

Biodiversity and Mining: A situational Analysis of project villages of bokaro river basin

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Focused Group Discussion was conducted in every village along with the Participatory Rural Appraisal for the Micro Planning activity. The study area is a tribal belt, with the presence of Scheduled Castes and Other Backward Classes. Marked by extreme poverty, issues like environment and biodiversity conservation hold little importance to them. In several villages, the usual scenario was that on being asked whether mining had any negative impact on the biodiversity of their area, they used to come up with answers that mining is providing them with livelihood opportunities. Though there was an acceptance that the forest cover has reduced, water table has gone down and land fertility has declined in the past few years, but they could not logically relate it to mining operations. In every group though there used to be people with some experience and education who after getting the objective of the question used to make the other members understand the whole procedure. These people used to be the major speakers of the discussion. Moreover interacting in the local language which differed from village to village used to be a hindrance. In such scenario, people having some kind of formal education were targeted from each village to take a lead and make the people understand the whole process.

Negotiating with the people during the Focused Group Discussion brought about similar findings in every area. Bokaro river has now become like a shrunken sewage highly contaminated with coal dust. Many parts of its course have dried. During visit to the villages, one can only see the meandering path of the river with no water in it. Water resources have been highly contaminated. The habitants have, however, been compromising by taking contaminated and polluted water, as there is no alternative source of safe drinking water. The ground water table has gone down by several feet. According to the Divisional Forest Officer of Ramgarh District, *“all the wells and ponds in our village have failed because of decreasing water table, there have been instances when we dug till 200 feet and could not find a single drop of water.”* Villages like Parej and Pundi are facing acute water scarcity.



Picture 1 People standing in a queue to avail the tanker facility

There is not enough water to suffice human needs, animals are the silent sufferers. Community is not aware about how to clean the rain and well water. In *Semra* village, in one of the *tolas*, there was only one well having some amount of water in it. The pond and hand pumps had dried. The community was using the same water for drinking, cooking as well as bathing and washing clothes. The water in the well was apparently very dirty and it is being used for drinking without getting boiled.

The mining operations in the village *Semra* has been closed now. But the forest cover has decreased considerably and it is being cut even now for fuel wood by the community. The top soil of this area has become very loose. The picture shown below is a usual scene in *Pundi* village. The evenings and mornings are spent in a lot of commotion, standing in a queue, waiting for one's turn to get a container of water and at times one has to return back with an empty hand.

Lack of fodder due to incessant cutting of trees and other forms of natural vegetation is causing unbearable suffering to the animals. They are the worst sufferers of water scarcity, with the natural consequence that migration of domestic animals is very common in the villages. In many cases, the owner has to travel long distances to get some suitable fodder for them. The productivity of these animals has also declined. People whose livelihood depended on animal products like milk, eggs etc have suffered because of this.



Picture 2 Coal loading and dumping site of TISCO in Pundi village

According to one of the villager in Pundi, “*earlier the animals used to have higher longevity of five or six years but it has reduced drastically to two to three years, as they are not getting enough to eat.*” Drinking contaminated water is causing diarrhoea in animals. Large scale cutting of forests is causing soil erosion, reducing soil fertility and is also a threat to wild life. In Gobindpur, very common statement that emerged in the Focused Group Discussion was, “*earlier we used to be scared of going to the forests because of wild animals, but now they are nowhere to be found, there used be Deer, Tiger, Wild Cats etc. but they have become extinct.*” A very old person in Bongahara commented that, “*whatever fruit bearing trees there used to be in forests like pyaar, jamun, karanj etc. the government has all taken away*”



Picture 3 Wastes getting loaded in Pundi village

Agriculture is heavily dependent on monsoons. There is no water to irrigate the fields. Earlier it was practiced round the year, but now it has been reduced to a few months. This has reduced the food crops diversity and thus has also limited the livelihood opportunities. Loss of top soil has reduced the fertility of the soil. This is a plateau area, already there is very limited land suitable for agriculture. With the water table going down, these lands are also getting transformed in to wastelands.

Parej Open Cast Mining- A case study

Parej is one of the worst affected villages due to the extractive operations. The impact of such industries has been both direct as well as indirect. Natural surroundings and hence the life in general has been severely devastated. There is no community land remaining in the village, all being given to the C.C.L on lease. People are facing problems of rehabilitation. Total land acquired for mining in *East Parej* alone is 237 Hectares and the number of people getting affected by it is 1,172⁵. People are being forced to leave their lands and settle in other places with the meager compensation provided to them.



Picture 4 Shifting village base in Parej

The village now seems like a barren land with very little population remaining. The village base is slowly shifting. The main source of livelihood for the people is working as laborers in coal loading and dumping sites. In a small Focused Group Discussion

Picture 5 Coal dumping site in Parej

conducted at the work site, one of the member said, “*Earlier agriculture used to be the only source of livelihood, but it is almost finished now, now the land only produces coal nothing else*”

People are forced to drink water stored in the closed mines, though it is not rendered fit for drinking. All the wells and ponds have become dried. Water is also provided by tankers, but the frequency is very less. Water has to be stored for many days. People avoid taking bath daily.

Mahua trade was very common before mining operations started. But *Mahua* trees are



rarely found now. It used to be a source of good amount of money

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View Point of Administration

Mr. Ravi Raj Sharma, Block Development Officer- Mandu Block, District-Ramgarh

There used to be diversified flora and fauna here but in lieu of economic benefit out of mining operations, it has not been properly taken care of. The green belt has definitely been reduced because of this mindless exploitation. I do not think any study to assess the impact has been done before. No doubt the economic condition of people has improved but the negative fallouts outweigh the positive ones. There has been cultural deterioration; people have come into liquor business. I accept that there is severe problem of drinking water along with the problem of irrigation but we do not have any option. Moreover the drinking water is very contaminated leading to many health hazards. The agricultural land is getting shrunk and the remaining ones are getting converted into wastelands.

Mr. Ram Bilas Ram, Forest Guard, Mandu Block

No doubt the forests have been degraded. Forest department has formed *van samiti* in every village where there is forest. To carry out any sort of plantation activity, the department consults the *samiti* first. In recent years, the pollution level has increased and forests are getting affected due to this. The life in general is also getting affected. As one enters the areas like *Parej and Pundi*, the level of coal dust becomes very high as these are mining intensive areas. The breed of trees have also evolved, now, one gets to see trees with very thin branches and no trace of wild animals in the forests. *Mahua* used to be a very important tree in terms of livelihood generation. Also it had medicinal properties, but these trees have become rare. Forest Department is doing its job by generating awareness and formation of *Van Suraksha Samiti* in every village