

Prospective Mining Conflicts Adopt Sustainable Development

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Prospective Mining Conflicts Adopt Sustainable Development*

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Abstract

Mining is an important activity for the growth and development of the country. However, many of the regions with rich mineral resources in India are inhabited by some of the poorest communities. While the expansion of mining activities may benefit the affected local communities, it may harm them if their benefits do not offset the negative impact on their habitat and earnings. Mining can also have adverse environmental impacts. Some of the mining court cases discussed in this note are examples of poor implementation of the laws protecting the environment and the local communities. The growth and development of the mining sector must ensure benefits to the local communities and environmental protection.

Backdrop

Since it was a part of the ancient supercontinent Gondwana region, India's mineral geology has been documented to be similar to Western Australia, South America and South Africa. However, only 10 percent of India's Obvious Geological Potential (OGP) has been explored, so there is an urgent need to incentivise exploration by the government and private players. This would enable the optimum use of the hitherto unexplored geological mineral abundance. Furthermore, expanding a vibrant non-fuel mining sector could provide employment opportunities for local communities, fiscal gains for state governments, and create linkages with downstream industries.

Most Indian districts with significant mineral resources are inhabited by some of the poorest communities or are densely forested. These areas are often forced to bear environmental costs for the nation's benefit and face an increasing amount of ecological distribution conflicts due to the growing mineral requirements in the national economy (Bisht & Gerber, 2017).

Although the mining sector generates government revenue through royalties, mineral taxes, and auction premia and generates employment, mining activity can be disruptive. It could lead to a negative economic, political, cultural and social impact (Ayuk, Pedro, & Ekins, 2020).

Given India's commitments to move towards a clean climate regime, it needs to ensure its mineral security for the future of clean energy, electric vehicles, and high-tech manufacturing. The ease of doing business and regulatory and enforcement mechanisms in the mining sector must be simple yet effective. Further developments in this sector must ensure sustainability with the mining companies adhering to global practices and principles. The vision of the Government of India's National Mineral Policy 2019 is to double the production of minerals and halve the trade deficit by 2026.

Retrospective Outlook of Mining and Jurisprudence

The Indian Constitution and legislation contain various provisions to safeguard the rights of local communities against extractive industries. These provisions can provide potential safeguards to the welfare of local communities against powerful economic interests. Some of the relevant legislation and principles are discussed below (Bisht, 2018):

- Schedules V and VI of the Indian Constitution grant rights to the land occupied by tribal communities.
- The Panchayat (Extension to Scheduled Areas) Act 1996 (PESA) makes it mandatory to organise public hearings before a project is granted permission to begin mining operations in an area. It also requires obtaining clearance from the Gram Sabhas and helps villages self-govern based on their customs, culture and tradition.

- The Forest Rights Act 2006 (FRA) recognises the rights of habitation and occupation of forest land of Scheduled Tribes and other traditional forest dwellers who have been residing in these forests for generations. In addition, the Act allows tribal community members to obtain heritable individual and collective rights to land within forest areas.
- The public trust doctrine implies that property subject to public trust must be protected and held for use by the general public and be utilised only for public purposes. For minerals under state control, it also implies that the entire mineral value needs to be extracted to avoid private agents from depriving the current generation. Finally, the principle mentions the needs of future generations to be considered through direct utility or indirect transfer of benefits.
- The precautionary principle broadly states that in the case of uncertain negative environmental consequences, it is essential to take some preventive action even if the negative impacts cannot be proven.

Multiple violations of these legislations and principles have been observed in the past. These violations represent a significant threat to the lives, livelihood and homelands of local communities living close to mining sites. Some estimates suggest that 3,500 of the 4,175 mines in 1991 were established in Adivasi areas and contributed towards half of India's mining production. While legal instruments to protect the scheduled areas exist in the Constitution, mining projects often ignore them (Ministry of Tribal Affairs, Government of India, 2015).

Iron ore mining in Dantewada by the National Mineral Development Corporation Ltd. (NMDC) has been cited as an example of constitutional rights violation of tribal communities under PESA and FRA. However, no public hearing was conducted in the region prior to the grant of the mining lease. The conflict between local communities and the mining company has been ongoing since 2008 and is still not resolved. The reasons for dispute include socio-economic consequences such as loss of livelihood, violation of human rights, and a detrimental impact on the environment and health of local communities (Environmental Justice Atlas, 2017).

The principle of intergenerational equity under the public trust doctrine is cited in multiple mining conflicts in the courts. Intergenerational equity was mentioned significantly in the Bellary, Goa, and Odisha iron ore mining conflicts. It resulted in a cap on the extraction of iron ore. Multiple NGOs have been advocating and petitioning for a holistic approach to intergenerational equity to protect the rights of future generations. Referring to this principle, the Supreme Court, in 2012, stated that the state governments must ensure that the states receive the full value of the extracted mineral.¹ Intergenerational equity was also included as part of the National Mineral Policy 2019 (Basu, 2019).

Extractive industries deplete non-renewable resources. This might lead to a situation where the high unit cost of production becomes difficult to sustain, leading to a search for newer sources or alternative substitutes. The number of mining conflicts increased significantly between 1992 and 2014. Bisht and Gerber (2017) analysed a database of 100 mining conflicts from 1992 and 2014 and found that ecological reasons such as access to water, pollution, impacts on wildlife, and deforestation were significant causes of conflict in almost 87 percent of the cases. Sand has the

¹ "SC Justice J.S. Khehar, in his concurring judgement in the presidential reference on the issue of Alienation of Natural Resources (2012) 10 SSC 1, put it clearly:

I would therefore conclude by stating that no part of the natural resource can be dissipated as a matter of largess, charity, donation or endowment, for private exploitation. Each bit of natural resource expended must bring back a reciprocal consideration. The consideration may be in the nature of earning revenue or may be to bring 'best subserve the common good'. It may well be the amalgam of the two. There cannot be a dissipation of material resources free of cost or at a consideration lower than their actual worth. One set of citizens cannot prosper at the cost of another set of citizens, for that would not be fair or reasonable."

largest share of mine-related conflicts in India due to its widespread extraction. Conflicts in metallic ores correspond to more classic mining conflict cases between local communities and large mining corporations (Bisht and Gerber, 2017).

Major mining conflicts in India: Some examples

India recognises a healthy environment as a right to life. Article 21 of the Constitution states that the “right to live is a fundamental right under Article 21 of the Constitution and includes the right to the enjoyment of pollution-free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws, a citizen has the right to have recourse.” Along with the right to a clean environment, the Supreme Court has held the right of citizens’ liberty and scope of engagement in decisions of development projects (Banerjee, 2020). Some of the significant court judgements regarding mining conflicts in India have been discussed in what follows. These judgments cover topics important for the mining business in India, including environmental clearances, tribal rights, fragile ecosystems, illegal mining, overproduction, intergenerational equity, mine closures and rehabilitation of degraded lands.

Samatha v. State of Andhra Pradesh and Others (1997)

A petition was filed by the social action group Samatha for the rights of the tribal population in 1993. The petition was filed because the Indian government was considered a ‘person’ and hence does not have the power to grant leases in a scheduled area to non-tribal people for mining. The Andhra Pradesh High Court dismissed the petition in 1995. However, the Supreme Court decided in favour of the tribal community in 1997 and stated that land in scheduled areas could not be leased out to non-tribal or private industries. The prime minister was directed by the Supreme Court to implement all the guidelines mentioned in the judgement through a national scheme applicable to all tribal communities across India. Henceforth, under the fifth schedule of the Constitution, the government cannot lease out land in scheduled areas for mining operations to non-tribal entities. Additionally, the Supreme Court stated that at least 20 percent of the net profits should be set aside for a permanent fund to address the local needs of the tribal communities affected by the mining project (Indian Kanoon 1997; InforMEA 1997). The Samatha judgement is a weapon of the weak and has been used by various tribal communities in scheduled areas in their favour. However, many tribal communities still face a lack of implementation of this provision due to a lack of awareness addressed by the Samatha Group. Despite the efforts of the Samatha group, the central and state governments have tried to reverse the judgement (Rebbapragada, 2017).

Goa Foundation v. Union of India and Others (2013)

More than 80 percent of Goa’s geographical area is classified as eco-sensitive. Mining and construction activities are an ecological hazard in these areas (Fernandes, 2013). The Goa mining case is one of the crucial matters covered under the investigation and revelation by the special commission appointed by the central government (Shah Commission). The commission report highlighted multiple irregularities, including mining without a valid permit, mining outside the lease area, ore production beyond the permitted capacity, and illegal transportation of ore (Banerjee, 2020). The outcome of this case resulted in placing a resource cap on the production of iron ore in Goa. The Supreme Court ordered a cap of 20 MT per year. Additionally, mining companies were directed to pay 10 percent of the sale value of iron ore to the Goan Iron Ore Permanent Fund to address the redistribution of the value of minerals acquired by them (Indian Kanoon, 2013).

Common Cause v. Union of India and Others (2017)

This petition was filed by Common Cause (a non-profit) to terminate all mining leases involved in illegal activities in 2012 following the extensive Shah Commission report on Odisha's illegal mining issues in the iron ore mining districts of Kendujhar, Sundargarh and Mayurbhanj. The final judgement by the Supreme Court in 2017 dealt with two key matters: issues of illegal mining in forest lands and iron ore produced more than the environmental clearance (EC) stipulated amount. Therefore, the Court's ruling mandated the payment of separately determined funds by mining companies to resume operations in the state. The compensation was payable from 2000-2001 at 100 percent of the price of the mineral. In addition to that, the Court directed that the compensation should benefit the tribal population in the affected districts (Indian Kanoon, 2017). Based on the Supreme Court judgement in 2017, a new National Mineral Policy (2019) was drawn up to ensure environmental protection, ecological conservation and the protection of people's rights in the mining areas. Additionally, in 2020, the Supreme court directed the central government to impose the condition for re-grassing affected mining areas in the mining plan and environmental clearance. The 2017 judgement for Common Cause was cited in this order and is based on the 'Polluter Pays' principle (The Wire, 2020).

M.C. Mehta v. Union of India and Ors (2009)

In 2004, the Supreme Court observed that mining could be permitted in the Aravalli hills range based on sustainable development and compliance with stringent conditions. However, in 2009, the Court decided to shift the focus from individual mining sites to the macro view of the area. They decided to suspend mining in the area as mining sites had been abandoned without the rehabilitation of the degraded lands. Thus, mining has been stopped until statutory provisions for restoration and reclamation are complied with, particularly for areas with abandoned mines (Indian Kanoon 2009; Ecolex 2009).

Prospective Outlook for Mining and Related Jurisprudence

As the demand for minerals grows in the future, several drivers will shape the mining and metals sector (Maennling & Toledano, 2019). Firstly, the world is transitioning to a low carbon economy so that the minerals sector will play a major role as cleaner technologies for energy and transport are more mineral intensive than fossil fuels. Furthermore, the technology required to facilitate this shift—including wind turbines, solar panels, and improved energy storage—requires significant metal and mineral inputs (Church & Crawford, 2018).

Second, as mineral resources are exhausted in areas with lower risks, mining companies will have to adopt newer technologies for extraction and processing or venture into areas where extractions have not been economically viable in the past. Deep-sea and asteroid mining are likely to be explored in the future to extract high-grade ore. Many mining companies are ready to explore and invest in sea bed mining. However, there are many concerns amongst marine biologists, ocean conservationists, government regulators and environmentally-conscious companies about the environment, food security, and financial and biodiversity issues that may arise from sea bed mining. The government of India has already set aside \$544 million for technological research and investment into the industry (Lodge, 2017; Montojo, 2021).

Finally, creating real benefits for communities in and around mining sites will be the key to successful mining projects. One of the main challenges has been obtaining the local communities' approval to begin mining operations in recent years. Multiple projects have been rejected, or their operations have been disrupted due to protests. This kind of opposition is likely to increase in the future if new business models benefitting the communities are not adopted, particularly since a lot of existing mines are at the end of their lifecycle and require remediation. Additionally, new mining projects

are increasing the carbon footprint of the mining sector without creating new job opportunities (Maennling & Toledano, 2019)

There is, however, a growing recognition that the mining sector plays a positive role in promoting broad-based development and structural transformation of economies (Pedro *et al.* 2017). The mining sector directly links to the Sustainable Development Goals (SDG), specifically related to poverty eradication, decent work and economic growth, clean water and sanitation, life on land, sustainable and affordable energy, climate action, industry and infrastructure, and peace and justice (Ayuk, Pedro & Ekins, 2020).

The SDGs represent a new approach to development—threading together economic, social, and environmental dimensions while acknowledging that decisions are related and have both synergies and trade-offs. The SDGs can be classified into five Ps—people, planet, prosperity, peace, and partnerships. These five Ps highlight the interconnection between the SDGs (Brown & Rasmussen, 2019).

While the mining sector links to all the SDGs, a direct contribution could be through environmental sustainability, economic development and social inclusion (Columbia Center on Sustainable Investment, Sustainable Development Solutions Network, UNDP & World Economic Forum, 2016):

- **Environmental sustainability:** Mining activities impact land, water, climate, flora and fauna, and people. SDG 6 (clean water and sanitation) and SDG 15 (life on land), which measure the impact on land and water, should be kept in mind to avoid the repercussions on land and natural resources. Additionally, SDG 7 (energy access and sustainability) and SDG 13 (climate action) provide great opportunities for energy-efficient mining activities and expand access to energy.
- **Economic development:** Mining leads to the economic development and growth of a region—this should be used to strengthen infrastructure, technology and employment. The generation of new economic opportunities fulfils SDG 8 (decent work and economic growth), SDG 9 (infrastructure, innovation and industrialisation), and SDG 12 (responsible consumption and production).
- **Social inclusion:** Through the creation of economic opportunities, mining also leads to various human right and livelihood challenges. But revenues generated from mining activities through royalties, mineral taxes, and auction premia for investments in social and economic development achieve SDG 1 (ending poverty), SDG5 (gender equality), and SDG 10 (reduced inequalities). Mining also helps towards providing employment and business. In addition, mining can contribute to SDG 16 (peace, justice and strong institutions) by ensuring transparent operation, smooth conflict resolution and respecting the rights of indigenous communities.

The Responsible Mining Index (RMI) developed by the Responsible Mining Foundation tracks and reports the efforts taken by large-scale mining companies to address the economic, environmental, social, and governance issues. The assessment of these companies covers all the SDGs and indicates the extent of measures adopted by large-scale mining companies to achieve global goals (Responsible Mining Foundation, 2020). Two Indian mining companies are part of this initiative—Coal India and NMDC. Others, such as Vedanta and ArcelorMittal, are also part of the index (Responsible Mining Index, 2020).

Although it has been established that the mining sector can play a major role in achieving the SDGs by 2030, the key issue is how to transform mining into sustainable development and avoid future mining conflicts? Countries rich in minerals usually suffer from a ‘resource curse’, which leads to lower economic growth, weaker institutions, and worse developmental outcomes, preventing them from enjoying the full benefits of their natural resource wealth. The Extractive Industries

Transparency Initiative (EITI)² and International Council on Mining and Metals (ICMM)³ share the mission to strengthen the governance of natural resource development around the world. Global standards and initiatives provide the platforms needed to align governments, companies, and civil society's objectives and actions (ICMM, 2021). The principles under the EITI standard are set to increase transparency over payments and revenues in the mining sector (EITI, 2019). ICMM has laid down ten mining principles that define good practice environmental, social and governance requirements for the metals and mining industry. These principles set a standard of ethical performance for member countries and mining companies and help realise the SDGs. The 10 ICMM principles include (ICMM, 2020):⁴

- *“Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development.*
- *Integrate sustainable development in corporate strategy and decision-making process.*
- *Respect human rights and the interests, culture, customs and values of employees and communities affected by mining activities.*
- *Implement effective risk-management strategies and systems based on sound science and which account for stakeholder perceptions of risks.*
- *Pursue continual improvement in health and safety performance with the ultimate goal of zero harm.*
- *Pursue continual improvement in environmental performance issues, such as water, stewardship, energy use and climate change.*
- *Contribute to the conservation of biodiversity and integrated approaches to land-use planning.*
- *Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals.*
- *Pursue continual improvement in social performance and contributing to the social, economic and institutional development of host countries and communities.*
- *Proactively engage key stakeholders on sustainable development challenges and opportunities openly and transparently. Effectively report and independently verify progress and performance.”*

Though India is not a part of the ICMM and EITI global initiatives, the Federation of Indian Mining Industries (FIMI) established similar sustainability principles in 2009. The Sustainable Mining Initiative (SMI) addresses the environmental and social issues related to the mining industry and maximises the mining sector contribution to the cause of sustainable development. Member companies must improve their sustainability practices and report their progress annually (Sustainable Mining Initiative, 2020a). A mining company can become a member of the SMI by voluntarily adopting the ten sustainability principles:⁵

- *“Integrate sustainable development considerations within the corporate decision-making process*
- *Conduct business with ethical practices and sound systems of corporate governance.*
- *Implement risk management strategies based on valid data and sound science.*
- *Seek Continual Improvement in health and safety performance.*
- *Seek continual improvement of our environmental performance based on a precautionary approach.*

² <https://eiti.org/>

³ <https://www.icmm.com/>

⁴ ICMM principles mentioned in <https://www.icmm.com/en-gb/about-us/member-requirements/mining-principles>

⁵ SMI Principles as mentioned in <https://fedmin.com/smi/principles.php>

- *Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.*
- *Contribution to the conservation of biodiversity and integrated approaches to land use planning and management.*
- *Facilitate and encourage responsible use, re-use and recovery of mined materials, including associated natural resources.*
- *Contribute to the social, economic and institutional development of the communities in which we operate.*
- *Implement effective and transparent engagement, communication and verifiable reporting arrangements with our stakeholders.”*

Currently, 33 mining companies have adopted the SMI principles. The 10 sustainability principles have evolved considering the expectation of stakeholders and align with international standards like the ICMM sustainable development principles, which suit the Indian mining sector requirements. The SMI annually conducts performance assessments through desktop assessments and site visits to ensure the commitment of its members (Sustainable Mining Initiative, 2020b).

In addition to the industry initiative, the Ministry of Mines has developed a Sustainable Development Framework (SDF) implemented through the Star Rating method. A ‘star rating’ is awarded to mining leases for their effort to implement the SDF—the best performing leases get five stars. The star rating mechanism, which includes compliance with forest and environment policies, helps recognise good performance and encourages all mining leaseholders to adopt best practices. In addition, the SDF platform encourages sharing best practices and also incentivises the adoption of best practices. In the future, the star rating system could be utilised to obtain faster clearances from the regulatory bodies. The star rating system is based on self-evaluation by mining companies and verified through an inspection by IBM officials (Ministry of Mines, Government of India, 2016). In 2020-21, 920 mining leases were self-evaluated—184 of them were awarded a provisional rating of five stars, 318 were given four stars, 343 got three stars, 29 received two stars, 40 mines had one star, and the remaining six were given no rating (Indian Bureau of Mines, Government of India, 2020).

Another initiative by the Ministry of Mines is the District Mineral Foundation (DMF) funds. DMFs are non-profit trusts established under the Mines and Minerals (Development and Regulation) (MMDR) Amendment Act 2015. They aim to work for the interest and benefit of persons and areas affected by mining-related operations. The purpose of setting up DMFs was to address the concerns of the economic inequality in India’s mining districts, where poor and disadvantaged tribal communities inhabit mineral-rich lands. DMFs aim at eliminating such disparities by ensuring socio-economic and environmental justice for people whose lands are resource-rich but who remain disadvantaged. From its inception in 2015 until June 2021, a total of Rs 50,500 crores has been collected towards the DMF funds (Ministry of Mines, Government of India, 2021). Only about half of these funds have been utilised. The utilisation of these funds has been skewed towards developing public physical infrastructures like roads, railways, and bridges. However, very little is being spent on important sectors such as the environment, healthcare, women and child welfare and skill development in mining districts.

The study by CSEP on the Sustainable Mining Attractiveness Index (CSEP-SMAI) for Jharkhand evaluates the districts in Jharkhand on various attributes of sustainable mining. The study helps in highlighting the policy focus areas to improve the mining attractiveness of the districts for sustainable mining. Similar studies for all the mining states in India will help bridge the gap to achieve sustainable mining. The CSEP-SMAI also provides guidelines for mining investment decisions in mining states (Chadha, Kapoor & Sivamani, 2021). CSEP-SMAI offers a holistic overview of the districts in Jharkhand across the five pillars which include the mining potential and

performance, socio-economic status, policy and governance, infrastructure, and environment. The analysis highlights future mining prospects and focuses on areas that have slacked in the past and need improvement to ensure sustainable mining.

As mentioned above, mining can be disruptive, and its negative impacts might lead to severe environmental degradation and disruption of the social fabric (Ayuk, Pedro & Ekins, 2020). The broad reasons that can be attributed to the overall negative impacts and perceptions about mining operations are:

- a) Lack of positive engagement with host communities
- b) Laws pre-dating 2015 had a limited thrust on social compliances
- c) Managing community concerns vis-à-vis proactive engagement with communities
- d) Generalised views on mining businesses
- e) Unrealistic expectations and broken promises.

The MMDR Amendment Act (2015) and the National Mineral Policy (2019) acknowledge these challenges and underscore the need to adopt a sustainable development framework for inclusive mining businesses. However, the recent draft of the Environment Impact Assessment (EIA) 2020 by the Ministry of Environment, Forest and Climate Change (MoEF&CC) received a lot of criticism as the new provisions dilute the already weak environmental regulations. These regulations need to be strengthened to ensure environmental protection and compliance with these policies in the interest of long-term sustainable mining (Chadha & Sivamani, 2020). Mineral-rich areas should be prepared for a smooth transition to begin mining activities. By carefully integrating all the pillars—people, planet, prosperity, peace, and partnership of sustainable development—the mining sector will contribute to achieving SDGs in a meaningful manner.

Conclusion

Mining is an important activity for the growth and development of the country. However, many of the regions with rich mineral resources in India are inhabited by some of the poorest communities. While the expansion of mining activities may benefit the affected local communities, it may harm them if their benefits do not offset the negative impact on their habitat and earnings. Mining can also have adverse environmental impacts. The mining cases discussed in the previous section are examples of poor implementation of the laws protecting the environment and the local communities. The draft Environmental Impact Assessment (EIA) notification 2020 was widely criticised for further diluting these weak environmental protections. The notification proposed reductions in the public consultation process and allows for post facto clearances (Chadha & Sivamani, 2020).

The MMDR Act was amended in 2021. The amended Act states that any brownfield mine being auctioned will carry forward with it all existing and valid clearances to the new owner. While this is an effective process and may lead to ease of doing business, the clearances need to be reviewed to ensure the best environmental protection. An EIA by the new owner should be conducted to ensure the validity of the clearance based on their operations.

Yet as the mining sector grows, newer issues will arise which need to be accounted for such as the adoption of newer mining technologies and increasing mineral use in cleaner technologies. It would be imperative to understand and incorporate the Sustainable Development Goals (SDGs) in the mining sector. Efforts are being made through various initiatives by global and national bodies like ICMM, EITI and FIMI to ensure sustainable mining and avoid future mining conflicts.

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