Mining In Rajasthan

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Introduction

Rajasthan, the second largest state of the country has large reserves of mineral resources of both the metallic and nonmetallic variety. The mining industry in Rajasthan employs the largest number of people after agriculture. The state generates almost 50% of the country's value of minor minerals. This is an indicator of the erstwhile nature of mining activities in the state. The widespread mining activities in Rajasthan till recently were characterized by small, privately owned, localized enterprises, (the exception being a few major mineral leases exploited under the state owned public sector bodies). These mines are mostly semi-mechanized or in some cases under complete manual operation gross violations like for instance, operation on illegal or expired leases, haphazard dumping of mine debris, paying less that the minimum wage stipulations, hazardous work conditions, etc. are rampant. In fact the extensive and erratic mining in Rajasthan partly derives it's profitability from cutting the cost of labour by paying them less for long hours of work intensive erratic mining often exceeding lease limits, frequent non-payment of cess/royalty, etc.

This state mining department has neither the political will nor adequate number of personnel to monitor workings of a couple of thousand leases. All this augments the oppressive work conditions of a large number of people who are dependent on seasonal or permanent wage labour in mining to maintain subsistence levels. The complexity of the situation increases further with large private capital entering into this sector for exploration mining, prospecting and setting up mineral processing plants and installing captive power plants, etc. The primarily mechanized nature of their operation will have serious ramifications on the quantum of employment generated in this sector.

Rajasthan's mineral policy document brought out in 1994 is a mess of contradictions, but manages to convey the state's pro-liberalization stand clearly.

A. Analysis of Rajasthan's New Mineral Policy, 1994

- Foreign investment in the exploration of gold, diamond, base metals, precious stones, etc. Proposal to remove the ceiling of 25 sq. km. area for prospecting license (under the MMRD act).
- Releasing Gypsum for private investors setting up cement plants.
- Size of marble and granite leases increased from earlier limit of 1 ha. to 2.25 ha. More incentives to mechanized mines and processing units.
- Export oriented units to be given priority while granting leases.
- For easier and cheaper transportation from the mines the state government will construct roads under "Apna Gaon, Apna Kaam", JRY schemes, etc. (even the names of the schemes are ironical, "My village, my work" indeed!!).

- The state government has also amended the provisions under the Minor Minerals Concession Rules, 1986 some of the changes are as follows:
- The period of mining lease extended from 10 years to 20 years with renewals being granted from 20 years.
- Minimum prescribed size of a mining lease increased from 50 x 50 m to 1 ha.
- Quarry license period has been extended to 5 years from 1 year.
- In cases where the charagah (common grazing land) is less than 5% of the area applied for mining lease, prior NOC (no objection certificate), of revenue department is no longer required District Collectors are empowered to issue NOC for Charagah land up to 4 ha.
- NOC from either the Forest or the Revenue Department is not required in case of transfer of leases.
- In case of any objection towards the grant of mining lease the district collector is required to inform the concerned ME/AME within a period of 30 days after receiving the request from the ME/AME. If the no decision is taken in this time, the collector ceases to have any say in the matter. The request passes on to the concerned Divisional Commissioner if decision is not taken in the next 30 days the clearance will be automatically granted.
- The Forest Department will be required to inform the mines department over any objection regarding the grant of lease in a specific area within 60 days.

Source: (Mineral Policy, 1994, Department of Mines, Government of Rajasthan).

B. Contextualising Mining In Rajasthan

1. Mineral Production in Rajasthan

Rajasthan produces 42 varieties of major minerals and 23 varieties of minor minerals. Besides the minerals listed below Rajasthan produces Zinc concentrate, Fluorite, Gypsum, Asbestos and Calcite. Also Barytes, Copper ore, Dolomite, Limestone, Steel Grade Limestone, Marble, Mica, Sandstone, Granite, Quartz, Silica sand, etc.

Mineral	Percentage of India's Production
Lead concentrate	77%
Tungsten concentrate	56%
Phosphorite	62%
Kaolin	44%
Ball clay	55%
Soapstone	85%
Ochre	66%
Felspar	70%

2. Locating Minor Mineral Leases and the area under them, 1991

Till 1991 Rajasthan State was divided into the following mining offices. SME Udaipur, SME Jaipur, SME Bikaner, SME Kota and SME Bharatpur. Each of these senior mining engineer's offices had within their jurisdiction, ME and AME office. Listed below are some specific offices and the leases under them. Inspite of the extremely erratic data available (from Rajasthan's Mineral Statistics), the exercise does give a broad idea about the intensity and the nature of mining in some parts of Rajasthan.

Region	No. of Mining leases	No. of Quarry License
ME Udaipur	2827	2460
SME Kota	2026	4654
SME Bharatpur	1879	29
SME Jaipur	1067	1308
SME Jodhpur	799	8693
SME Bikaner	587	264

3. Mineral Wise Proportion of Leases and the Region (Minor Minerals)

i) Marble

Office	No. of Mining Leases
ME Rajsamand	1664
ME Alwar	550
ME Udaipur	248
ME-Banswara	219
ME Jaipur	106
ME Sirohi	106
ME Ajmer	104
ME Barmer	85

The total number of mining leases under marble is 3246. What is most surprising is that marble mining lease figures are not quoted for AME Makrana. Marble mining and processing are the mainstay of the local economy. On the other hand AME Makrana shows 691 quarry licenses whose breakup is not given. So can we logically conclude that marble mining in Makrana is done under quarry license? What remains a fact is no one whose been to Makrana can miss encountering the intensive marble mining in the region.

ii) Masonry Stone

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Office	No. of Mining Leases
ME Bharatpur	244
ME Jaipur	198
ME Alwar	167
AME Neem Ka Thana	99
ME Bhilwara	89
ME Sawai Madhopur	89
ME Dholpur	92
ME Kota	83
ME Barmer	65

iii) Serpentine or Green Marble

Office	Mining Leases
AME Dungarpur	187

iv) Sandstone

Office	Mining Leases
ME Bundi 1	700
ME Bundi 2	670
ME Karoli	192
AME Jhalawar	170
ME Kota	133
ME Dholpur	111
ME Bharatpur	89
ME Jodhpur	25

The mining lease figures quoted for Jodhpur is extremely low. No figures are mentioned for ME Balesar either. Both these places in Jodhpur district are under intensive sandstone mining. On the other hand quarry license figures for Jodhpur is given to be, 5843, similarly quarry license figure for ME Balesar is 2685. Apparently sandstone mining in Jodhpur district takes place under quarry license. This shows major discrepancy in the legislation. The same mineral is mined under a mining lease at one place and under quarry license in another place. Quarrying of course has even less of legal formalities involved than minor mineral mining.

v) Granite

Office	Mining Leases
ME Jaipur	127
ME Bhilwara	44
ME Sirohi	66
ME Barmer	54

4. Mineral wise distribution of mining leases, the area under them and revenue earned, 1991 (minor minerals)

Mineral	No. of Leases	Area under leases in ha.	Revenue in Rs.
			Lakhs
Marble	3246	4365	1116.42
Sandstone	2173	83,534	854.19
Limestone	534	21,116	408.16
Masonry stone	1691	5489	296.80
Limestone (b)	83	2063	295.27
Brick Earth	461	1256	97.16
Serpentine	227	225	61.52
Granite	478	630	33.62

- Total number of mining leases 9181.
- Total revenue collection from minor minerals in 1992 was Rs. 3376.31 lakhs.
- Total area under mining leases 120,261 ha.
- Total no. of quarry licenses 17,463

5. Region wise distribution of major mineral mining leases, 1991

Region	No. of mining leases	Leases are in ha.
SME Udaipur	577	68,926
EME Jaipur	445	41,587
SME Jodhpur	96	15,153
SME Bikaner	123	13,365
SME Bharatpur	134	13,063
SME Kota	17	3779

6. Mineral wise distribution of mining leases, the area under them and the revenue earned, 1991 (major minerals)

Mineral	No. of Leases	Leases are in ha.	Revenue in Rs. Lakhs
Limestone	40	18,171	910.37
Lead/Zinc/Silver	5	7883	699.81
Soapstone	330	34,786	120.48
Copper ore	6	2240	97.4
Gypsum	31	19,156	67.39
China & white clay	86	8043	39.75
Bali clay	42	5855	28.31
Quartz	79	6828	18.55
Silica sand	118	10,708	16.38

- Total number of mining leases under major minerals: 1391
- Total area under the lease: 173,634 ha.
- Total revenue from major minerals in 1991: Rs. 2222.18

7.A. Comparison between the major minerals and minor minerals statistics, 1991

Nature of mineral	No. of leases	Area under leases in173,634	Revenue in Rs. Lakhs
Major	1391	120,261	2222.18
Minor	9181	293,895	3376.31
Total	10,572		5598.49

• Total area under mining leases in Rajasthan: 2938.95 sq. km.

C. In The Mining Area

Rajasthan's mineral economy is dependent primarily on minor minerals. The state government makes regulatory law regarding the grant of concessions (leases, etc.) for mining minor minerals. The mining of significant revenue earning major minerals like base metal, is under public sector. Marble is the highest revenue-earning mineral of Rajasthan followed by limestone and sandstone. For our present discussion we shall restrict ourselves to a brief description of the nature of minor mineral mining in some specific areas of Rajasthan.

Among the areas visited were parts of Rajsamand and Udaipur districts in south Rajasthan, parts of Jodhpur district in western Rajasthan, Makrana in Nagaur district and the area near Sariska sanctuary in Alwar district, north Rajasthan. The following are some of the relevant details from the areas.

1. 'They say it with marble', in south Rajasthan

The districts of South Rajasthan like Udaipur, Rajsamand, Dungarpur and Banswara are mined intensively for marble, serpentine, masonry stone, limestone among the minor minerals and soapstone.

ME Rajsamand had 1664 mining leases for Marble.

ME Udaipur had 248 mining leases for Marble. (1990 figures)

Total no. of M.L. in ME Udaipur: 3404

The mining of these minerals take place under the private sector. Mining takes place primarily under small leasehold areas. Though several contiguous lease might be held by a single owner. Besides the mining areas are stretched large numbers of small processing units where stones are cut, polished and stacked to be sold and a number of lime kilns.

In places like Kelwa in Rajsamand district, the marble mining belt continues for several km, where every inch of land is being mined. The deposits are available on the outcrops of Aravalis and these look hacked, sliced and stripped bare, in places razed to the ground level depending upon the age and intensity of mining. The tiny roads have heavy traffic of trucks, carts, jeeps, tractors, etc. carrying away blocks and chunks of marble. In between the stretches of mining, there are some village settlements. In the month of October the land looked parched and caked with white marble dust. In fact land for miles around are used for convenient dumping for the considerable waste of earth, debris-generated daily from the mines and the processing units. Near the soapstone mines of Kemti and Kalora in Udaipur district, the air is laden with fine stone dust clogging ones nostrils. The

two mining leases are privately owned, each spread over a distance of four to seven km. a couple of hundred meters deep at places filled with water from the last rains. These mines semi mechanized. In fact most of the larger mines have some machines, but the bulk of work is still done by manual labour.

The profitability of stone mining is derived to a large extent by the unorganized nature of mining in the area. Mining in Rajasthan is typically unorganized. The chief characteristics are, violation of existing laws as an accepted practice rather than an exception. Thus mining or quarry leases will have innumerable irregularities, in their areas, in ownership, in the haphazard working of the mines geared towards maximum daily output, rampant dumping of wastes, encroachment on land other than what is specified by the lease, hazardous work conditions and extremely low and erratic wages, not following safety guidelines, non payment of cess, royalty, not keeping legal record of the number of workers employed.

The growing domestic demand for building as well as decorative stones coupled with the large number of small mine owners always competing to cut overheads and extract maximum profit till the boom lasts, has created a nightmarish situation in Rajasthan. The almost non existent forest cover, dwindling productivity of land in an already arid area and large-scale and rapid degradation of land due to mining and other related activities leave very few available livelihood options for the local population.

Mining as an activity not only encroaches into the natural resource base of the local communities but also introduces external elements in the system. This induces in many places a growth of urbanization, influx of outsiders and introduction of cash economy with resulting hike in the prices of daily commodities. The growing need for wage earning leads to increased out migration. High dependence on activities such as mining has cut enormously into the bargaining power of people creating some of the ugliest exploitative situations. In some of the mines in Kelwa, the majority of the workers are tribal from the neighboring tehsils. The live on the open mine sites in makeshift shelters constructed out of mine debris. Many of them are in debt, extremely ill paid. Water and fuel wood are scarce. Daily necessities have to be procured at high prices. Some live on the mine site all the year round, going back to their villages every new moon day. The frequency decreases with the distance from the mines. People from nearby areas often go back to sow the kharif crop.

What is clear is that there is no dearth of people of work in the mines. This generally creates a situation that is favourable from the point of view of the mine owner. The system of giving loans and the subsequent indebtedness also ensures that a particular group of people continues to supply their labour to the mine at low cost. The irony of the situation is that the Rajasthan state government justifies the expansion of mining by touting it's employment generation potential when there is no legal documentary evidence defining the status of the several thousand people working in the mines. Most of the private mine owners do not keep any records of the people employed in their mines. This means that for this large category of people there is no institutional support. As far as the law is concerned they are non-existent.

2. On (what) remains of Makrana

In places like Makrana where marble mining has traditionally been the mainstay of the local economy, the situation is slightly different. In Makrana almost every household is involved in some trade related to either marble mining or processing of marble blocks, slabs and tiles, or sculpting and making ornamental marble artifacts, etc.

A large part of Makrana town has been created by the settlers who came to work in the mines. The wage rates are slightly better than that in south Rajasthan. But the area is affected by some complex problems. Large-scale mining for many years, manual but extensive, has devastated the landscape. The older mines have become deep and are filled with water after the rains. Highly mechanized forms of mining are required to be able to extract the marble and retaining profitability. This has affected older mines and the people working there with only manually operated cranes as mechanical support.

Large dealers in marble processing have moved into Makrana over time. These people control the marble prices both of the raw slab (from the quarry and the finished product. The rate at which a marble slab) is bought from the mines is much lower than the processed product. Large-scale processing is done at the larger units. Household units processing and manufacturing marble products are going out of business. The new marble mines coming up near Makrana are all large leaseholds with high degree of mechanization. A lot of erstwhile agricultural land is being mined.

Makrana town is a hub of commercial activities but lacks basic infrastructure. It has no roads, no sewage system and most critical no water. The sludge and slurry from the processing units are deposited in every available inch of place. The air is laden with marble dust reducing visibility in the night. The largest areas are covered by huge sheds, godowns and processing units. The remaining area is occupied by deep mines that look like ravines.

In between are the small, congested settlements where even water for daily consumption has to be bought at a price. In the midst of all this there are large enclosed areas of rich private landowners. These are the people with high political connection and control a lot of marble trading in the area. In fact the settlement we visited called Kalanada, where 3000 people have been living for the last fifty years,

has received eviction notice because the local MLA wishes to extend his property. These people had come to work in the marble mines years back and had settled in the area. Makrana is literally disintegrating but mining continues to expand.

3. Sariska; protecting Tigers of spawning mines?

Alwar is one of the northern districts of Rajasthan. The sariska Tiger sanctuary is situated in Alwar district. The low hills of Sariska till recently were covered with dense Among the mines closed by the supreme court judgment was HCL's Copper mines in village Kho-Dariba, Alwar, dis. Water containing toxic copper compounds continue to seep out of the mines into the village. Also there is an almost three story high waste dump outside the processing unit next to the mine. Every monsoon the rainwater cut deep furrow in the dump washing toxic heavy metals into the surface water sources of the village below.

vegetation. It was also the source of a number of hill rivers, which carried rainwater down to the plains.

The ground water table in the villages around Sariska is very high and the agricultural land very fertile and productive, large-scale marble mining in the sanctuary buffer zone is causing havoc in the area. The proximity to the Delhi-Jaipur highway is making the area extremely lucrative for other projects. Near Ajabgarh villages, the Heritage group is constructing a large resort on the bank of a barrage built by the Maharaja of Jaipur in the last century. As many as thirteen distilleries are going to sep up their operations in Alwar district.

In the early nineties a Supreme Court indictment in response to writ petition filed by a local NGOs ordered the closure of mines working inside the reserve sanctuary, buffer area. Within a year almost all those having substantial deposits had started functioning again. In villages like Tilwad and Tilwadi marble mining operations are taking place right in the middle of the village on purchased private agricultural land.

Many of the large landholders in the villages are keen on selling their agricultural land as they are getting a high price for it. In most of these better off families' occupational pattern in changing with their children getting educated and moving away from agriculture based activities, and urban transition becoming more possible and desirable. With these people selling of their considerable landholdings, the land use of the area seems to be changing rapidly.

For instance, in Tilwadi village, pieces of marble blasted from the mines fall into the nearby agricultural land. Rainwater released from the mine sites were also flooding into the neighbouring land. In such situations agricultural productivity of land would definitely go down due the impact of mining.

Sooner or later most people would sell. The opinions commonly held in the area also seems pro mine and in favour of monetization of transaction. In all the big mines coming up the local people seem to be playing the roles of contractors and middleman, sometimes employed by the mines as cashiers, etc. Most of the labour comprises of migrant communities from the nearby districts of Sawai

Madhopur and Jaipur. Mining is expanding rapidly in an area, which has some of the most fertile lands, plentiful water supply in the state.

The dominant opinions rife in the area seem to favour all outside intrusions that could lead to a monetary windfall for them. In the meantime the Sariska forest area are dwindling. The forthcoming plans of a national highway through this area would speed up the process of plunder.

The natural resource base is shrinking. In one of the villages in the Sariska buffer zone the women leave the village at four in the morning and come back at around 9 am after collecting fodder for the cattle. According to them every year it gets slightly more difficult to meet the requirement, forests had thinned some more and one had to go collecting higher and higher up in the hills.

4. Sandstone economy of Jodhpur District

Sandstone quarrying is a major source of livelihood in Jodhpur district. According to the 1991 census 23,138 people were employed in sandstone quarries.

Although it is minor mineral sandstone is the third largest revenue-earning mineral in the state of Rajasthan. Sandstone had traditionally been in use for building purposes in

Locating the sandstone quarries of Jodhpur district

Within a 5 km radius of Jodhpur city. Soorsagar, Fidsaur, Kaliberi, Devria: 4310 quarries.

Keru and Pabu magra, 12 km from Jodhpur city; 3000 quarries

Mandor ghati, 10 km north of Jodhpur city: 1500 quarries.

In all Jodhpur district had 18,524 quarries in 1990.

the district. It has a substantial local market and a growing demand in other states due to its decorative possibilities.

The hills in the neighbouring area of Jodhpur city are capped with alternate beds of coarse and fine-grained sandstone. In these areas sandstone quarries are stretched out for miles. The quarry licenses are located adjacent to each other alone a

continuous bed of sandstone.

Sale value of sandstone: in' 000 Rs. 1984: 98,122.8, 1989: 494,271.7 Production in '000 Tones.

1984: 1090.2 1989: 1761.1

- Production has increased by 61.53%
- Value has increased by 403.7%

In the quarry areas, which spread out over ten km in places, it is difficult to distinguish individual lease areas. Individual quarries generally do not have any names. Each quarry however has a demarcated labour force in a complex system of hierarchy. Some quarries are worked by the family members of the leaseholders, these cases are few.

Generally the lease area is divided into portions and given to individual contractors who further have a number of people working for them or in some cases

do the entire work themselves. The entire operation is manual using hand tools like hammer, plinths and tape measures. After the initial clearing up of soil and overburden, the exposed sandstone slabs are measured and manually extricated, cut and sized. The hard labour for long hours shortens the work life of most people working in the sandstone mines.

The actual quarrying is done by the men. Women do the work of clearing and loading the rubble and debris. The payment is either on a piece rate or daily basis. Among the people who work in the mines, some come from nearby villages, a large number is also from neighbouring districts.

There is a high rate of indebtedness among the quarry workers. This primarily due to the

Work division and nature of payment in the sandstone quarries of Jodhpur.

Leaseholder can give the quarry for mining to several contractors. These contractors themselves work in the mines and can also have several other workers under them.

The terms of payment are as follows:

In case of piece-rate: Per pillar (7.5 ft.) Rs. 18 to 25 small irregular blocks or "Khandas" could belong to the contractor ("paya") or the "mazdoor". The rate for which is: Rs. 400 to Rs. 600 per truck filled.

The daily wage rate could between Rs. 50-60

For women daily rate is Rs. 30. Each pillar cost Rs. 80 if sold at the quarry site and Rs. 120-150 when sold in the market.

Therefore after accounting for the transportation and labour cost there is a profit of almost 300%.

practice of taking advances from the contractors and/or the leaseholders. Since no written records are maintained at the time of the transaction, the debtor continues to work at lower wages in the quarries and the loan amount never seems to get repaid. This kind of bondage is extremely common in the area.

People from nearby districts who come to work in the quarries live in rented shacks close to the quarry sites. Their shelters are generally owned by the leaseholders to whom they have to pay rent. Near the older quarry sites small townships have grown up. Although the quarry sites are small not more than 100 x 200 feet, the nearby area for kilometers is used as a dumping group for the quantities of debris generated by the quarries. Mounds of sandstone debris in continuous rows extending up to 10 km are visible form long distances.

It is difficult to determine the pre-mining land use of the area. So the extent of encroachment into common land, agricultural land, etc. is difficult to enumerate. Sandstone mining has an ecologically degrading effect on the surrounding landscape due to the problem of disposal of large quantities of debris that it generates as well as the formation of large and deep pits. In fact the heaps of the

overburden of low-grade stones and rubble in places, occupy areas larger than the actual quarry sites.

D. Oxfam's Intervention Programme in Rajasthan

The case for intervention

Mining in Rajasthan has been rampant in growth. In the discussion that follows, the focus shall be on minor minerals mining in the building and decorative stone industry. The enormous domestic demands of these particular commodities have been the direct incentive to the growth in mining in the last decade.

The organization of this form of mining has had severely debilitating impact on the local environment. With original forms of livelihoods becoming increasingly unable, large numbers of people in Rajasthan are dependent on the mines or smallscale mineral based industries for subsistence. The resulting brew is one, in which, entrenched exploitation are reinforced and a parallel economy flourishes on the now almost bare flanks of the Aravalis.

The state government quotes large figures to indicate the tremendous employment generating potential of the mining industry. And this is true. All over Rajasthan the most common sight would be, of cranes sticking out over mounds of debris, stone waste and slurry lining the roads, straggly vegetation enveloped by stone dust, signboards every two km in front of stacks and piles of polished and raw, slabs and tiles. Such a visible enterprise surely does not run without people.

What the states does not whisper even in passing is that, more than ninety percent of this industry falls within the unorganized sector. The people making it work are non-existent as far as the law is concerned. The resulting situation is one in which the modern economy abounds: technological sophistication and industrial growth, riding piggyback on the unorganized sector, into the area of globalization.

The abysmal work conditions of the people working in the thousands of marble, limestone, sandstone, masonry stone, quarries of Rajasthan is apparent. The state government is also aware of it. Earlier precedence has shown that, the available legislation are not going to start working on their own volition. There has been a steady revenue drain on the state due to violations of law.

Undeniably, around the mines of Rajasthan, there is and has been, for a longtime, a critical case for intervention. And concerned individuals, voluntary organizations and other bodies have been involved in this activity for sometime. Keeping in mind their own limitations, and the complex nature of problems, they have been trying, testing and adopting various methods to make some inroads in their areas. It has been a tough battle and this is just about the beginning. Beginning in external intervention i.e., the issues have had a longer, older history.

In their struggle with the resilient problems in the mining areas, the interventions have had their measures of success and failures. The following analysis is on the specific intervention strategies adopted by Oxfam programme partners in their approach to mining issue.

Intervention approaches to the issue of "mining". Experience of Oxfam partners in Rajasthan

The identified issue for intervention can be broadly categorized under the following heads.

Protecting the livelihood of people. This entails intervening in the system to effect changes that are desirable or to oppose changes that are considered undesirable.

We can define as 'desirable changes':

- i) Generation of alternative means of livelihood:
- ii) Regeneration of livelihood sources
- iii) Rehabilitation of the displaced

The 'undesirable change' could be an activity that leads to the displacement of the local population. Intervention in this case would be to oppose the activity causing the undesirable change.

The methods, which have been used to pursue the above objectives, can be classified under:

- Research and Documentation
- Networking, Campaigning and Advocacy

Defining Intervention

Without losing way in the esoteric ramble of infinite possibilities, an attempt is made to understand in simple terms, what does intervention entail?

- 1. A clear assessment of the issue one is concerned with.
- 2. An understanding of the intervening agency's skills, capacity, specific, advantages, commitment, etc.
- 3. The people in question. These are the local inhabitants in context. The concern is for vulnerable and marginalized group. The objects of intervention being to progressively reduce and ultimately aid in eliminating the conditions of marginalisation. Whether one is working "for them" or "with them" or "inspite of them", determines the foundation of intervention.

Issue based intervention and regional variations

The Oxfam programme intervention areas in Rajasthan, in the districts of south Rajasthan, Jodhpur, Nagaur and Alwar, a combination of approaches that have evolved in the course of working on the critical issue of mining in these areas. In a dynamic process, where innumerable factors determining the course and outcome of a particular action, it is not surprising that, the Oxfam partners' experiences open a wealth of possibilities.

The following discussion makes an attempt to contextualise these efforts. The narrative does not take particular organizations separately. It tries to analyze the issues and interventions, region-wise.

The two organizations whose activities will figure extensively are GVVS in Jodhpur and TBS in Alwar. These organization have been involved in the issue for the longest period. Their involvement with the mining issue in particular dates back to the early nineties. The issue in south Rajasthan and Jodhpur will be dealt comparatively.

Alwar is treated separately for this discussion.

Issues and Intervention. A comparison between the situation in south Rajasthan, Jodhpur and Makrana

One of the most critical and identified problems in the unorganized mining sector in Rajasthan is the wage issue.

The system of payment differs in the different mining areas. With in the same region for the same type of mines and for similar work, wages will be uniform. Wages are also perceptibly higher for the locals in comparison to the migrants. The locals could be better skilled and therefore doing slightly more specialized jobs. The ability command better wages could also stem from their comparatively secure status due to the proximity of agricultural land providing them with a supplementary source of livelihood. Living among their own village community and caste group the other tangible support are structures.

The profile of the organizations.

In south Rajasthan

Samajik Sudhar Evam Manavadhikar Suraksha Samiti.

The organization was registered in 1994. Between August 1995 to March 1996, they undertook a project to collect baseline information about mineworkers in seven blocks in Udaipur and Rajsamand districts. August 1996 onwards, they would work towards unionizing mineworkers, undertake advocacy through media.

Jyoti Jan Vikas Sansthan

In 1993-94 the organization undertook an environmental regeneration programme in Udaipur district. The next project in the two-year period between 1995-97 was to organize mineworkers in Udaipur and Rajsamand district.

Sarita

In 1993 the organization had submitted a proposal for organizing environmental awareness camps in forty villages of Udaipur and Dungarpur districts. The special focus of the camps was to address the various issues related to mineworkers. In 1995 Sarita initiated a project aimed at the regeneration of a mineral cooperative society at Kaya and Balwara villages.

In south Rajasthan mining areas, most of the hard labour, work involved in extricating the blocks were done by tribal who had migrated from neighbouring tehsils at the behest of contractors. In some of the mines near Sariska area in Alwar district, men and women, in the ranks of the unskilled category of labour were migrants from the neighbouring districts of Sawai Madhopur and Jaipur. Some of the locals near Tilwadi village, were actually employed in medium level jobs like keeping accounts, driving the tractors, etc. in the mines in the area.

The sandstone quarry stretches near the Keru area in Jodhpur district has a mixture of locals and migrants from Barmer district.

Both Makrana and Jodhpur being centers of old mining activities have early generations of migrants now settled in clusters near the mining areas. Some of these areas in Jodhpur are named after the communities that came and settled there.

It is important to understand these differences as they play important role in the organization of in the organization of the community. In the mining areas irrespective of the region, men and women do different kinds of work. On the whole there are fewer women involved directly in the mining activity. There are various reasons for this.

The Keru area in Jodhpur district has more than two thousand sandstone quarries. The work involves extricating neat pillars and slabs of sandstone from the rock faces using nothing more than a hammer, chisel and a measuring tape. Considerable physical strength is required to be able to wield the hammers, driving in the plinths and cutting out the slabs. The division of labour is clear. Work involving hard labour is done by the men.

Jodhpur district Brief profile of GVVS

Grameen Vikas Vigyan Samiti

In 1992, conducted baseline survey among the sandstone mineworkers of Jodhpur

Conducted several state level workshops, which led to the formation of a networking and advocacy agency for the mineworkers called the MLPC.

Organized a documentary film production on the condition of mines and mineworkers.

Undertook medical examination of a sample of 450 mineworkers to detect the incidence of silicosis and tuberculosis.

A PIL was filed in the state high court resulting in the establishment of a state silicosis medical board.

Organized a leadership-training programme for the mineworkers, which led to the formation of Jodhpur Zilla Khan Mazdor Sangathan.

Women are involved in loading small broken pieces in the truck or helping to clear the initial earth and rubble that is essential before actual sandstone layers are exposed. In comparison in the Udaipur district, there were more women employed in the soapstone mines.

Soapstone mines in Jharan, bordering Alwar district has many women working their inspite of a certain level of mechanization in the area. The women are hired to perform specific tasks like, carrying the small pieces and doing the straining of fine soapstone powder.

In Makrana there are hardly any women to be seen in the marble mines though the case was different few years back when there was less machines and women operated manual cranes. The wages given to the women are lower than what the men earn. But their representation is low and employment is irregular. In rare cases the daily wages can be higher than the minimum wages. In Jodhpur and Makrana the wages are comparatively better than in south Rajasthan.

Interventions based on standard definition of minimum wages might not be able to address the complex, exploitative systems of payment in the mining areas. Besides the irregular system of wages, it is the activity itself, which is extremely damaging to the person performing it. It is a high-risk activity. To assume that people are unaware of it would be making a mistake. The precedent of a person's shortened life expectancy and general damage to health, after a stint at the mines, are things, which the community knows off. The exact medical terms might not be used by them but they are extremely familiar with the outcome. There are two key points therefore in the intervention. Firstly, the community must be convinced that something can be done about the existing situation and secondly, that it can happen only with their involvement.

Looking at the impacts of the present interventions, one realizes, how difficult it is to make a serious dint in functioning of the unorganized mining sector, despite concerted efforts by concerned bodies.

Advocacy initiatives by the MLPC

The regional level advocacy and networking body, the MLPC has been able to attain major judicial breakthroughs. Their efforts have been invaluable towards making some of the mining legislation functional in the district. Represented by eminent lawyers and professionals, its base is constituted primarily of the middle class. Therefore successful campaigning at the legislative and media level have not called for the active involvement of the miners. The vast and spread out nature of the mining activities make it necessary that inroads are made into the settled communities of miners. Their involvement is imperative for the implementation of progressive decisions.

A mineworkers union can be formed by people who work in the mines. In the present case the concept of the union emerged out of the organization first and then contacts were made with people asking them to join the union. Identification with the Zilla Pathar Khan Mazdoor Sangathan is yet to be complete. It is gaining ground as a dispute settles because of the involvement of the lawyers but base needs to take root among the miners. With only one full time field level workers covering the 5000 odd quarries in and around Jodhpur, this will definitely take time.

The concerted campaigning of the organization was instrumental in the Supreme Court order, which led to the formation of the state Silicosis Board. But the constitution of the medical board does not ensure that it will become functional. For the moment the board exists only on paper. Judicial injunctions are not enough to mobilize political will which is largely absent in the state due to the entrenched vested interests of dominant players. The state will be willing to pay any amount of lip service as long as it does not have to disturb the powerful mining lobby. Indeed many of them of the political brotherhood have personal stakes in the mines. The maximum utility out of the profession service offered by the lawyers can be derived only with supportive field level presence, which is missing at the moment. The combination of a MLPC and a strong union could become a formidable strength.

The vortex of MLPC remains in Jodhpur, the place where it was initiated. South Rajasthan mining area being equally large or even larger with it's own set of complexities requires different strategy and substantial efforts, independent of what is happening in west Rajasthan. The undivided Udaipur district covers an area of 17,279 sq. km., which is larger than the entire state of Orissa for instance. Jodhpur district covering an area of 22,850 sq. km. even larger. To organize mineworkers all over the district is too broad a mandate for the localized intervenes and would demand superhuman skills.

At present mining in Rajasthan is characterized by violations of all kinds. The entire industry is thriving on irregularities. It is unlikely that this form of mining activities would change into any other form of production. Their profitability and survival is dependent on unorganized, labour intensive mining.

Whatever the policy changes, mining in Rajasthan is likely to be dominated by this form for more time. This is primarily because the new entrants are interested in high value minerals like, base metal, lignite, gold, gemstones and oil and gas explorations. The thriving unorganized industry in building and decorative stones is unlikely to be disturbed. Till now MNCs have not started mining. Foreign investment in mining will take some more time to materialize.

The New Mineral Policy of Rajasthan as discussed earlier is geared to make things easier for the private sector. The various exploration projects are presently at an MOU stage. The ultimate materialization of many of these would be dependent on several factors. Once they are formalized they would have critical impact on settled habitats due to their sheer size and nature of production. To intervene effectively in these areas in future, one would have to have strong base in combination with a coherent strategy much in advance.

The case of Sariska

The north Rajasthan experience has been quite interesting. The concerned organization has been working in the Sariska reserve area, in northwestern part of Alwar district. The area is different from the rest of Rajasthan. It has better rainfall and till recently the Sariska hills were covered with dense forests. A number of rivers originating in the hills resulted in the creation of fertile lowlands with high agricultural productivity. Rainfall in the area is also higher than in other parts of Rajasthan. A veritable land of milk and butter. Things, of course, have changed now.

In village Gubbara Vyas, about six to eight km. from Ajabgarh, the women in the household wake up very early. They disappeared around 4 am in the morning only to return five hours later, with large head loads of fodder and small timber. Every year they get up slightly earlier, come back later. They have to go further and further in the hills to meet the daily fodder requirement of household cattle. The forests are disappearing.

The landowning classes in the area are upwardly mobile. They are selling off agricultural land at high prices. Some have built big houses for themselves, bought cars, many are moving to urban areas. The proximity to Delhi, the locational advantage of the Delhi-Jaipur highway has made the area extremely lucrative for investors. Distillery, mines and hotels are the major bidders. Land prices have soared in the area. In the Sariska region in particular, a rash of mines scar the land.

Most of the marble mines were situated in the buffer zone of the sanctuary area. An effective PIL filed by TBS resulted in the Supreme Court order declaring the closure of some 200 mines in the area. Less than three years after, the bigger mines have opened up again. Between Baldeogarh and Tilwadi, along the edges of Sariska, scores of closed mines are marked by piles of rubble and boulder and disused machinery. Crane heads are visible for miles around. Those operations had come to a standstill.

In many other areas inside the sanctuary mining continues unabated. Marble mining is on in full spate along a single stretch surrounding Tilwad, Tilwadi and few other villages all the way up to the foothills. Work was on at full spate. The place was scarred with rubble heaps and dusty with machinery. The hillside, literally

on the body of the sanctuary was stripped bare of all vegetation, ugly red in places and stark white wherever marble veins have been exposed. Tents were pitched by the people who had come to work in the mines. That particular settlement was entirely made up of migrants from Sawai Madhopur district.

The present mine sites were on agricultural land, surrounded by land were cultivation was going on. The water flowing down the irrigation channels were full of white scum due to in large chunks of boulders flying into people compounds. Men and women working in the surrounding agricultural land run serious risk of being hit. Instance of low-lying agricultural land being flooded due to water released form the mines are common. Marginal landholders who face the brunt of the impact have the least say in the villages. The general sentiment in the villages, especially the powerful and the influential opinions remain pro-mine.

Inside the Jamuva Ramgarh sanctuary in Jaipur district, there exists a large soapstone mine. Countless dolomite and marble mines exist inside villages at Dausa.

There was considerable difference in the way people perceived mining in the area. The large landed people of the community were able to higher prices for their land sold to the mine owners, the poorer people with less of tangible assets were caught up in the fast deteriorating environment.

The prospects of the mines, the large hotel coming up in the area, the proposed helipad, the planned construction of a national highway cutting across the area, were seen as Alwar district

Brief profile of TBS

Tarun Bharat Sangh

Campaigning against illegal mining inside Sariska wildlife sanctuary.

Filling a writ petition in the Supreme Court.

Supreme Court decision in 1991, ordering the closure of 215 mines.

In 1993-94, TBS undertook soil and water conservation in 19 villages in the Sariska buffer area under Ecoregeneration programme and to provide employment to the erstwhile mineworkers.

In 1996-98 TBS undertook similar campaigning against illegal mining in the Jamuva Ramgarh sanctuary area in Jaipur district.

signs of positive development. Whether one can consider this as the general sentiment in the area or not, it was obvious that, this was the perception of a sizable number of the articulate population. There were a number of 'rags to riches' stories within ten minutes, as proof of prosperity. The rising land prices were cited as the first tangible gains, followed by employment generation.

The reading of the situation was very disturbing. On one hand mining seemed to be intensifying and the general sentiment looking at if for a short term and quick monetary gains. Purely judicial measures would be inadequate to check the growing menace of mining in the area if people who live in the area do not see a case for defense.

This is not to say that all people are unanimously promoting mines. Among stakeholders, hierarches are bound to exist. Many would have more to lose than gain from the situation, this besides the large and irreparable loss of the forest and fertile lands. The situation is indeed complex and critical. Theoretically, TBS has adopted the most logical method of functioning. The organisatin's approach has

been localized. This had entailed I) identifying the causes for disruption of local environment; for instance, the indiscriminate and illegal mining in the Sariska region. ii) evolving possible solutions to the problem, both immediate like filing a writ in the supreme court as well as long-term planning such as eco-regeneration work to reduce the dependency of the local population on exploitative mining sector. Having identified mining activities as having detrimental effect on the environment and livelihood of poor, the organization has applied legal pressure. This proved effective as the enterprises were on shaky grounds, operating from protected areas.

There are 19 villages inside the Sariska wildlife sanctuary spread over an area of 800 sq. km. TBS with all its excellent documentation backup and a winner of a legal situation would have to roll up its sleeves and look for the allies among the locals. To build up local resistance to contain the occurrence of such activities, attempts were made to provide alternative livelihoods to the people. To be convinced about the need to resist such encroachments is required for any intervention. Since within the concerned area varied and diverse needs have to be addressed, there has to be some balance among the variety of stakeholders. But first, is there an identification against a common adversary? If not.

TBS's considerable efforts at environmental regeneration, superb achievements in themselves, might remain decontextualised due to lack of claimants.

Summarizing the intervention efforts

The interventions in the mining sector are of three types and each has achieved some tangible results.

- Mining activities in protected areas have been opposed and some gains were made. However lack of community participation has hampered the realization of gains achieved through court intervention. There is an urgent need to identify ecologically fragile areas and oppose initiation of mining activities these areas.
- ii) Much of the NGO work in Rajasthan is aimed at enhancing the power of mineworkers to improve their living and working conditions. Greater involvement of the people should be facilitated to bargain for improved entitlements and basic rights.
- Regeneration of natural resources and their effective management must be promoted action in this front is slow.
- iv) Intervention options need to be more focused taking into account the complex regional variations. At present the intervention areas as well the mandate is too broad for the intervenes who are located in specific areas and whose spread is limited.