

UNDERMINING INDIA'S ECOLOGICALLY SENSITIVE AREAS



Photo: Asad R. Rahmani

Open-cast mining is having impact on some of the most ecologically sensitive areas of India. This picture was taken just outside Kudremukh National Park, Karnataka.

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*Mining activities are impacting some of the most ecologically sensitive areas of the country, many of which form crucial water catchments, besides supporting rich biodiversity and providing secure livelihoods to tribal and other communities. A report published by Kalpavriksh in 2003, 'Undermining India – impacts of mining on ecologically sensitive areas'³ found that at least 90 sanctuaries and national parks and hundreds of other ecologically sensitive areas across the country – in the Western Ghats, Eastern Ghats, Aravallis, Coasts, Central forest belt, Northeast Hills, Western Himalaya, and natural desert areas are threatened by existing or proposed mining activities. **The list includes over fifty Important Bird Areas (IBAs)** (see Table 2)⁴.*

The impacted areas are sites that are crucial to our long-term ecological security, thus it is vital for the country to safeguard these areas through appropriate Land-use planning, including comprehensive designation of 'off-limit' areas where no mining can be permitted. This also requires a critical examination of current development policies, including those in the mining sector, to see how they are impacting our ecological as well as livelihood security, especially of the most under-privileged sections of the society who are dependent on natural resources. Finally, the very many wasteful ways in which we use minerals, including luxury minerals like diamonds, marble, granite, and gold requires introspection.

While a substantial number of mining threats are from ongoing mining (both large and small), a major threat to many ecologically fragile areas is from new mining as the liberalisation of the mining sector in the past few years has 'opened up' access to more areas. Since 1996, 65 large prospecting licenses⁵ covering over 90,000 sq. km of area have been granted and since 2000, 119 reconnaissance permits covering over 1,55, 000 sq. km have been given.⁶

A closer look shows that many of these overlap with some of the most ecologically rich and culturally sensitive areas in Rajasthan, Chhatisgarh, Maharashtra, Orissa and Jharkhand. For example, 'prospecting licenses over large areas' and now reconnaissance permits



swamp the area around the Udanti Sanctuary (also an IBA) in Chhattisgarh, one of the last homes of a viable Wild Buffalo population and a tribal area. In January 2001 it had been reported that a company granted a prospecting license here had illegally removed soil from the Udanti Sanctuary and that the Government of India had ordered an enquiry. But what is of more concern is the **legal destruction** which is taking place and is likely to continue in the coming days. While reconnaissance and prospecting does not amount to mining, the writing on the wall is clear. A reconnaissance permit holder or prospecting licensee has been given preferential rights for obtaining a prospecting license or mining license in these areas. Therefore provisions in the National Mineral Policy, 1993, such as: “**Mining operations shall not ordinarily be taken up in identified ecologically fragile and biologically rich areas**” are regularly violated by other rapid changes taking place in the sector to facilitate mining in ecologically fragile areas.

India’s environmental and forest policies and laws have some provisions to counter this trend, but in a climate where the general development policy itself is in contradiction, their implementation is poor. Moreover, dilutions have taken place over the last few years. The Coastal Regulation Zone notification, 1991⁷ has been amended repeatedly to permit mining in sensitive coastal areas, while environmental public hearings⁸ were done away with for mining leases of major minerals⁹ up to 25 ha. It is important to note that 50% of India’s mining leases for major minerals and a much greater percentage of leases for minor minerals are less than 25 ha in size! The status of the ecological restoration of the mines in the country also remains poor, contributed by a lack of a clear statutory framework and apathy from the miners.

The fact that there is a great overlap between our forest resources, tribal areas and minerals, compounds the situation. The last few years have seen several struggles by the tribals and other local communities against mining which threatens ecosystems and livelihoods, as also the emergence of the Mines, Minerals and People (MMP) network to respond to the rapid changes in the mining sector from a people’s perspective. Examples of peoples struggles include those of tribal communities in Kashipur, Orissa, against bauxite mining in the Eastern Ghats, tribals in Andhra Pradesh against proposed calcite mining around the famous Borra Caves, and villagers in Hemwalghati in Uttaranchal against limestone mining.

There have also been recent attempts to amend constitutional provisions protecting tribal rights and preventing land transfer in notified tribal areas called scheduled areas¹⁰, to allow access to private companies to mine in scheduled areas. Although this move has for the moment been thwarted by tribal activists, the threat is far from over; indeed the 10th 5-Year Plan Approach Paper recommends action to remove impediments in the way of such ‘development’ projects in the scheduled areas.

Wildlife and social groups have often responded to the mining threats to ecologically sensitive areas by seeking the intervention of courts and there have been some positive interventions from the Supreme Court as well as other courts around the country to stop/ regulate mining in ecologically sensitive areas, for example, in the Sariska Tiger Reserve in Rajasthan, Kudremukh NP in Karnataka, Buxa Tiger Reserve in West Bengal and Radhanagari Wildlife Sanctuary in Maharashtra (all IBAs). While some of these judgements have indeed been landmark judgements, it is important to remember that in the long run, the battle over destructive mining and development cannot be won in courts. The very same courts have also given directives in other matters, which have the potential to be ecologically and socially disastrous, for instance, certain directives of the Supreme Court to the Government of India on the issue of ‘interlinking of rivers’. As pointed out earlier, the larger economic and development policies of the day have created a space for huge hitherto untouched areas to be opened up for mining. To address this issue we will need to restructure how we currently approach development and use natural resources.

Development activities like mining can be sustainable and sensitive only if the overall planning and decision-making in India are oriented towards the twin objectives of ecological security (including conservation of ecosystems and species) and livelihood security (especially of the most underprivileged sections of the society who are dependent on natural resources).

Recommendations on Mining

- ❏ The Government of India to urgently take stock of ecologically sensitive areas in the country impacted by existing mining activities or likely to be impacted by future mining.
- ❏ Ecologically sensitive and biodiversity-rich areas, especially water catchments, to be safeguarded through appropriate land/water use planning and clear, long-term designation of areas where no mining should be permitted. This includes phasing out of existing mining in ecologically sensitive areas.
- ❏ More stringent, participatory, and transparent Environmental Impact Assessment procedures, to be applicable to all sizes and categories of mining under the environmental laws.
- ❏ Identification and prioritisation of mine-affected areas in ecologically sensitive areas for ecological restoration and evolving a clear framework for the purpose.
- ❏ A comprehensive review of the ecological and social impacts of economic and mining sector reforms, including the impacts on biodiversity, on water resources, on local residents or nomadic communities traditionally using the areas affected by mining, and so on.
- ❏ The rights of tribals and other communities, and the letter and spirit of constitutional provisions in place in specially notified tribal areas such as ‘scheduled areas’, to be respected.
- ❏ Comprehensive action plans to be framed for ‘just-transition’ to safe and sustainable livelihoods for labour impacted by the stoppage of mining activities in ecologically sensitive areas. Sudden blanket bans without provisions for alternative livelihoods for labour involved in ongoing legal mining in ecologically sensitive areas is not desirable.
- ❏ The Government of India to set up a taskforce with experts from within and outside the government to evolve a strategy and action for appropriate material and energy use, especially to reduce and eliminate luxury and wasteful use of minerals, and to meet our legitimate material and energy needs sustainably.

Communities, people’s groups, and NGOs, to unite and network more strongly, to resist the increasing takeover of sensitive areas and IBAs for mining.

Table 1: Mining in ecologically sensitive areas in India: some key highlights (Kalpavriksh 2003)

- q Mining activities are destroying some of India's most ecologically sensitive areas, including catchments that provide water security to millions of people;
- q At least 90 wildlife sanctuaries and national parks, and hundreds of other ecologically sensitive areas with unique biodiversity and wildlife, are threatened;
- q Culturally and economically fragile communities residing in these areas, including many *adivasi*/ tribal groups, are seriously affected by mining;
- q Since the economic liberalisation phase in the 1990s, the mining sector has opened up thousands of sq. km of the country for reconnaissance and prospecting activities, many of which are taking place in some of our most ecologically fragile areas;
- q Many mining activities are in gross violation of environmental policies and laws, of the constitutional guarantees to *adivasis* (tribes) and other communities, and of the National Mineral Policy's own assurance that "ecologically fragile and biologically rich areas" would be avoided;
- q The Government of India and state governments need to take urgent steps to declare ecologically and culturally sensitive areas as being off-limits to mining, to commission an independent assessment of the impacts of the mining sector, to make necessary changes in the mining policies and laws, to ensure ecological restoration of already mined areas, to provide alternative employment to workers before closing down mines in ecologically sensitive areas, and to set up an expert group to explore ways of sustainable material and energy use, including the reduction of luxury and wasteful consumption of minerals;
- q Communities, people's groups, and NGOs, need to unite and network more strongly, to resist the increasing takeover of sensitive areas for mining.

There is a trend the world over to minimize the damage of open cast mining and to restore the habitat once mining is over.



Photo: Asad R. Rahmani

Important Bird Areas in India – Mining in India

Table 2: IBAs impacted by mining

(The table lists the IBAs impacted/ Likely to be impacted by existing/ proposed mining in and around them)

Sr. No.	Statewise List of IBAs impacted by mining	Nature of mineral/mining
	Andaman and Nicobar Islands	
1	Mahatma Gandhi Marine National Park	Sandmining in surrounding areas
	Andhra Pradesh	
2	Coringa Sanctuary	Oil drilling and ancillary impacts
3	Nagarjunsagar-Srisailem Tiger Reserve	Uranium mining
	Arunachal Pradesh	
4	Namdapha NP	Oil and coalmining in nearby areas
	Assam	
5	Upper Dihing (West) Complex	Oil drilling and related impacts; opencast coalmining
6	Upper Dihing (East) Complex	Opencast coalmining
7	Subansiri	Boulder
	Bihar	
8	Valmiki Tiger Reserve	Boulder
	Chhatisgarh	
9	Udanti Sanctuary	Diamond
10	Barnawapara Sanctuary	Limestone
11	Indravati National Park	Stone quarrying ¹¹
	Goa	
12	Bhagwan Mahavir Sanctuary	Iron ore
13	Madei sanctuary	Iron ore
14	Cotigao Sanctuary	Manganese
	Gujarat	
15	Banni grasslands and Chhari Dhand	Limestone and bauxite
16	Gir NP and Sanctuary	Limestone
17	Marine NP and Sanctuary	Limestone
18	Dhrangadhara Wild Ass Sanctuary	Salt mining
	Himachal Pradesh	
19	Bandli Sanctuary	Limestone
20	Kanawar Sanctuary	Stone quarrying
21	Rupi Bhaba Sanctuary	Stone quarrying
22	Gobindsagar Sanctuary	Limestone
	Haryana	
23	Kalesar	Boulder
	Jharkhand	
24	Hazaribagh NP and North Karanpura Valley	Coal
25	Palamau Tiger Reserve	Coal
	Karnataka	
26	Anshi NP	Manganese
27	Bannerghatta NP	Stone quarrying
28	BRT Sanctuary	Stone quarrying
29	Bhimgad	Manganese
30	Dandeli Sanctuary	Manganese
31	Kemmangundi and Bababudan Hills	Iron ore
32	Kudremukh NP	Iron ore
33	Ranganathittu Sanctuary	Stone quarrying
	Kerala	
34	Amarambalam RF- Nilambur	Gold
	Maharashtra	
35	Koyna Sanctuary	Bauxite
36	Radhanagari Sanctuary	Bauxite
	Madhya Pradesh	
37	Bandhavgarh NP	Coalmining
38	Ghatigaon Sanctuary	Quarrying
39	Kanha NP	Copper

Important Bird Areas in India – Mining in India

Sr. No.	Statewise List of IBAs impacted by mining	Nature of mineral/mining
40	Panna Tiger Reserve	Diaspor and pirophilite stone, diamond and white sandstone
41	Madhav NP	Stone quarrying
	Orissa	
42	Bhitarkanika Sanctuary	Oil and gas drilling
	Rajasthan	
43	Desert NP	Oil drilling
44	Ranthambore Tiger Reserve	Red sandstone and limestone
45	Sariska Tiger Reserve	Dolomite and marble
	Tamil Nadu	
46	Gulf of Mannar NP	Coral mining
	Tripura	
47	Trishna	Gas drilling
	Uttar Pradesh	
48	National Chambal Sanctuary	Sand
	Uttaranchal	
49	Askot Sanctuary	Soapstone, sand, zinc, copper, silver, lead and gold
50	Govind Pashu Vihar Sanctuary	Slate mining
	West Bengal	
51	Buxa Tiger Reserve	Dolomite
52	Sunderbans Biosphere Reserve	Oil

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² Kalpavriksh (KV) is a 23-year-old NGO in India, working on environmental education, research, campaigns and direct action. KV believes that a country can develop meaningfully only if ecological sustainability and social equity are guaranteed. To this end its activities are directed to ensuring conservation of biological diversity, challenging the current destructive path of 'development', helping in the search for alternative forms of livelihood and development, assisting local people in empowering themselves to manage their surrounds, and reviving a sense of oneness with nature. Over the last few years it has increasingly focused on community-based conservation and management of natural resources.

³ Vagholikar N. and Moghe, K. A., 2003. Undermining India: Impacts of mining on ecologically sensitive areas. Kalpavriksh.

In light of ecologically sensitive areas across the country impacted by mining, the report also examines the following: the legal and policy framework for mining and environment, response of courts to mining in ecologically sensitive areas, citizens' response, a review of ecological amelioration practices for abandoned mines. It makes a set of recommendations to address the concerns raised in the report.

⁴ This list may not be comprehensive. It has been compiled by comparing the information available in *Undermining India* and the list of IBAs in the country. There may be gaps in information available on some of the IBAs. Only the name of the IBA and the nature of mineral have been provided here. Details such as: whether mining is existing or proposed; exact location with respect to IBA; legality; nature of impact etc. have not been provided. In some cases the mining has also been stopped in recent times, although the impacts of abandoned mines are still felt. For further details refer to *Undermining India* (reference given above).

⁵ Three kinds of mineral concessions are recognized in Indian law, viz Reconnaissance Permit (RP), Prospecting License (PL) and Mining Lease (ML). RP is granted for preliminary prospecting of a mineral through regional, aerial, geophysical or geochemical surveys and geological mapping. PL is granted for undertaking operations for purpose of exploring, locating or proving mineral deposit. ML is granted for undertaking operations for winning any mineral. (<http://www.mines.nic.in>)

⁶ Ministry of Mines, March 2003

⁷ The jurisdiction of this notification extends to the 'Coastal Regulation Zone' or CRZ which is defined to cover the 'coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters which are influenced by tidal action (in the landward side) up to 500 metres from the High Tide Line (HTL). The CRZ also includes the land between the Low Tide Line (LTL) and the HTL. The entire CRZ is divided into 4 zones (CRZ – I, II, III, IV) based on certain characteristics. In addition to the broad prohibited and permissible groups of activities (Paras 2and3), each zone has specific restrictions for the siting of such activities (Para 6). Within each zone certain restrictions are imposed on the setting up and expansion of industries, operations or processes. Mining and certain related activities in the coastal areas are also subject to the provisions of the notification and along with a steady number of other activities, mining too has been granted allowances in the CRZ by way of amendments to the Notification.

⁸ These are public hearings as per India's Environmental Impact Assessment Notification, 1994

⁹ Under Indian mining law "minerals" includes all minerals except mineral oils. The "mineral oils" are natural gas and petroleum. Minerals in India are further broadly divided into 'major minerals' and 'minor minerals'. 'Minor minerals' are generally those used as construction materials. The Mines and Minerals (Development and Regulation) Act, 1957, defines "minor minerals" as: "means building stones, gravels, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette declare to be a minor mineral."

Apart from the minerals already listed in the above clause the Central Government has declared 15 other minerals as minor minerals. No exhaustive definition of a minor mineral, which states the criteria for declaring any mineral as minor mineral has been given in any law. But minor minerals have generally been minerals used for building and construction purposes. The state governments have considerable powers to regulate the mining of minor minerals, including the grant of mining leases. Generally, these minerals are somewhat of local importance and can be developed on a small scale. After the 73rd amendment of the Constitution in 1993, Panchayats too have a greater role to play with respect to the minor minerals. "Major minerals" are all minerals other than those notified, as "minor minerals" by the Central Government.

¹⁰ The "scheduled areas" here refers to the "fifth schedule" of the Indian Constitution. Article 244 (i) provides for tribal dominated areas in the country to be declared as fifth schedule areas (except the Northeast which has a separate provision in the sixth schedule of the Constitution). The Governors of the concerned states have been given extensive powers and may prevent or amend any law enacted by the Parliament or the State assembly that could harm the tribal interests. It is a tool of "positive discrimination" to protect the interests of tribal communities which have been exploited over the years. One of the most significant provisions for these areas is the prevention of land transfer to non-tribals in these areas. The Panchayat (Extension to Scheduled Areas) Act, 1996, applies to these areas and seeks to give the communities greater control over their natural resources and developmental planning in the area.

¹¹ 'Stone quarrying' has been mentioned in cases where the nature of stone may not be confirmed. In some cases it is basalt. But this basically refers to stone used in construction activities.