



Environment Clearances

of Coal Mines in India
2019-2020

INTRODUCTION

India is the third largest energy consumer in the world after China and the United States (IEA 2019). With increasing population, modernisation, and economic growth, the country's need for energy has grown over the past several years. Primary energy consumption in India has nearly tripled between 1990 and 2018, reaching an estimated 916 million tons of oil equivalent (IEA 2019). Coal continued to supply most (45%) of India's total energy consumption in 2018, followed by petroleum and other liquids (26%), and traditional biomass and waste (20%). Other renewable fuel sources make up a small portion of primary energy consumption (ETEnergyWorld 2019). With characteristics such as high ash content (~25 – 45 %) (MoC 2018), low sulphur content, and location and mining difficulty, it becomes crucial to limit the usage of this polluting natural resource even though the demand and requirement is increasing everyday (Chandra and Chandra 2004).

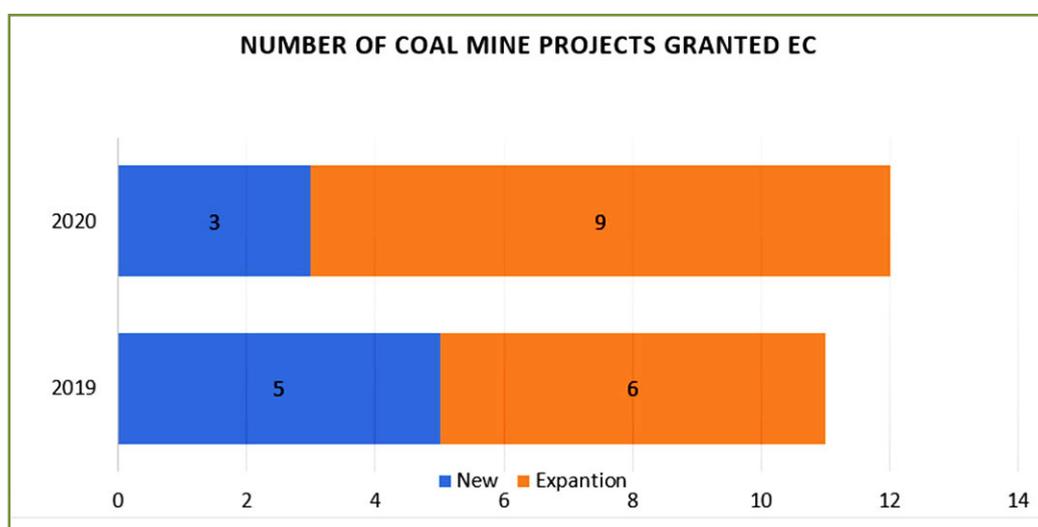
THE PROCESS

All new and expansion coal mine projects require prior Environmental Clearance 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 the use of forest land for non-forestry purpose.

Analysis of Environmental Clearance provides a fair idea about addition of coal production capacity in India as approvals 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 two years i.e., 2019 and 2020.

Environmental Clearances granted in 2019-2020

In 2019 and 2020, a total of 23 Environment Clearances have been granted to coal mines. Total number of projects granted Environmental Clearances in 2019 and 2020 were 11 and 12 respectively. Over the past two years the shares of fresh and expansion project have changed—in 2020 more expansion projects has been granted clearance. This could be the result of office memorandums issued for the One Time Capacity Expansion (OTCE)¹ and others to accelerate coal production in the country. The distribution of expansion and fresh projects in last two years is presented in the Graph 1.

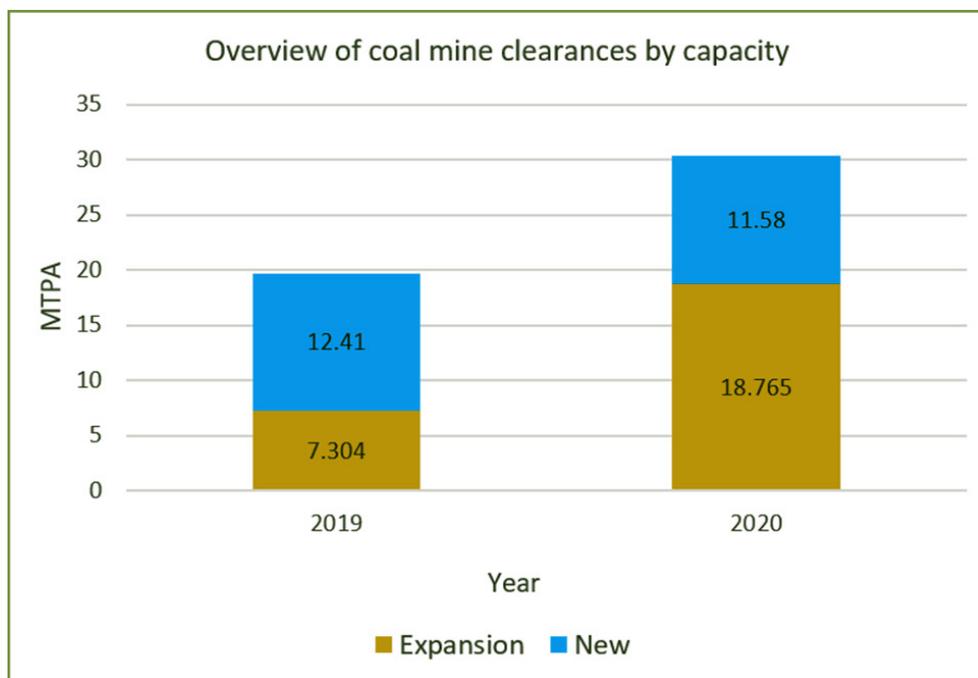


Graph 1: Number of coal mine projects granted environmental clearances in 2019 and 2020

¹ 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 potentially destructive of the 2006 notification

Overview of increase in capacity

The analysis of prior Environmental Clearance grants shows an increasing trend in production capacity from 2019 to 2020. There is an increase of almost 50% (10 MTPA) in production capacities as compared to 2019 (20 MTPA).



Graph 2: Total capacities of coal mines granted clearances in 2019 and 2020

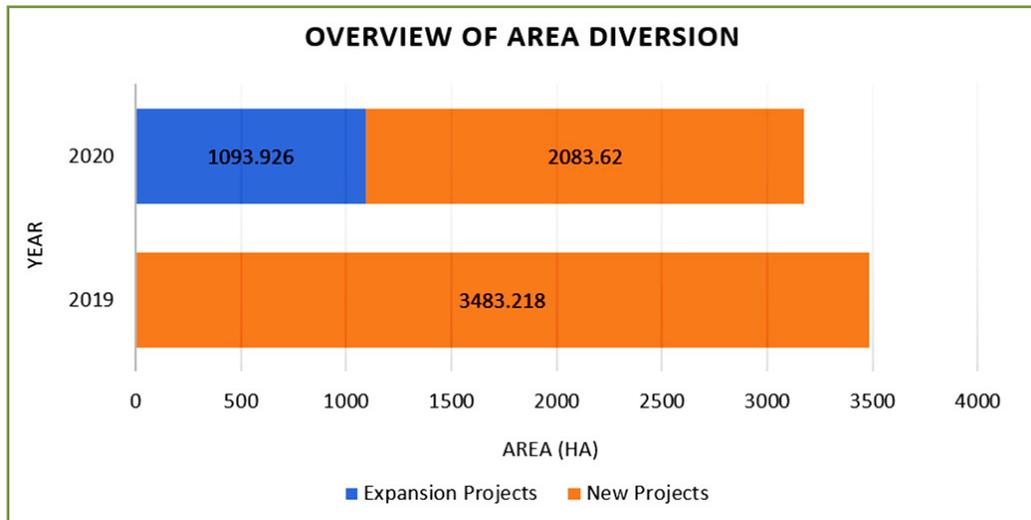
When the project type was analysed, it was observed that ratio of capacity between fresh projects and expansion projects has decreased in the year 2020. This means that more expansion projects have been granted Environmental Clearance in 2020 as compared to 2019. Moreover, in 2019 there were six projects 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.

Overview of area diversion

The details of area diverted for coal mining in the last two years are as follows:

Year	Land Area (in Ha)		
	Total	Fresh Project	Expansion Project
2019	3483.218	3483.218	
2020	3177.546	2083.62	1093.926
Total	6660.764	5566.838	1093.926

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



Graph 3: Total area diverted for coal mine projects in 2019 and 2020

Out of the total 5566.838 hectares (ha) fresh land area diverted for coal mining projects in the past two years, forest area accounts for 1419.372 ha. Details of diversion per year are given in Table 2.

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
Total	5566.838	4147.466	1419.372	25.5

Table 2: Share of forest land diverted for coal mine projects in 2019 and 2020

CONCLUSION

In 2020, an increase in capacity was observed that can largely be attributed to capacity expansion projects. This could be the result of steps taken by the Ministry of Environment, Forest and Climate Change (MoEFCC) to promote coal production by easing processes and diluting 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 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 September 15, 2017, MoEFCC issued Office Memorandum 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. Eleven such projects (six projects in 2019 and five projects in 2020) of total 20.944 MTPA capacity have been granted prior Environmental Clearance during 2019-20. Total capacity of expansion projects that were granted Environmental Clearance under the provision of clause 7(ii) of EIA Notification, 2006, with exemption in public hearing (as they involve no expansion in area), has increased. During 2020, total capacity of such expansion projects has increased more than 80% as compared to 2019. This issue is of great concern as grant of clearance for such projects happens without any sort of public participation.

As a party to the United Nations Framework Convention on Climate Change's Paris Agreement, India has submitted a public declaration of its plan to mitigate the effects of climate change and in its Nationally Determined Contributions (NDC) to the Paris Agreement. India vowed to "achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030." Given the ongoing slow development in coal based thermal energy sector, it is difficult to comprehend the 50% growth in capacity granted considering the data of 2019 and 2020. To sum up, there needs to be an evaluation of the need/demand of coal while keeping in mind the environmental elements like air, water, soil and forest that are at stake. Since coal mining causes substantial environmental damage, lessons from the past need to be kept in mind while devising the regulatory framework for the coal sector.

References:

Chandra, A, and H Chandra (2004): "Impact of Indian and imported coal on Indian Thermal power plants," Journal of Scientific & Industrial Research, pp. 156-162.

ETEnergyWorld(2019), "India's plan to raise natural gas share in energy basket to 15% looks increasingly ambitious: WoodMac," February 8, 2019; International Energy Agency, Gas 2019,. <https://energy.economictimes.indiatimes.com/news/oil-and-gas/city-gas-distribution-to-drive-indias-gas-demand-even-as-infrastructure-issues-persist-wood-mac/67901301>

International Energy Agency (2019), "World Energy Outlook 2019, Annexes; BP Statistical Review of World Energy 2019". International Energy Agency, World Energy Outlook 2019, page 734.

Ministry of Coal (2018): "High Ash content," Press Information Bureau, 3 January, <http://pib.nic.in/newsite/PrintRelease.aspx?relid=175272>.

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