the fixed fee/tonne regime.

The government launched the third tranche of commercial coal auctions on October 12, offering 88 mines with geological reserves of 55 billion tonnes and annual peak rated capacity of 282 million tonnes. As many as 48 coal mines in the list are "roll over" mines which could not find bidders in the previous two rounds of auctions.

The government had offered 67 blocks under the second round of auction in August for commercial mining, out of which only eight mines could be put up for final bidding.

In the maiden auction round under the commercial coal mining policy, held in November last year, as many as 19 mines out of the 38 offered could be auctioned off. Currently, the government is also working on the second round of bidding for 11 coal mines which had received only one bid in the second tranche of auction.

Prime Minister Narendra Modi had said in June 2020 that '20,000 crore will be invested in coal gasification projects by 2030 to utilise 100 million tonne of coal. Coal can be gasified to turn it into a cleaner syngas or synthesis gas—a mixture of hydrogen and carbon monoxide — which constitutes the basic building block of the chemical industry and can be converted into a wide range of downstream products such as methanol and olefins of which India is at present a net importer.

A recent Niti Aayog study has found out that methanol is much more economically competitive than ethanol when it comes to blending with gasoline.

-Source : Financial Express

2021 Review of Indian Mining Sector

Jan-21

1. MoC launched a unified single window clearance portal for coal mining in India
2. MECL, RSMML & DMG Rajasthan has signed tripartite agreement for mining Potash
3. CIL signed Rs. 2900 Cr for procurement of dumpers

Feb-21

1. CIL has signed MoU with EESL to improve operational efficiency & reduce carbon footprint
2. HZL signed pact with Epiroc for EVs in UG mines
3. Mining at NMDC's Donimalai Iron ore mine got resumed
4. Budget 2021 sees no major investment directly in mining sector

March-21

1. Revised SOP w.r.t NCI was published
2. MMDR Amendment Act, 2021
3. Minerals Concession (Second Amendment) Rules, 2021
4. 2nd Commercial Coal Tranche launched with 67 blocks
5. CIL approved 32 mining projects with Rs. 47000 Cr.

April-21

1. Minerals Concession (Second Amendment) Rules, 2021
2. HZL appoints women as UG mine managers
3. Aviation Ministry permits CMPDI to use drones for surveying CIL coal-fields
4. CIL firms up Rs. 40000 Cr. Domestic Coal evacuation plan
5. NALCO gets Utkal E Coal Mining Lease

May-21

1. CIL has incorporated CIL Solar PV Ltd. & CIL Navikarniya Urja Ltd. foraying into renewable energy sector
2. MoC has framed policy of handling & disposal of washery rejects
3. MoC has undertaken Systemic Improvements w.r.t Geo-referencing as a tool for detecting and stopping illegal mining

June-21

1. Minerals (Evidence of Mineral Contents) Amendment Rules, 2021
2. Mineral (Auction) Second Amendment Rules, 2021
3. MoC submitted proposal to club all the spot coal e-auctions for regulated & nonregulated sectors

July-21

1. MOIL signed pact with MP State Govt & MPS-MCL to explore domestic manganese ore reserves
2. MoM notifies all the states government with an order against utilisation of DMF
3. CIL will replace diesel operated vehicles with LNG and 1500+ EVs will be used in next 5 years by 2026

Aug-21

1. India & Russia signed MoU for sourcing of coking coal for growth of Indian Steel
2. Only 8 Coal Blocks out of 67 were successfully auctioned in 2nd Tranche
3. CIL frames roadmap to produce sand from OB
4. Govt. identified 160 Coal mining assets Rs. 28000 Cr. for monetization
5. Coal Crises - Coal stocks at Indian power plant started depleting

Sep-21

1. Directions under Section 20A of the MMDR Act State Govt. to provide data on minor minerals to IBM
2. GSI delineates 100 G4 explored blocks to respective states for auctioning
3. MoC publishes Mission Document on National Coal Gasification Mission

Oct-21

1. 9 No. of Iron ore mineral blocks of Odisha got auctioned
2. 3rd Commercial Coal auctions launched with 88 blocks
3. Mineral Conservation and Development (Amendment) Rules, 2021
4. Review of production of 40 captive coal mines under CMSP undertaken by MoC

Nov-21

1. Minerals Concession (Fourth Amendment) Rules, 2021
2. Mineral (Auction) Third Amendment Rules, 2021
3. Rescission of the Mineral (Mining by Government Company) Rules, 2015
4. Approach Paper on National Mineral Index (NMI) Published

Dec-21

1. Minerals (Evidence of Mineral Contents) Second Amendment Rules, 2021
2. Mineral (Auction) Fourth Amendment Rules, 2021
3. Only 53 bids were received for 20 coal blocks in 3rd Tranche
4. 4th Commercial Coal Tranche launched with 99 blocks

Source- Abhinav Sengupta | MBA in Energy & Infrastructure & B.Tech in Mining & Executive Diploma in Business Valuation | Email : abhinavsengupta85@gmail.com | Phone : +919016047552

4th Tranche of Auction for Commercial Mining of Coal – Technical Details (99 Coal Mines)

#	Name of Coal Mine/Block	State	Coalfield	Area (Sq.Km)	Exploration on Category	Exploration Status (G1/G2/G3)	Mine Plan available	Geological Resource (MT)	PRC /Tentative Mine Capacity (MTPA), NotAssessed- NA	Coal Type	Mine Type (OC/UG/Mixed), Not Assessed-NA	CMSP/ MMDR	Tranche 1st /2nd 3rd 4th (New)	Grade	Representative Price (Rs./Tonnes)	Upfront Amount / Estimated Exploration Expense (Rs. In Cr.)	Bid Security (Rs. In Cr.)	Fixed Amount (Rs. In Cr.)
1	Chintalpudi Sector A1	Andhra Pradesh	Pranhita Godavari Valley	12.00	Explored	G1	No	867.73	0.5	Non-Coking	UG	MMDR	1st /2nd	G12	2481	500.00	100.00	137.64
2	Somavaram West	Andhra Pradesh	Pranhita Godavari Valley	15.10	Explored	G1	No	97.10	1	Non-Coking	UG	MMDR	1st /2nd	G13	1650	40.05	8.01	46.58
3	Mandar Parvat	Bihar	Rajmahal	13.10	Explored	G1	No	340.35	17.5	Non-Coking	OC	MMDR	4th New	G12	2481	211.10	42.22	20.25
4	Gare Palma IV/6	Chhattisgarh	Mand Raigarh	3.81	Explored	G1	Yes	166.98	4	Non-Coking	OC	CMSP	4th New	G10	2498	100.00	20.00	3.56
5	Dolesara	Chhattisgarh	Mand-Raigarh	15.20	Explored	G1	No	622.70	1.74	Non-Coking	UG	MMDR	1st /2nd	G12	2481	386.23	77.25	79.78
6	Eastern Part of Gorhi-Mahaloi	Chhattisgarh	Mand-Raigarh	23.50	Explored	G1	No	800.88	1.74	Non-Coking	UG	MMDR	1st /2nd	G13	1650	330.36	66.07	86.90
7	Jarekela	Chhattisgarh	Mand-Raigarh	19.10	Explored	G1	No	610.66	1.74	Non-Coking	UG	MMDR	1st /2nd	G12	2481	378.76	75.75	124.47
8	Jharpalam Thangarghat	Chhattisgarh	Mand-Raigarh	13.30	Explored	G1	No	788.40	1.74	Non-Coking	UG	MMDR	1st /2nd	G12	2481	489.01	97.80	60.19
9	Meghuli	Chhattisgarh	Tatapani-Ramkola	10.90	Explored	G1	No	316.40	4	Non-Coking	OC	MMDR	1st /2nd	G11	1898	150.13	30.03	31.65
10	Western Part of Gorhi-Mahaloi	Chhattisgarh	Mand-Raigarh	20.30	Explored	G1	No	585.00	1.74	Non-Coking	UG	MMDR	1st /2nd	G12	2481	362.85	72.57	124.81
11	Datima	Chhattisgarh	Bisrampur	8.08	Explored	G1	No	13.30	0.36	Non-Coking	UG	CMSP	1st /2nd	G7	3236	10.76	2.15	11.62
12	Sondhia	Chhattisgarh	Tatapani Ramkola	10.70	Explored	G1	Yes	50.18	1	Non-Coking	Mixed	CMSP	3rd	G10	2498	31.34	6.27	5.42
13	Shankarpur Bhatgaon II Extn	Chhattisgarh	Bisrampur	33.77	Explored	G1	Yes	80.64	2	Non-Coking	Mixed	CMSP		G6	6279	100.00	20.00	11.20
14	Panchbahani	Chhattisgarh	Hasdeo-Arand	11.79	Partially Explored	G3	No	11.00	NA	Non-Coking	UG	CMSP	1st /2nd	G7	3236	8.79	2.20	2.63
15	Kartala	Chhattisgarh	Mand Raigarh	21.30	Partially Explored	G2	No	1050.00	NA	Non-Coking	NA	MMDR	4th New	G12	2481	133.37	33.34	33.88
16	Barapara	Chhattisgarh	Bisrampur	57.10	Partially Explored	G2	No	20.00	NA	Non-Coking	NA	MMDR	1st /2nd	G11	1898	52.56	13.14	5.17
17	Ghutra	Chhattisgarh	Sonhat	3.90	Partially Explored	G3	No	95.00	NA	Non-Coking	NA	MMDR	1st /2nd	G11	1898	9.86	2.46	1.33
18	Pipraul	Chhattisgarh	Tatapani- Ramkola	9.40	Partially Explored	G3	No	256.33	NA	Non-Coking	NA	MMDR	1st /2nd	G8	3013	54.75	13.69	8.32
19	Dharampur	Chhattisgarh	Bisrampur	51.70	Partially Explored	G2	No	45.00	NA	Non-Coking	NA	MMDR	1st /2nd	G9	2625	52.01	13.00	6.24
20	Ramnagar	Chhattisgarh	Mand- Raigarh	9.36	Partially Explored	G3	No	600.00	NA	Non-Coking	NA	MMDR		G10	2498	60.23	15.06	5.00
21	Reonti	Chhattisgarh	Tatapani- Ramkola	17.01	Partially Explored	G2	No	478.58	NA	Non-Coking	NA	MMDR	4th New	G10	2498	15.06	3.76	142.53
22	Sursa	Chhattisgarh	Tatapani Ramkola	11.53	Partially Explored	G2	No	72.55	NA	Non-Coking	NA	MMDR	4th New	G7	3236	7.89	1.97	74.72
23	Sonhat Block A	Chhattisgarh	Sonhat	28.40	Partially Explored	G3	No	320.00	NA	Non-Coking	NA	MMDR	4th New	G9	2625	50.04	12.51	5.14
24	Chitarpur	Jharkhand	North Karanpura	5.60	Explored	G1	Yes	222.44	3.45	Non-Coking	Mixed	CMSP	1st /2nd	G13	1650	91.76	18.35	118.77
25	North Dhadu	Jharkhand	North Karanpura	11.33	Explored	G1	Yes	923.94	8.15	Non-Coking	OC	CMSP	1st /2nd	G12	2481	500.00	100.00	11.08
26	Mahuamilan	Jharkhand	North Karanpura	10.99	Explored	G1	No	101.24	3.23	Non-Coking	Mixed	MMDR	4th New	G12	2481	62.79	12.56	28.15
27	Pirpanti Barahat	Jharkhand	Rajmahal	18.83	Explored	G1	No	798.56	25	Non-Coking	OC	MMDR	4th New	G12	2481	495.31	99.06	33.00
28	Dhulia North	Jharkhand	Rajmahal	18.10	Explored	G1	No	1181.25	14	Non-Coking	OC	MMDR	1st /2nd	G12	2481	500.00	100.00	44.09
29	Rabodih OCP	Jharkhand	West Bokaro	5.85	Explored	G1	No	133.17	2.5	Coking & Non-Ckoking	NA	CMSP	4th New	W-IV &G10	3514	100.00	20.00	14.24
30	Seregarha	Jharkhand	North Karanpura	3.70	Explored	G1	No	187.29	4	Non-Coking	OC	CMSP	3rd	G13	1650	77.26	15.45	4.38
31	Sitanala	Jharkhand	Jharia	3.20	Explored	G1	Yes	108.85	0.3	Coking	UG	CMSP	3rd	W-II	4899	100.00	20.00	10.32
32	Choritand Tiliaya	Jharkhand	West Bokaro	2.49	Explored	G1	Yes	97.04	0.78	Coking	NA	CMSP		WV	2625	63.68	12.74	8.56
33	Patal East	Jharkhand	South Karanpura	12.43	Explored	G1	Yes	129.77	2.5	Non-Coking	OC	CMSP	4th New	G10	2498	81.04	16.21	20.48
34	Barwatoli	Jharkhand	North Karanpura	33.23	Partially Explored	G3	No	1900.00	NA	Non-Coking	NA	MMDR	3rd	G12	2481	134.30	33.58	0.75
35	Binja	Jharkhand	South Karanpura	1.30	Partially Explored	G3	No	50.00	NA	Non-Coking	NA	MMDR	1st /2nd	G9	2625	9.20	2.30	1.07
36	Dighi Dharampur North	Jharkhand	Rajmahal	28.74	Partially Explored	G4	No	4100.00	NA	Non-Coking	NA	MMDR	3rd	G11	1898	163.70	40.93	0.07

#	Name of Coal Mine/Block	State	Coalfield	Area (Sq.Km)	Exploration on Category	Exploration Status (G1/G2/G3)	Mine Plan available	Geological Resource (MT)	PRC /Tentative Mine Capacity (MTPA), NotAssessed- NA	Coal Type	Mine Type (OC/UG/Mixed), Not Assessed-NA	CMSR / MMDR	Tranche 1st /2nd 3rd 4th (New)	Grade	Representative Price (Rs./Tonnes)	Upfront Amount / Estimated Exploration Expense (Rs. In Cr.)	Bid Security (Rs. In Cr.)	Fixed Amount (Rs. In Cr.)
37	Dighi Dharampur South	Jharkhand	Rajmahal	33.13	Partially Explored	G4	No	2900.00	NA	Non-Coking	NA	MMDR	3rd	G11	1898	188.61	47.15	0.07
38	Gawa	Jharkhand	Auranga	14.80	Partially Explored	G3	No	51.50	NA	Non-Coking	NA	MMDR	1st /2nd	G11	1898	21.90	5.48	2.83
39	Gomarpahari Siulibana	Jharkhand	Brahmani	23.32	Partially Explored	G2	No	1900.00	NA	Non-Coking	NA	MMDR	3rd	G9	2625	78.82	19.70	6.05
40	Mausingha	Jharkhand	North Karanpura	41.50	Partially Explored	G3	No	2500.00	NA	Non-Coking	NA	MMDR	3rd	G12	2481	267.07	66.77	0.82
41	Jainagar	Jharkhand	South Karanpura	1.30	Partially Explored	G2	No	77.52	NA	Non-Coking	Mixed	CMSR	1st /2nd	G7	3236	4.05	1.01	4.21
42	Latehar	Jharkhand	Auranga	10.43	Partially Explored	G2	No	22.04	NA	Non-Coking	OC	CMSR	1st /2nd	G11	1898	30.33	7.58	6.82
43	Rawanwara North	Madhya Pradesh	Pench-Kanhan	16.42	Explored	G1	No	177.07	1.26	Non-Coking	UG	CMSR	1st /2nd	G6	6276	100.00	20.00	34.26
44	Gondbahera Ujheni	Madhya Pradesh	Singrauli	20.40	Explored	G1	Yes	672.90	4.12	Non-Coking	Mixed	MMDR	1st /2nd	G10	2498	420.23	84.05	97.29
45	Jamui	Madhya Pradesh	Sohagpur	14.70	Explored	G1	Yes	208.47	1	Non-Coking	UG	MMDR	1st /2nd	G9	2625	136.81	27.36	64.79
46	Dongeri Tal-II	Madhya Pradesh	Singrauli	30.05	Explored	G1	Yes	158.45	2.9	Non-Coking	OC	CMSR	4th New	G7	3236	100.00	20.00	5.61
47	Mandla North	Madhya Pradesh	Pench Kanhan Valley	10.30	Explored	G1	Yes	195.38	1.5	Non-Coking	UG	CMSR	3rd	G7	3236	100.00	20.00	10.16
48	Mandla-South	Madhya Pradesh	Pench Kanhan Valley	5.93	Explored	G1	Yes	80.40	0.3	Non-Coking	UG	CMSR	3rd	G7	3236	65.04	13.01	22.70
49	Chainpa	Madhya Pradesh	Sohagpur	16.93	Explored	G1	No	228.00	1	Non-Coking	UG	MMDR	4th New	G9	2625	149.63	29.93	85.27
50	Marwatola Sector VI & VII	Madhya Pradesh	Sohagpur	22.17	Explored	G1	Yes	267.65	4	Non-Coking	OC	MMDR	3rd	G9	2625	175.65	35.13	35.01
51	Sarai East	Madhya Pradesh	Singrauli	18.89	Partially Explored	G2	No	237.08	NA	Non-Coking	NA	MMDR	4th New	G8	3013	76.65	19.16	33.13
52	Nigwani Bakeli -A	Madhya Pradesh	Sohagpur	28.30	Partially Explored	G3	No	300.00	NA	Non-Coking	NA	MMDR	4th New	G8	3013	136.88	34.22	16.10
53	Barimahuli	Madhya Pradesh	Singrauli	14.30	Partially Explored	G2	No	116.20	NA	Non-Coking	NA	MMDR	1st /2nd	G11	1898	60.88	15.22	17.00
54	Chopna Shaktigarh	Madhya Pradesh	Pench-Kanhan	42.00	Partially Explored	G3	No	440.00	NA	Coking	NA	MMDR	1st /2nd	W-III & G14	3692	194.45	48.61	1.71
55	Maiki South	Madhya Pradesh	Sohagpur	12.50	Partially Explored	G3	No	88.20	NA	Non-Coking	NA	MMDR	1st /2nd	G7	3236	71.18	17.79	6.76
56	Rajathari South	Madhya Pradesh	Pench-Kanhan	10.50	Partially Explored	G3	No	197.00	NA	Non-Coking	NA	MMDR	1st /2nd	G7	3236	44.90	11.22	5.04
57	Merkhi West	Madhya Pradesh	Sohagpur	24.10	Partially Explored	G3	No	100.00	NA	Non-Coking	NA	MMDR	1st /2nd	G6	6276	109.50	27.38	6.29
58	Pathakhuri Piparia	Madhya Pradesh	Pench Kanhan Valley	9.11	Explored	G1	No	154.49	0.5	Non-Coking	UG	MMDR	4th New	G7	3236	100.00	20.00	42.99
59	Rajathari Pathakhuri West	Madhya Pradesh	Pench-Kanhan	28.42	Partially Explored	G3	No	500.00	NA	Non-Coking	NA	MMDR	4th New	G7	3236	92.42	23.10	1.03
60	Arjuni	Madhya Pradesh	Sohagpur	19.78	Partially Explored	G2	No	242.00	NA	Non-Coking	NA	MMDR	4th New	G7	3236	25.19	6.30	49.74
61	Khappa & Extn	Maharashtra	Kamptee	6.50	Explored	G1	Yes	89.21	0.3	Non-Coking	UG	CMSR	1st /2nd	G8	3013	67.20	13.44	15.92
62	Dahegaon Dhapewada & Tondakhairi Khandala Combined	Maharashtra	Kamptee	40.50	Explored	G1	No	421.58	2.01	Non-Coking	UG	MMDR	1st /2nd	G8	3013	317.56	63.51	104.41
63	Kosar Dongergaon	Maharashtra	Wardha Valley	4.5	Explored	G1	Yes	22.61	0.3	Non-Coking	UG	CMSR	4th New	G10	2498	14.12	2.82	0.74
64	Chinora	Maharashtra	Wardha Valley	2.6	Explored	G1	Yes	17.85	0.26	Non-Coking	Mixed	CMSR	4th New	G9	2625	11.71	2.34	6.23
65	Marki Mangli-IV	Maharashtra	Wardha Valley	2.04	Explored	G1	Yes	3.42	0.2	Non-Coking	OC	CMSR	4th New	G8	3013	2.58	0.52	0.17
66	Dahegaon/Makar dhokra-IV	Maharashtra	Umrer	6.59	Explored	G1	No	121.00	1.5	Non-Coking	UG	CMSR		G8	3013	91.14	18.23	1.61
67	Hingna Bazargaon	Maharashtra	Kamptee	37.90	Partially Explored	G3	No	180.00	NA	Non-Coking	NA	MMDR	1st /2nd	G8	3013	184.64	46.16	5.36
68	Kalambi Kalmeshwar	Maharashtra	Kamptee	14.40	Partially Explored	G3	No	97.46	NA	Non-Coking	NA	MMDR	1st /2nd	G7	3236	46.00	11.50	18.15
69	North West of Madheri	Maharashtra	WardhaValley	36.61	Partially Explored		No	200.00	NA	Non-Coking	NA	MMDR	4th New	G10	2498	43.03	10.76	11.85
70	North of Arkhupal Odisha Srirampur	Odisha	Talcher	19.46	Explored	G1	No	1805.89	15	Non-Coking	OC	CMSR	3rd (New)	G13	1650	500.00	100.00	77.63
71	Nuagaon Telisahi Odisha	Odisha	Talcher	15.40	Explored	G1	No	904.60	20	Non-Coking	OC	CMSR	1st /2nd	G11	1898	429.23	85.85	38.72

#	Name of Coal Mine/Block	State	Coalfield	Area (Sq.Km)	Exploration on Category	Exploration Status (G1/G2/G3)	Mine Plan available	Geological Resource (MT)	PRC /Tentative Mine Capacity (MTPA), NotAssessed- NA	Coal Type	Mine Type (OC/UG/Mixed), Not Assessed-NA	CMSP / MMD R	Tranche 1st /2nd 3rd 4th (New)	Grade	Representative Price (Rs./Tonnes)	Upfront Amount / Estimated Exploration Expense (Rs. In Cr.)	Bid Security (Rs. In Cr.)	Fixed Amount (Rs. In Cr.)
72	Mandakini B	Odisha	Talcher	20.70	Explored	G1	Yes	2040.36	20	Non-Coking	OC	CMSP	3rd (New)	G11	1898	500.00	100.00	71.74
73	Ramchandi Promotion Block	Odisha	Talcher	12.39	Partially Explored	G2	No	1500.00	NA	Non-Coking	NA	CMSP	1st /2nd	G13	1650	1.64	0.41	40.55
74	Kardabahal- Brahmanbil	Odisha	Talcher	9.90	Explored	G1	No	1066.60	10	Non-Coking	OC	MMD R	1st /2nd	G12	2481	500.00	100.00	37.28
75	Kosala West	Odisha	Talcher	7.30	Explored	G1	No	1599.90	2	Non-Coking	UG	MMD R	1st /2nd	G12	2481	500.00	100.00	44.73
76	Phuljhari East & West	Odisha	Talcher	9.40	Explored	G1	No	2210.80	10	Non-Coking	OC	MMD R	1st /2nd	G13	1650	500.00	100.00	29.00
77	Saradhapur North	Odisha	Talcher	8.30	Explored	G1	No	1116.39	6	Non-Coking	OC	MMD R	1st /2nd	G13	1650	460.51	92.10	48.17
78	Tentuloi	Odisha	Talcher	8.60	Explored	G1	No	1730.20	8	Non-Coking	OC	MMD R	1st /2nd	G13	1650	500.00	100.00	44.47
79	Burapahar	Odisha	Ib Valley	6.06	Explored	G1	No	547.89	6	Non-Coking	OC	MMD R		G12	2481	339.83	67.97	21.90
80	Bartap	Odisha	Ib Valley	13.60	Partially Explored	G3	No	2500.00	NA	Non-Coking	NA	MMD R	1st /2nd	G11	1898	60.43	15.11	10.23
81	Dip Side of Chatabar	Odisha	Ib Valley	22.70	Partially Explored	G3	No	2500.00	NA	Non-Coking	NA	MMD R	1st /2nd	G12	2481	64.61	16.15	12.51
82	Alaknanda	Odisha	Talcher	11.02	Partially Explored	G3	No	500.00	NA	Non-Coking	NA	MMD R		G10	2498	32.99	8.25	3.65
83	Dip Extn of Belpahar	Odisha	Ib Valley	17.40	Partially Explored	G3	No	2500.00	NA	Non-Coking	NA	MMD R		G10	2498	37.23	9.31	20.99
84	Jadunathpur	Odisha	Talcher	12.11	Partially Explored	G2	No	470.00	NA	Non-Coking	NA	MMD R	4th New	G10	2498	14.24	3.56	25.13
85	Kalyan Khani Block-6	Telangana	Godavari Valley	3.71	Explored	G1	No	71.87	1.23	Non-Coking	UG	MMD R	3rd	G10	2498	44.88	8.98	29.08
86	Sattupalli Block- III	Telangana	Godavari Valley	2.44	Explored	G1	No	69.65	4	Non-Coking	OC	MMD R	3rd	G11	1898	33.05	6.61	12.06
87	Shravanapalli	Telangana	Godavari Valley	18.63	Explored	G1	No	219.59	2.3	Non-Coking	OC	MMD R	3rd	G10	2498	137.13	27.43	41.00
88	Salbhadra- Gomarpahari	West Bengal	Birbhum	9.17	Explored	G1	No	599.50	8	Non-Coking	OC	MMD R	3rd	G10	2498	374.39	74.88	37.13
89	Dhobanpur	West Bengal	Birbhum	18.87	Partially Explored	G2	No	66.90	NA	Non-Coking	NA	MMD R	3rd	G11	1898	49.28	12.32	7.37
90	Kapasdanga-Bharkata	West Bengal	Birbhum	12.02	Partially Explored	G2	No	922.00	NA	Non-Coking	NA	MMD R	3rd	G8	3013	55.85	13.96	5.46
91	Makhumnagar	West Bengal	Birbhum	23.35	Partially Explored	G2	No	403.60	NA	Non-Coking	NA	MMD R	3rd	G9	2625	105.12	26.28	7.47
92	Chendipada	Odisha	Talcher	8.16	Explored	G1	No	1908.08	40	Non-Coking	OC	CMSP	3rd	G10	2498	500.00	100.00	65.10
93	Chendipada-II																	
94	Machakata	Odisha	Talcher	51.82	Explored	G1	Yes	3394.17	30	Non-Coking	OC	CMSP	1st /2nd	G11	1898	500.00	100.00	47.05
95	Mahanadi																	
96	Rampia	Odisha	IB Valley	12.70	Explored	G1	No	1177.77	15	Non-Coking	OC	CMSP	3rd	G12	2481	500.00	100.00	28.02
97	Dip Side of Rampia																	
98	Utkal B1	Odisha	Talcher	3.90	Explored	G1	Yes	347.08	8	Non-Coking	OC	CMSP	4th New	G12	2481	215.28	43.06	9.14
99	Utkal B2																	

Source - S N Chawla, Email: sn_chawla@yahoo.com

SWASTHA

A GEMCOKATI EMPLOYEES INITIATIVE

Resolutions: Most important things for a meaningful journey into New Year.

A very well known fact: More than half of the people who make New Year's resolutions give up on them by June. Get ready to join the 50% who will succeed in achieving it in 2022.

Let us follow these three research-based strategies for making resolutions that stick.

1. Making resolution a habit and not a goal.

Behaviors that are very simple, become habits, by following ritualistically and that helps in achieving our goals and fulfilling resolutions than compared to lofty goals.

To make something into a habit, there needs to be something else that triggers the new behavior--a regular, uniform stimulus that tells you its time to perform this behavior. For example -An alarm in your phone that shows the message to give it rest 1 hour before you go to bed, just like you need rest and be energized, prior to get ready for the next day.

2. Giving self a reward into the actual behavior, rather than holding out until you've achieved some distant goal.

As human beings we always say that we are in pursuit of happiness, but actually what we

tend to pursue is a reward. Anything that we might desire could count as a reward: a healthy delightful drink, a low carb dessert, getting a gentle massage before sleep, if we have such a luxury, etc.

The moment our brains identify a potential reward, they release dopamine, a feel-good chemical messenger that motivates us towards the reward, in return of the action required.

3. Being prepared for any uncertainty.

You have to be some sort of a superhero, then only you will be able to get into this new habit perfectly the first time. You're bound to trip and fall and really screw yourself up. Research indicates that as a human being, 100 percent of people starting a new habit lapse at some point. To stumble is a normal part of the process. It doesn't matter if you have a lapse, or even a relapse, as much as it matters the way you respond to that lapse.

At the end everyone needs to understand that, even with the best laid plans, lapses are still going to happen--probably over and over again. In those cases, what's important is that you don't beat yourself up for your lack of willpower but instead try to practice "self-compassion ." When we practice self-compassion, we recognize that everyone



makes mistakes and falls short of their expectations for themselves at one time or another--in fact, our shortcomings are what bind us to the rest of our fellow humans.

When we treat ourselves with self-compassion--we extend the same kind of understanding and kindness to a friend or fellow human who makes a mistake, thus they are more likely to bounce back from a failure and stay on track to meet their goals.

New Year resolutions are a fantastic opportunity to develop new behaviors that really can make us happier, healthier, and more successful in 2022. The key is knowing ways to make resolutions that stick.

Everyone needs to do a little reality check. Setting unrealistic resolutions is a sure path to failure.

That's it! If you are now aiming for a target that is specific, realistic, and inherently rewarding, you are truly apt to go ahead.

About Author:

Dr. Majo Joseph

Dr. Majo Joseph is an Ayurveda Consultant, & General Practitioner. He is also a Psychology And Counselling, Wellness Trainer.

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