Report on

WORKERS IN STONE QUARREIES & CRUSHERS

Gohad, Madhya Pradesh

Prepared by – Environics Trust

Prepared for - The Developing World Outreach Initiative and Maquiladora Health & Safety Support Network
**About** - Gohad is a city and a municipality in Bhind district in the state of Madhya Pradesh. The city is about 35 Kms from the city of Gwalior. It is located at 26.43°N 78.44°E. It has an average elevation of 159 metres (521 feet). Gohad block has 206 villages with the population of about Four Hundred Thousand.

**Background** - The city of Gohad is surrounded by stony land. One can find large amount of stone by only digging a few metres below ground level. This stone is used in road and house construction activities. The mines in the area are about 20-30 years old. Earlier the area used to be lush carpeted forest with several native tree and shrub species. A few small mines used to be operated in which all activities were carried on manually. Several of these mines were illegal while a few of them were legal and operating after obtaining necessary government permissions.

Around 10-15 years ago, several samities (groups) of tribal's were formed in the area to look after mine operations. These mines used to pay a token royalty amount to the government and still the work was done manually without use of machines. There used to be about 20,000 workers in the mines at one time who used to come from towns like lalitpur, tikamgarh, chattarpur , shirpuri, savangarh among others. These workers were almost all tribals. Many of them have settled in the area and have prospered.

About 7 years back, large number of machines both for mining stones and crushing stones were brought in to carry out the mines work and crush the stone that was mined. Since then, the work has been taken over by the mines mafia and has led to large scale degradation of the environment. Since the machines have entered the scene, the number of workers has also gone down to about 15,000. At the beginning of year 2015, the area had about 200 mining machines in operation.

By looking at historical and current the Google Earth Images, we can easily make out the difference in ecology which these large number of machines has brought to the area.

*Google Earth image from 16/1/2008. One can see the large amount of foliage in the picture with sporadic mining activity which was limited to a small section*
Google Earth image from 20/12/2012

Google Earth image from 10/3/2014
Google Earth image from 10/5/2015. One can easily see the devastation which has been witnessed in the region. Water bodies created when rainwater / ground water has filled the pits can be spotted which were not present earlier

The Problem –

1. Due to the operation of large number of machines, the area witnesses lot of dust in the environment. Further as this mined stone is transported for use by large number of trucks and dumpers which are often driven negligently, there are lot of accidents and traffic jams in the villages. Lot of dust is scattered in the environment during the movement of these trucks.

2. Large scale mining has also led to severe water scarcity with depleting ground water. Even the quality of water has suffered with villagers reporting receiving red color water.

3. Another major problem in the area is of Tuberculosis (TB). Large numbers of people are suffering from TB. Most of them leave medicine in between which leads to the disease becoming un-treatable.

4. The area also sees high malnutrition.

5. There is no other avenue or alternate employment available for the villagers. Agriculture is difficult due to stony land and lack of water.

6. Most of the mining in the area is illegal. The land is owned by the government which gives the land on lease for a stipulated amount of time and sets conditions for work and in turn receives royalty on the amount of mineral mined. But most of the miners involved in the activity violate the conditions and mine more mineral or mine in excess land.

After lot of complaints by the villagers, a 7 day camp was organised by the government which saw doctors going door to door for health surveillance. The villagers were mostly treated for fever, cough and TB.
Medical Camp / Training Program:

A two day medical camp cum training program was organised on November 17-18, 2015 in the area with the support from the Developing World Outreach Initiative and the Maquiladora Health & Safety Support Network. Brass Sangathan and Environics Trust have been working in the area for a long time and have developed good will in the region through their work.

The workers for the camp were shortlisted based on the following criteria

1. The length of time they have been involved in the occupation of stone quarrying. Workers with more than 10 years of work experience were prioritised
2. Whether they have had symptoms like cough for a long time.
3. People suffering from TB who had taken medicine regularly and multiple times but still were not cured.

The camp saw very enthusiastic response. Villagers from 4 villages which were close to the camp location came and narrated their problems. The area Chief Medical and Health officer (CMHO), the local elected people’s representative and several journalists also visited us and enquired about the camp and the disease called Silicosis. Unfortunately, none of the workers, activists, journalists etc who visited us knew about Silicosis or the hazards of dust. Sadly, the only hazard of dust which they were aware of was that it spoils clothes and can cause a little cough once it gets into the nose and mouth.

The Program

Between the 2 days of the camp / Training Program, 45 workers came for diagnosis. Brass Sangathan had already arranged for the X-rays of these workers at the local hospital. Spirometry, Blood Pressure monitoring, SPO2 and other diagnosis were performed during the camp. A doctor was also present at the camp for a physical examination. The X-Rays of all the workers who came to the camp have been collected. These X-Rays will be compared with the ILO standard X ray plates for Pneumoconiosis and a final report will be prepared. 17 workers out of 45 are suspected of suffering from Silicosis during the preliminary investigation.

One of the camp organisers was also a mine worker. He was also the local DOTS provider (a person who ensures that the TB patient is taking medicines regularly). He stated that he has so far treated 85 TB victims himself in the past few years. Currently 13 villagers are undergoing treatment. He himself is a mine worker and even though he is aware of the dangers, he has to work as there is no other employment.
opportunity. He told us that the machines in the mines are mostly operated at night and he works from 7PM to 7AM. He is not given any PPE and with a broad smile stated that he covers his mouth with a towel while working. If only a piece of cloth could protect from Silicosis!

We were informed that in 30-35 villages near the mines there may be more than 300 TB patients who may in fact be suffering from silicosis. We saw kids as small as 4 yrs old who were suffering from TB. What kind of growth will they witness and experience. Even if they are able to cure themselves of TB, what kind of damage will have occurred in their malnourished bodies?

None of the workers who came to the camp knew about Silicosis. They were informed about the hazards of the dust, what is Silicosis, how it is caused, precautions to undertake and its symptoms. They were also explained the difference between Silicosis and TB and found it interesting. Most of the workers were now taking treatment for TB from private doctors spending a lot of money although the government distributes medicines free of cost but the patients have stopped trusting these medicines as according to them, these medicines do not provide immediate relief. While the medicines prescribed by a private doctor (steroids etc) might bring immediate relief, only long term and complete course of the disease can completely cure it. It was stressed that the medicines should not be left in between else the disease might become worse. The importance of hygiene and clean conditions was reiterated.

A unique characteristic of the area is that villagers term themselves as self employed. They state that they just go to the area and start digging for stone. Once they have collected stone of sufficient quantity, it is then sold off to the contractor with a trolley or tractor who takes the stone away. These villagers do not obtain any permission and their whole families are involved in the mining activity. For one trolley they get about INR 1500-1900 and it can take about 4 days to gather enough stone. They do not take any permission from any government department for such work nor do they pay any royalty on the amount.

Labour is migratory and many of the workers who had come earlier have settled here and established their own villages. These villages have several aaganwadis (play schools) and schools but these schools see low attendance as kids also go to the mines with their parents. The villagers state that although there are several government schemes for their benefits like food grains at subsidised rates, free heath card etc, these benefits are not received by the beneficiaries due to corruption and the money released for their betterment is swindled away.

Labour Rights are continuously violated. Even though the workers call themselves self employed, there is difference in money paid to a female and male worker. There are cases of bonded labour and cases where the material which has been collected by someone has been stolen at night. Sexual exploitation and harassment is rampant. There are no medical facilities available for these workers at the place of work. There are Liquor shops all around the mining area. One regular incident which was narrated is that the mine mafia pays a worker money for a trolley of stone. The worker spends a week collecting the material and once it is ready, the accomplices of the mine mafia gets the worker drunk by offering free liquor. While the worker is drunk, the material is stolen. The worker then gets into debt with the mine mafia and the story might get repeated regularly enough to get the worker into bondage.
We went around a small mining area and could see deep pits which have been created by the machines. Most of the machines which used to be visible at ground level are now invisible as they have been lowered into these deep pits. The depths of these mines range up to 150 feet. The area is completely devoid of trees and only few bushes grow sporadically.

Many ponds have been formed by rainwater due to deep mining and there have been several cases of cattle and human deaths after falling into these deep pits. Blasting in the mines has led to cracks being developed in the walls in the houses. Loud noise during blasting also lead to severe problems. Dust is a constant companion. Plants and crops are covered in dust. People also complain about eye and skin ailments.

Almost all the machines begin their operations after dark. Big generator sets are installed for uninterrupted power supply. The area witnesses large truck / dumper movement in the dark on the unpaved roads. It is very easy to get lost in the area as there are no signs and roads and pathways have been made considering only the ease of movement of mining equipment and trucks. Many of the machines are also easily movable and mobile and when the mafia comes to know of a raid, the machines are simply moved away. There are no boards declaring the name of the mining company or owner. The mafia is so strong that even the government officials are scared of raids and even if the raids are conducted, there have been reports of attacks on these teams. We saw one of the mining operations to be so large that there were tea and food stalls for the workers.

The effects of the camp are already visible. The district administration has already promised action against the illegal mining and has assured that affective steps will be undertaken to reduce and control dust emissions. The local media has also taken up the important issue of Silicosis and dust hazards and several news reports have been published. The local administration has also been approached and a memorandum has been submitted requesting for closure of all crusher machines in the area.
Some Photos of the area and the Mining Activity

Mining Activity in progress | Tractor Trolleys being filled | Crusher machines awaiting to be started after dark
Temporary / Mobile offices with Generator sets | Mobile / Easy to move machine | Food Stalls at mine site
Workers in Stone Quarries & Crushers, Gohad, Madhya Pradesh

Children at mine site - Playing and Working | workers residing at mine site