



ENVIRONMENTAL CLEARANCES

OF COAL MINES IN INDIA
2019-2021

India has become the second largest coal consumer in the world in 2020 (IEA 2021). China and India, account for two-thirds of global coal consumption, despite their notion to increase renewables and other low-carbon energy sources (IEA 2021). Per International Energy Agency's recent assessment India's growing appetite for coal is set to add 130 million tonnes (MT) of coal demand between 2021 and 2024 as India is yet to develop alternative technologies that can replace industrial use of coal in the short term. Coal consumption in India has been increased by 13.4% in the year 2021 as compared to 2020 (IEA 2021). According to the website of Ministry of Power, Government of India, almost sixty percent power is still generated from fossil fuel. Coal fired power generation accounts for 51.6% of total generation which is 203900 megawatt (MoP 2022) In the backdrop of several negative

impact of coal mining on environment and human health, India's dependence on coal in such a huge degree is a matter of concern. It is important to track the process and the trend of coal productions in India as the exercise might be crucial in formulating necessary advocacy action.

The Process

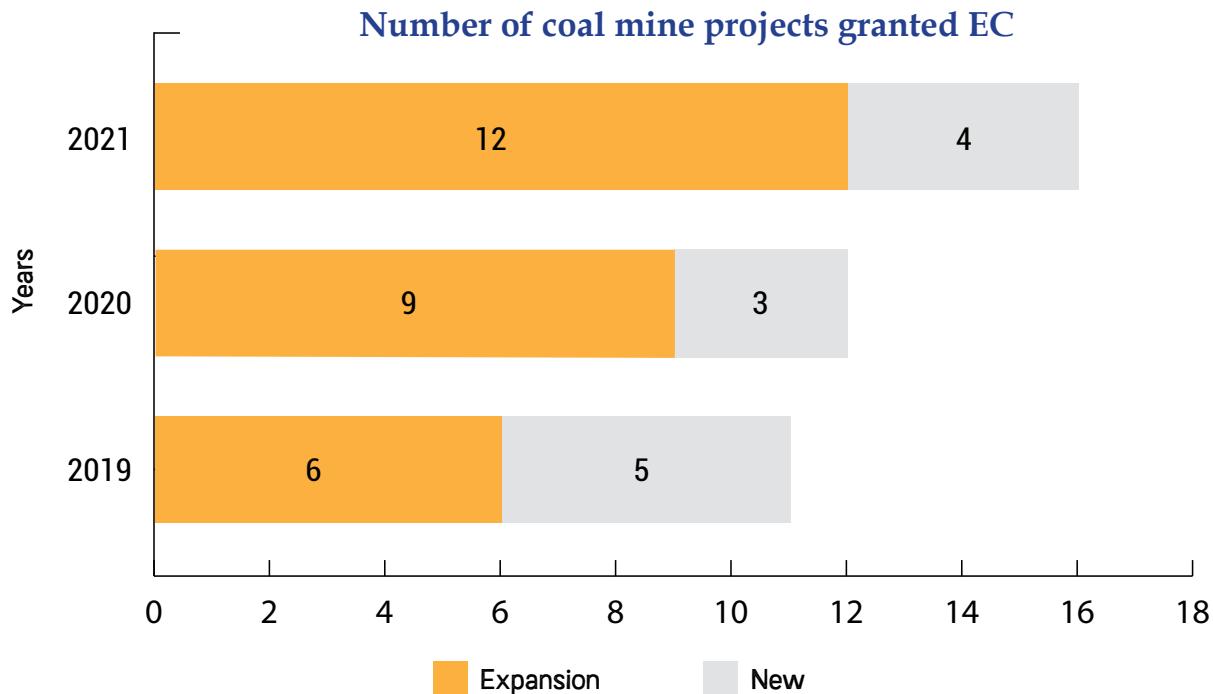
All new and expansion coal mines projects require prior Environmental Clearance (EC) from the Ministry of Environment, Forest and Climate Change, Government of India under the provisions of the Environment Impact Assessment Notification, 2006 (EIA Notification). In addition to prior Environmental Clearance, the projects also require "Consent to Establish and Operate" under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974. Forest clearance under provision of the Forest (Conservation) Act, 1980 is also mandatory for any coal mining project if it requires diversion of forest land for non-forestry purpose.

Analysis of Environmental Clearance provides a fair idea about addition of coal production capacity in India as the approval are dependent on the grant or rejection of environmental clearance to the projects. Thus, this analysis states the number of clearances granted to assess if capacities of coal mines have increased, decreased, or stayed constant over time. This report highlights the analysis for environment clearance granted to coal mining projects in terms of number and production capacity along with new forest and non-forest area involved in these coal mine projects in past three years i.e., 2019 to 2021.

Environmental Clearances granted in 2019-2021

During 2019-2021 a total of 39 Environment Clearances have been granted for coal mining. Total number of projects which involves increase in production capacity/area use and has been granted Environmental clearance in 2019 and 2020 were 11 and 12 respectively. Whereas in 2021 total 16¹ projects have been granted EC. Over the past three years the shares of fresh and expansion project have changed- in 2020 and 2021 more expansion projects has been granted clearance as compared to 2019. This could be the result of Office Memorandums (OMs) issued for the One Time Capacity Expansion (OTCE)² and others to accelerate the coal production in the country. The distribution of expansion and fresh projects in last three years is presented in the Graph 1.

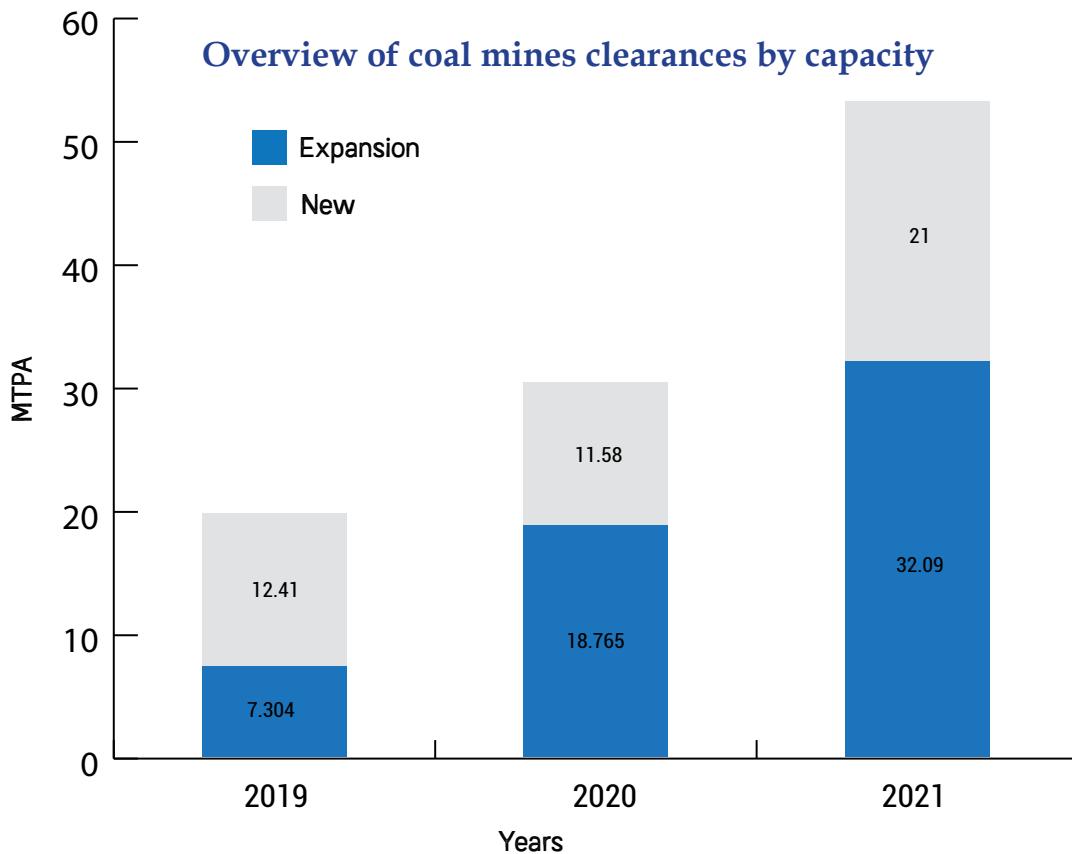
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1. Excluding Venkatesh Khani No.- 7 Inclineis UG mine of 0.843 MTPA capacity in 580.2 ha area. The mine started in the year 1954 and operating at a capacity of 0.843 MTPA (1993-94 Base level) without EC. The present proposal is for obtaining EC under violation Category, as per MoEF&CC Notification, SO No. 804(E), Dated 14th March 2017.
 2. The Hon'ble National Green Tribunal in S.P. Muthuraman versus Union of India & Others, 2015 held that the notification (Environment Clearance Notification, 2006) mandates the requirement of 'prior environmental clearance' without exception. But the entire mandate of prior environmental clearance (EC) has not only been diluted but completely rendered infructuous or ineffective by issuance of these impugned office memorandums. The office memorandums stated to be 'guidelines' are potently destructive of the 2006 notification.

Graph 1: Number of coal mine projects granted environmental clearances in 2019-2021

Overview of increase in capacity

The analysis of grant of prior Environmental Clearance grants shows an increasing trend in production capacity from 2019 to 2021. Total addition of 103.149 MTPA capacity has been recorded in last 3 years. In the Year 2020, the prior approval in terms of production capacity, almost 50% (10 MTPA) increase has been noticed as compared to 2019 (20 MTPA). Similarly, almost 75% (23 MTPA) increase has been observed in 2021 as compared to 2020 (30 MTPA).

When the projects type was analysed, it has been observed that ratio of capacity between fresh projects and expansion projects has decreased in the year 2020 and 2021 as compared to the year 2019. This means that more expansion projects have been granted Environmental Clearance in 2020 and 2021 as compared to 2019. In 2019 there were six projects which only had capacity expansion (total 7.304 MTPA) and involved no area expansion. In 2020, five such projects of total 13.64 MTPA capacity expansion were granted clearance. Similarly in 2021 seven such project has been granted EC which will add up 18.89 MTPA of production capacity.

Graph 2: Total capacities of coal mines granted clearances in 2019 to 2021.

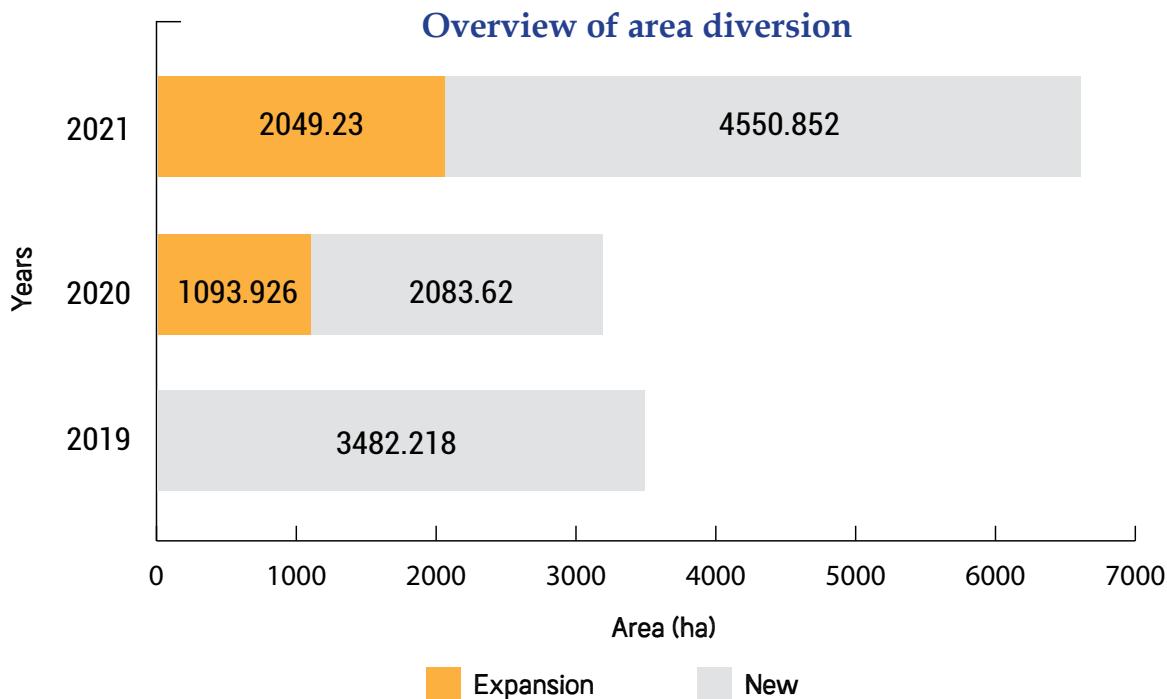
Overview of area diversion

The area diverted for coal mining in the last three years is as follows:

Table 1: Year-wise new land area diverted for Fresh and Expansion Projects.

Year	Land Area (in Ha)		
	Total	Fresh Project	Expansion Project
2019	3483.218	3483.218	
2020	3177.546	2083.62	1093.926
2021	6600.082	4550.852	2049.23
Total	13260.846	10117.69	3143.156

However, Land area diversion in 2021 for Fresh Project includes 1397.18 ha land in the Cluster XVII including Kalyaneshwari OC coal mining project of BCCL which is a new project over old mine leasehold taken through nationalization and re-allocation block.

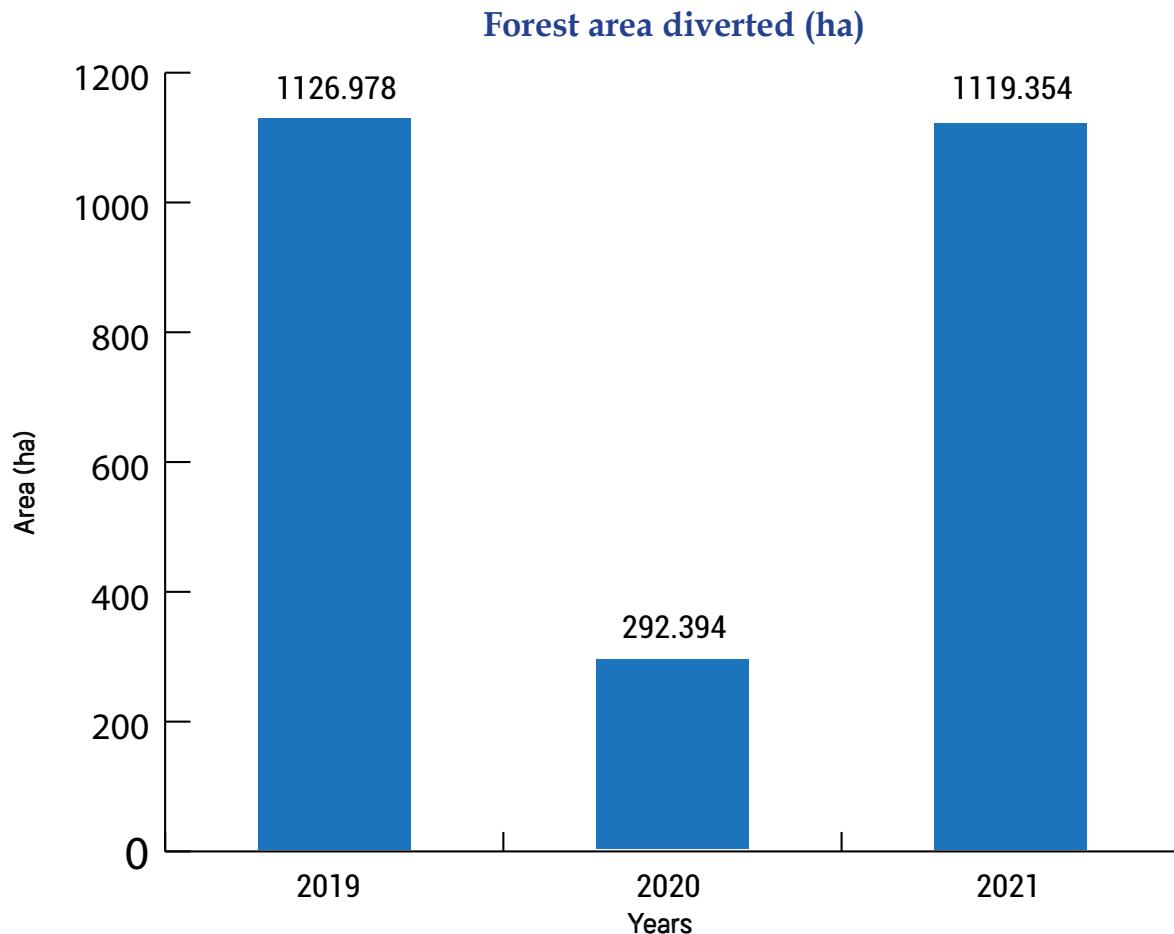
Graph 3: Total area diverted for coal mine projects in 2019-2021

Out of the total 10117.69 ha fresh land area diverted for coal mining projects in the past three years, the forest area accounts for 2538.726 ha the details of whose diversion per year is given in the Table 2.

Table 2: Share of forest land diverted for coal mine projects in 2019 and 2021

Year	Land Area (in Ha)			% of Forest Area
	Total	Non-Forest	Forest	
2019	3483.218	2356.24	1126.978	32.35
2020	2083.62	1791.226	292.394	14.03
2021	4550.852	3431.498	1119.354	24.6
Total	10117.69	7578.964	2538.726	25.09

The total forest area diverted in 2019 to 2021 in all fresh and area expansion projects is as follows:

Graph 4: Total Forest area diverted for coal mine projects in 2019-2021

From the graph it can be seen that the forest area diversion has decreased in 2020 with respect to the year 2019 and again increased in 2021. When compared to forest land diverted in 2020, it was found that in 2021 the increase in forest land diversion is 826.96 ha and is almost equal to the forest land diversion in 2019.

Conclusion

In 2021, maximum number Environmental Clearances grant have been observed among last three years. Almost 35% increase in capacity in the year 2021 was observed majorly due the capacity expansion projects. This could be the result of the measures taken by the ministry to promote coal production by easing of processes and diluting the restrictions for coal mining projects under the paradigm of EIA notification, 2006. For instance, the provisions of public hearing have been significantly relaxed and more and more coal mining expansion projects have been exempted from the requirement of public hearing.

Public hearings are mandated under the Environment Impact Assessment (EIA) Notification of 2006 in order to give the community an opportunity to express their concerns and opinion about a proposed developmental activity. However, during 2014 -2015 the provision has been diluted systematically. On 15th September 2017, MoEF&CC issued OM no. J-11015/224/2015-IA.II (M) for environmental clearance which allows capacity expansion of coal mining projects up to 40% with exemption of public hearing. Eighteen such projects (six projects in 2019, five projects in 2020 and seven projects in 2021) of total 39.834 MTPA capacity has been granted prior EC during 2019-21. This issue is of great concern as during 2021, almost 50 percent of Capacity increase of Expansion projects coming for EC under the provision of clause 7(ii) of EIA Notification, 2006, has been granted EC without any sort of Public participation.

References

1. International Energy Agency (2021), "Coal 2021 Analysis and forecast to 2024". International Energy Agency, World Energy Outlook 2021, page 3. <https://iea.blob.core.windows.net/assets/f1d724d4-a753-4336-9f6e-64679fa23bbf/Coal2021.pdf>
2. Ministry of Power (2022) " Power Sector at a Glance ALL INDIA". Ministry of Power Govt. of India. <https://powermin.gov.in/en/content/power-sector-glance-all-india>



photo: Ritwick Dutta

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