

Chapter I

A. Introduction

In India, forest cover has reduced rapidly in the last fifty years. The last five decades have also seen villages and settlements disappearing. Development projects in various forms have encroached into areas hitherto inaccessible. Roads and railways have been constructed to link mineral rich regions with mainland cities and urban aggregations have grown in clusters.

No area, however remote has remained uninhabited or unexplored. Exploration of minerals and establishment of industries facilitated opening up of areas that were considered as interior or isolated. Opening up of areas that remained on the periphery of dominant economic systems meant veritable destitution for settled communities who were till then dependent on local resources to meet their subsistence needs. The access and control pattern changes with the definition of ownership. When communities lose control over their local resources, they are given only marginal spaces in the new hierarchical economy.

Mining has been one of the activities, which has led to large-scale marginalisation of local communities all over the world. The very nature of the activity, which entails extracting minerals from underneath the surface of the ground, is violent. It also means that no other form of activity can coexist with it. The mineral rich areas of the world have been the cynosure of all eyes. As complex economies evolved the demand for a variety of minerals increased. Being a non-renewable resource there will come a time when the existing reserves get fewer and fewer. And that is what is happening. The rapidly depleting resources can no longer meet the growing consumption needs of a section of the world's population.

Alternatives to natural resources have not really evolved. The science of exploration has reached a stage of sophistication where it has become easier to locate mineral deposits even at low concentrations. As old areas get exhausted, the tendency is to move on to new ones. In the recent past mining has left its mark on the rain forests of the Amazonian counties in South and Central America parts of Africa and more recently the South East Asian countries. Deforestation, displacement and environmental degradation, in terms of ground and surface water pollution have followed in their wake. Local economies have been disrupted and the livelihood sources have been rendered unviable.

An iniquitous world system ensures that large development projects are sanctioned in the name of the general public, often with public money. And of course they are to be for the general good of the public. The mineral rich areas of India are among the last reserves in the world. Much of the coal, iron ore and bauxite deposits, possible gold and diamond areas, unexplored reserves of atomic minerals, gas, lignite, petroleum have not been extracted yet. This in addition to the comparatively stable political climate in India can make it an investor's paradise. A

willing state making all possible concessions under the economic liberalization programme to ease entry of corporations that will mine our minerals, process them and export them to earn us 'valuable foreign exchange'.

Mining, like all modern industries, is a typically capitalistic phenomenon, where external capital is used to produce goods to be transported outside the area for utilization and consumption. Investors and consumers live far away from where the primary resources are generated. The final commodity bears very little clue to its source of origin or the costs incurred by people in making it possible.

B. Objectives

The objectives of the study are to

1. Understand the nature of mining activities prevailing in mineral rich states of Orissa and Rajasthan.
2. Analyze change defining future trends in the climate of economic liberalization policies.
3. Assess impact mining on the lives and livelihood of local inhabitants as direct fallout of these activities.
4. Analyze the nature of planned interventions by people's organizations and NGOs supported by Oxfam.

C. Frame work of analysis

The process of mining has critical impact in the area. The area or impact area can be classified into:

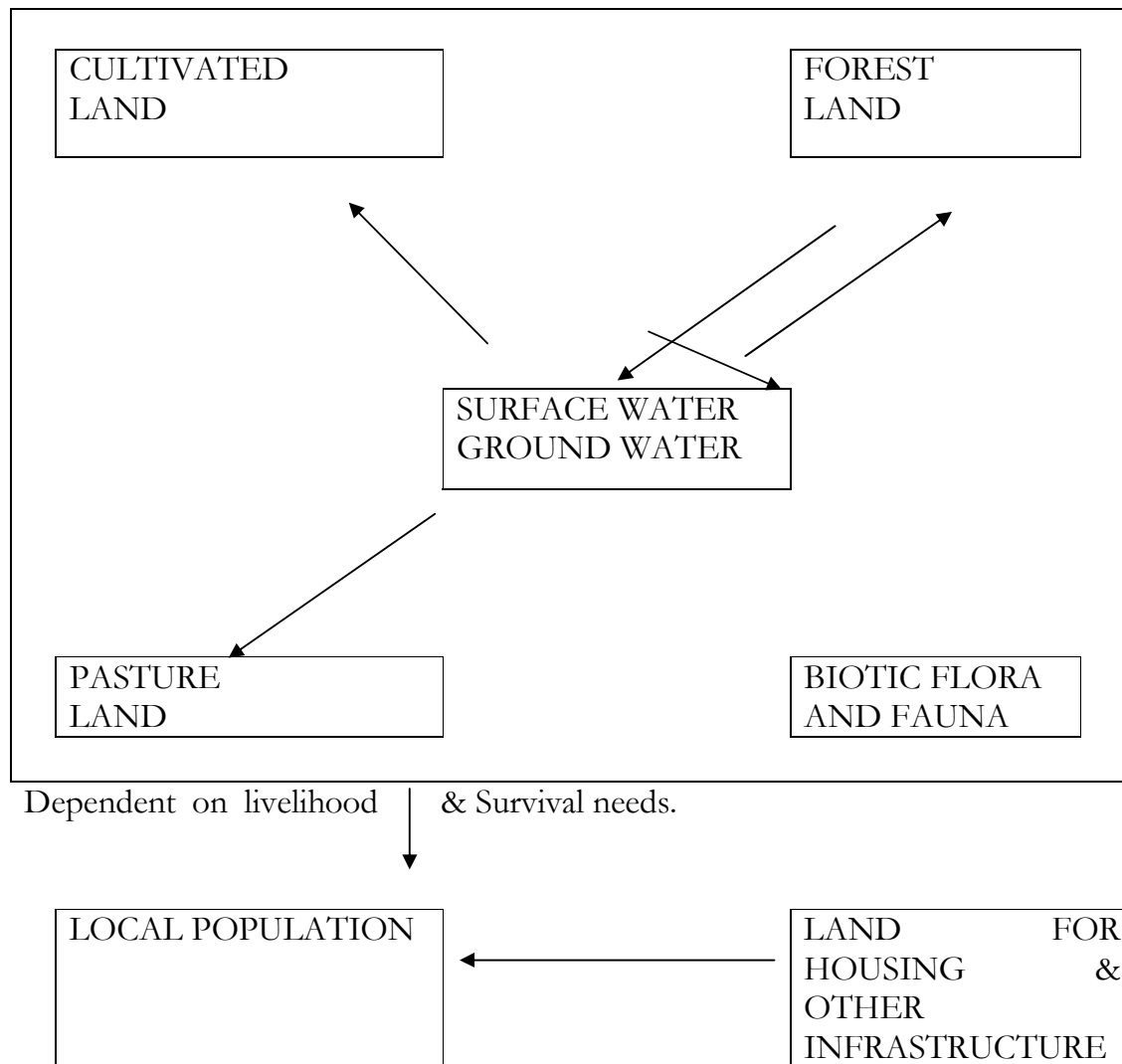
- The area under actual mining operation
- The land acquired for creating infrastructure in the area, e.g. constructing processing plants, sheds for storing raw ores stacking machinery, washing centers township for employees, roads, railways associated industries, etc.
- Second level of displacement resulting from future expansion plans
- Peripheral impact area surrounding all the above.

The impact area is constituted by specific components. These would be affected differentially by the activity. This would determine the nature of impact.

The components constituting the impact area can be classified as follows:

- The local population, i.e. people living in the area prior to commencement of mining activity. They could be the original inhabitants or settlers for a period of time.
- The natural resources:
 - i. Surface and ground water sources
 - ii. Cultivable land or land under cultivation
 - iii. Pasture land or land used for grazing cattle
 - iv. Forest land. This includes protected forests, reserve forests, sacred groves, demarcated forests, demarcated forests, any other
 - v. Mineral wealth
 - vi. Biotic flora, fauna and their derivatives (roots, fruits, flowers, leaves, small timber, wild animals, birds, fish, honey, lack, gum, oil, fibers, medicines, etc.)
- Land for housing and other infrastructures. This would include schools wells religious centers; burial/cremation ground market place, threshing ground community meeting place, etc.).

Basic Dependency Patterns



Impact on Basic Dependency Relationships

Mining activity brings about changes in the basic dependency pattern in the following manner the change in ownership and the right to usage changing with the emergence of new stakeholders. These could be in the form of state mining company, employees of the mining company, migrant wage labourers directly or indirectly dependent on mining in addition to the local inhabitants.

The change in usage or utilization pattern of the existing resources. E.g. surface water earlier used for household consumption and irrigation now used for washing the raw ores from the mines. Depletion of resources and skewed distribution of the remaining beginning the process of marginalisation. Since the erstwhile resource base would now have to support more number of people with differing nature and rates of consumption depletion will take place. As there is no equity between the stakeholders some groups would get lesser share of the shrinking resource base.

The Local System in flux

Mining activities depending upon its location, scale and intensity can

- displace the local population entirely
- increase pressure on the shrinking resource base, resulting in
 - i. loss of livelihood of the local population
 - ii. people might shift to mining related work, if available
 - iii. people might out-migrate in search of other livelihoods
 - iv. increased dependencies and further exploitation of the remaining resource base
- degradation of the local and surrounding environment. This is due to the actual mining operation, related and subsidiary activities, population pressure.

Displacement would entail moving out of entire communities from their habitat. This phenomenon invariably leads to decreased access to resources on which there was some amount of control earlier. These would be in terms of pastureland, forestland, village commons, agricultural land, water sources, etc. Loss of livelihood, the extent of which would be dependent on the penetration of mining and related activities in the area. This may be defined in terms of reduced access to resources due to change in ownership rights, reduced productivity of land due to the environmentally degrading effects of mining, disruption of local market due to the increasing influence of the external economy.

Mining activities change the nature of livelihood. If erstwhile activities are no longer viable in the altered scenario, people may shift towards other available options. Occupational changes would probably be in keeping with the demands of the external economy.

Mining activities change the standard of living of the local people. This is a result of a combination of factors. The trend is often towards a more populated, degraded, polluted environment. Nutritional standards would deteriorate due to both economic and cultural reasons.

D. Methodology of the study

The document is an outcome of a series of field visits undertaken between the months of September and December 1996. The experience is limited to some specific regions of Orissa, Rajasthan and Saurashtra. The methodology used for obtaining information differed slightly in each case though the broad framework drawn in accordance with the objectives were adhered to.

In Orissa, the major mining areas were identified. Following which they were listed according to the districts in which they occurred. Voluntary agencies, community based groups and/or individuals involved in working with various issues in these regions were kept as contact groups. Most of them were not directly active on mining related issues but were well acquainted with the local area.

Primarily with their help, it was possible to spend time in the villages close to the mining areas as also to visit several ministers and hold conversation with the people working there. The body of the paper consists of information derived out of informal interview with villagers living around mining areas, mining labourers, functionaries of local voluntary agencies, mining officials, government officials in the mining department, forest department, small mine owners, lawyers and the Oxfam office at Bhuvaneshwar. The analysis and arguments has been substantiated using secondary information from Government publications, papers and maps and documents obtained from the public and private sector mining industries.

Specific Oxfam project partners in Rajasthan have been working with mining related issues for the last five or six years. The Rajasthan trip entailed visiting the working areas of these voluntary agencies. Besides informal interviews with the various players as before there was also detailed discussion regarding ongoing and planned intervention with the functionaries of the organization and the Oxfam office at Ahmedabad.