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## IMPACT OF MINING'S ON ENVIRONMENT AND HUMAN HEALTH WITH RESPECT TO MAHARASHTRA STATE

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### ABSTRACT:

Mining is basically a destructive reform action where biology stays in the sacred place of the economy. Shockingly, in many districts of the world, underground geological assets are overloaded with environmental assets on land. This is especially evident in India. Mining then includes deforestation, environmental degradation and degradation of biodiversity. In addition to the extraction and manufacture of metals and minerals, it eliminates environmental pollution. As it is, humanity has not even tolerated the entrustment of geological topological property which is the raw material needed to improve. Unhygienic nature can provide biological security to individuals but not economic success. Environmental restoration and recovery of mined lands and prudent use of geographical assets, appropriate response with environment-friendly options and scans are essential.



**KEYWORDS :** Mining, Environment, Human Health, Pollution

### INTRODUCTION:

The environment is a cycle of all external conditions that affect the life, progress and survival of all living things. It is made up of biophysical and economic elements. Status and individuals are interrelated. Man is abusing characteristic assets to make his life more favorable. Regular property is part of an eco-framework in which normally adjusted relationships exist between living creatures and common forces. Any misuse of regular property is a change in the eco-framework and its effects on all living things. Mining and related exercises affect the world's regular habitat. Mining activities on the one hand improve the satisfaction of human life and on the other; It pollutes the air and water. It represents the deadly consequences of the scene and in addition the traditional socio-economic and socio-economic prestige.

The Government of India has made it necessary for the vast mining enterprises to formulate a comprehensive plan to ensure and prevent the spread of the situation and to control pollution. Such needs are not demanded if many small mines have occurred. The impact of minimal mining in the bunch frame and especially if the mines are in rough areas indicates a serious impact on the condition. In India, the mechanical policy determination of 1965 did not hinder small-scale undertakings through small-scale mining. Air and water are fundamental to human survival. Thus, clean air and consumable water should be of utmost

concern. The broad position can be divided into 6 parts (1) arrival (2) water (3) air (4) biota (5) human habitation (6) human body. Mining and various exercises identified with common property can affect any of these segments either exclusively or in a roundabout way. The effect of coastal mining is seen using (1) arrival surface (2) appearance (3) soil richness (4) arrival design.

The advent of both agriculture and woodland has had a devastating effect on the exercise of mining. If an incident of open mining has occurred, the arrival surface is fully raised although underground mining is unfortunate. Open cast mining can bother examples of existing waste. Similarly, soil fertility is also almost destroyed by the way. At the very end of battling, the fruit-bearing topsoil is emptied during nature, and overburdening's near the side of the mine are also dumped on the topsoil in front of the mine. Similarly, the material extracted from the excavation mixes with the dirt of the land area and harms the richness of the dirt. The land use structure is further enhanced as it cuts backwoods and moves rural exercises into the mining zone.

Maharashtra is known as a mineral noble state as it produces more than 50 types of minerals and rocks. The extended request has signaled an increase in excavations at existing marble quarries. The mining sector in Maharashtra is another major sector besides agriculture. Mining operations have a solid relationship with integration, development and transportation. Clearing the range to form shafts / slant complexes, foundations, provinces, etc. may require some plant extermination and animal exit along these lines. Mining and its exercises fundamentally affect the plants of the mining category and moreover the changes affect the growth and yield of the harvested plants. Mining clears the vegetation in the area, which complements the soil and reduces environmental problems, reduces organic activity and reduces soil efficiency, especially in agricultural areas. Thus, adjusting soil properties is associated with reduced yields. High metal fixation in the mining area adversely affected plant growth due to insufficient vegetation and barren land. Regardless of whether the mine is underground or open cast, it affects the overall situation, which or in a circular way adversely affects production, animals and human life. High concentrations of follow metals have been observed in the mining region and in the surrounding soils. Maharashtra has the second largest mineral reserves in the country. Maharashtra produces 38 varieties of significant minerals and 20 varieties of secondary minerals. By 1324 and through important mineral leases, 11309 minor mineral leases and 18741 excavation licenses are in trouble. In this investigation, we assessed the impact of mining on human health in the Chittorgarh locality.

#### REVIEW:

Savior (2012), expressed that sand and clay mining is turning into an environmental problem as it grows. Soil mining and land degradation are indirectly related. Informal mining has damaged the land. Subsidies and significant mine flames and the destabilizing effect of the water table causing topographic confusion, serious environmental irregularities and damage to the use of designs. Mining leads to deforestation, habitat loss and biodiversity loss. Asthma, lung bites and bronchial sections can be caused by the convergence of clean stores. The absence and impurity of the administration encourages the elimination of illegal mining, water resources.

According to Bamanian, Kapoor and Jain (2012), industrialization is a real condition for the development of a nation but it has burdened the earth with expanded wastewater, pollution, carbon levels, global warming, ozone depletion and so on. . Air emissions from various businesses are a cause for concern. Indian urban areas are facing an unusual situation of air pollution and the residents of these urban communities pay a high price for it.

Mining of common property is a problem of excess condition and contamination. Nowadays mining is posing a threat to the eco-conditioning framework. As suggested by Jha and Agarwal (2015), mining thrown open or underground, huge or small, metallic or non-metallic, motorized or not automated, has a significant negative impact on biogeographic and social conditions. . Important environmental issues seen in marble mining areas are land corruption, deforestation, soil odor and topsoil removal, surface and groundwater pollution, mineral pollution, noise pollution and vibration, changes in land use, changes in water-geographical conditions. And occupational health hazards.

As Stephens and Ahren (2001) suggest, mining is one of the riskiest entities in the world, with a higher number of deaths than any other business. Mining and health conditions are changing as a result of globalization. Mining is male commanding calling and varying according to health and danger areas, goods and commodities. Lead-zinc-copper mines will cause an unexpected set associated with the word. Hazardous materials used as part of the process in some mines are not yet at risk. The introduction of asbestos is the largest defense claim on the planet and is in charge of the fall of important British defense conventions.

**DATA COLLECTION:**

Interviews are planned to collect data 60 workers have been selected to collect preliminary data. These workers are divided into two categories 45 miners and 15 non-miners. The survey study was directed by randomized testing techniques to determine the water source and the physical chemical properties of the soil in the study range. Accessible writing was further scrutinized, and other information gathered through meeting strategy, survey techniques (organized and unstructured) web, journals, magazine inventories, and daily papers.

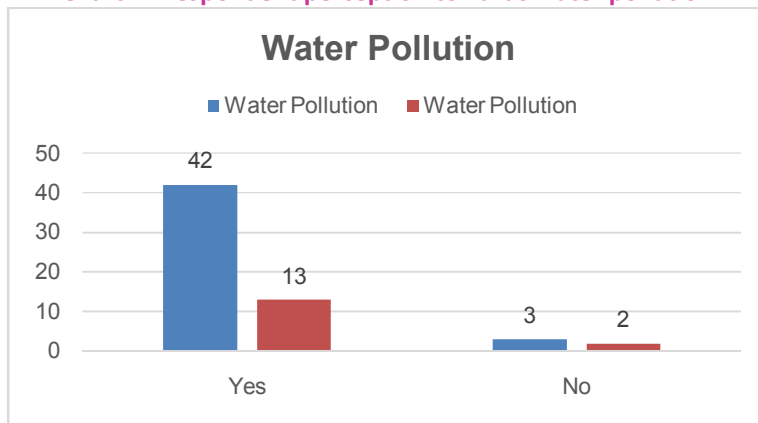
**Table 1.1 respondent perception towards water pollution**

Sr. No	Issue	Workers	Yes	No	Total
1.	Water Pollution	Mining	42	03	45
2.		Non-Mining	13	02	15

Source: primary data

Table 1.0 above describes respondents 'perceptions of water pollution, with most 42 miners and 3 non-miners saying 'yes' to the mining industry causing huge water pollution and only 13 miners and 2 non-miners saying there is no water pollution.

**Chart 1.1 respondent perception towards water pollution**



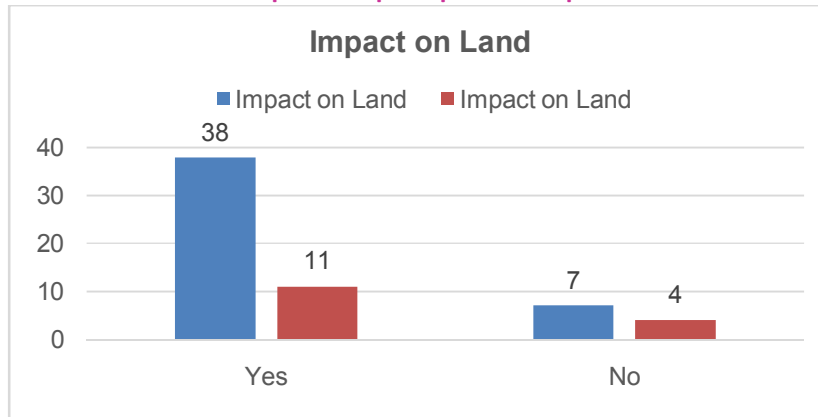
**Table 1.2 Respondent perception of Impact on Land**

Sr. No	Issue	Workers	Yes	No	Total
1.	Impact on Land	Mining	38	07	45
2.		Non Mining	11	04	15

Source: Field Work

The above table 1.2 describes the respondents perception about Mining Impact on Land, most of the 38 Mining workers and 11 Non-Mining workers says 'yes' there is huge Impact of Land due to mining industries and only 07 of the Mining workers and 04 of the Non-Mining workers says there is no any Land Impact.

**Chart1.2 Respondent perception of Impact on Land**



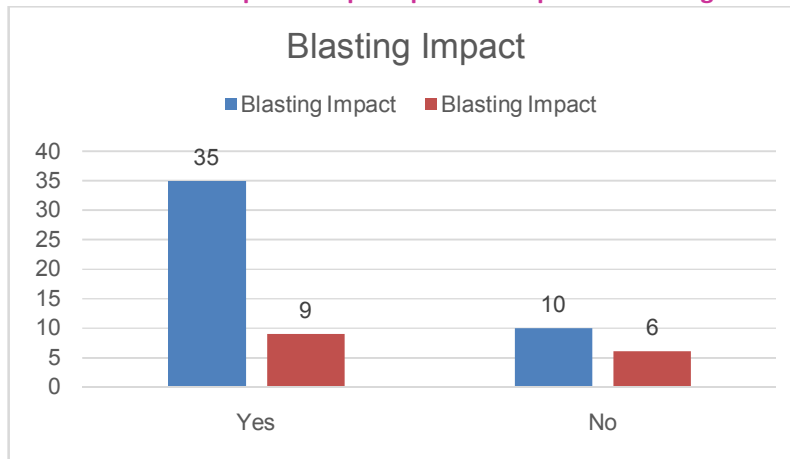
**Table 1.3 Respondent perception of Impact of Blasting**

Sr. No	Issue	Workers	Yes	No	Total
1.	Blasting Impact	Mining	35	10	45
2.		Non-Mining	09	06	15

Source: Field Survey

In Mining industry or mining location there is continue land blasting process is happen, due to that its impact on some workers. The above table 1.3 describes the same, in interview with the workers it is predicted that 35 Mining Workers and 09 non-mining workers says there is impact of blasting, they said due to the blasting some time accidents will happen and also its impact on kids. But, most of 09 the Mining workers and only 06 Non-Mining workers says there is no any impact due to Blasting.

**Chart1.3 Respondent perception of Impact of Blasting**



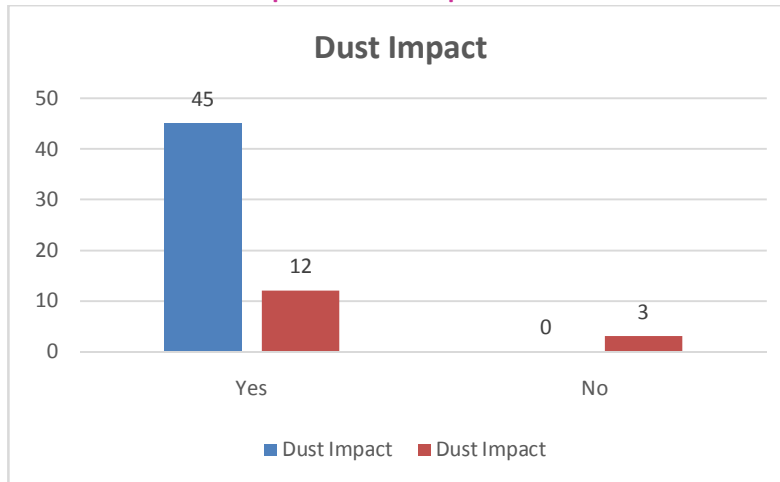
**Table 1.4 Perception of the respondent towards dust**

Sr. No	Issue	Workers	Yes	No	Total
1.	Dust Impact	Mining	45	00	45
2.		Non-Mining	12	03	10

Source: Primary Data

Landslides and mine blasts caused by the mining industry are huge dust and will affect human health. Table 1.4 above describes that most 45 miners and 12 non-miners say that dust has a huge impact on health and only 03 non-miners say that dust has no effect on health.

**Chart 1.4 Perception of the respondent towards dust**



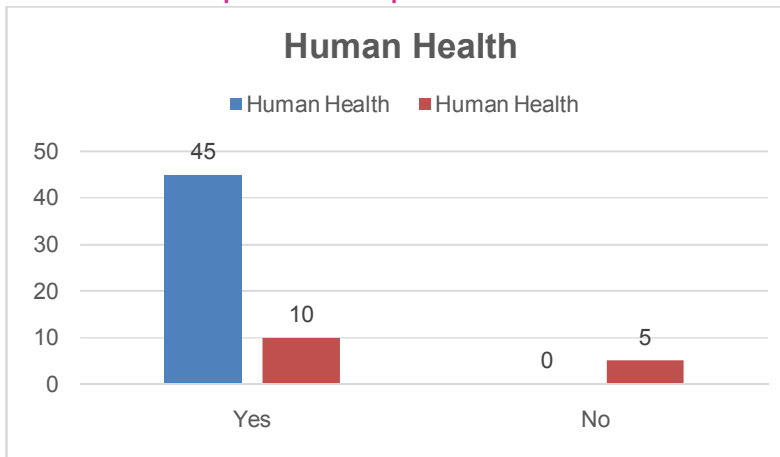
**Table 1.7 Respondent Perception Towards Human Health**

Sr. No	Issue	Workers	Yes	No	Total
1.	Human Health	Mining	45	00	55
2.		Non-Mining	10	05	10

Source: Primary Data

The mining industry produces pollutants like water pollution, dust pollution, blasting pollution and others, which affect human health. The above health describes the responses of respondents to mine pollution on human health, the survey found that all 45 mine workers and 10 non-mine workers responded that it has a major impact on human health, with people of all ages in the industry suffering from various diseases including children. And only 5 non-mining workers say the mining industry has no effect on human health.

**Chart 1.7 Respondent Perception Towards Human Health**



**EFFECTS ON WATER:**

Most of the miners who live around it throw stagnant water on which mosquitoes breed. The infection of waterborne malaria is very basic among excavators. Mining action stimulates the first watershed range and creates water storage problems that ultimately regenerate groundwater. It has also been noticed that the water level has decreased due to the mining action. Mine waste as a marble slurry can lead to long-term water contamination, increasing soil alkalinity, and disrupting photosynthesis and evaporation.

### EFFECTS ON BIODIVERSITY:

The biggest negative impact of excavation on Earth is the loss of biodiversity. Impacts on farmland can be brought here and can now result in increased yield or touch area or long span as soil or plant growth can affect the viability of long-term farming. As expressed in the photograph, due to the dynamic fragments of the plant artificially, the growth of the plant is reduced. Effects on biodiversity may include loss of habitat, deaths due to direct contact with investigative mechanisms and supplies, presentation of exotic species, Methods of growth and exchange of chase or shrub meat.

### AIR POLLUTION:

We can characterize air pollution by the proximity of significant material around such a focus that is harmful to man and his condition. Mining and its associated penetrating, blasting and transport exercises exacerbate the suspended particle problem which is noticed on all sides which is detrimental to the well-being of the workers. This exercise adversely affected both greens. A high-volume sampler was used to collect air tests from various mines, with the SPM Esteem going from 389 to 453 mcg / m<sup>3</sup>. An example was collected far away from the mining area which gives a basic figure of the atmospheric air which gave an SPM estimate of 189 mcg / m<sup>3</sup>. Despite the fact that the estimate of 354 to 453 mcg / m<sup>3</sup> is appropriate for zones falling under the Central Pollution Control Board's (CPCB) mechanical and composite areas (i.e. 500 mcg / m<sup>3</sup>), it is double that of 189 mcg / m<sup>3</sup> emanating from atmospheric air which Will still be presented to work in the mines.

### CONCLUSION:

There is an urgent need for specific mining laws, featured everywhere in the light of conservation and environmental management plans, with the extraordinary context of mining action, deportation and superficial transfer, to save our earth from massive excavations and for immediate treatment. Material, affecting the unique context of separation from home, prudent steps against malpractice and welfare crises, deforestation and afforestation, transfer of overburden, protection of water channels or everything, recovery and support of abandoned mining pits on one side my owner's responsibility against close persons. Improving these two requires working on a very advanced dumb-chimes show, general and in addition social status. The model emphasizes the two ends of the dumbbell as the most dynamic; One end is the place of the specific mineral and the flip side is the seat of the person.

### REFERENCES:

1. Das Gupts(1991): Study on Ground Water Quality and Monitoring in Asia and the Pacific, Water Resources Series No.70.
2. Ground Water Basin Management "ASCE Manual of Engineering Practice No.40", American Society of Civil Engineer, New York, 1967.
3. Chauhan Surendra Singh 2001. Biodiversity, Biopiracy and Biopolitics: The GlobalPerspectives. Delhi: Kalinga Publications
4. Kiran Soni, Nidhi Vyas 2015, A Study of Occupational Health and Safety Related Practices in Mining Companies of Southern Rajasthan: A Systematic Review, IJARIE-ISSN(O)-23954396, Vol-I, Issue-4, pp.92-103
5. S.K. Maanju, K. Sah, 2013, Impact of Mining Industry on Environmental Fabric -A Case Study of Rajasthan State in India, IOSR Journal Of Environmental Science, Toxicology And Food Technology ISSN: 23192399. Volume 6, Issue 2, pp. 8-13.
6. Rima, D.R. Chase, E.B. and Mayers, B.M., 1971 : "Sub-surface Disposal by Means of Wills – A Selected Annotated Bibliography", U.S. Geological Society Paper 2020.
7. Anju Gahlot 2014, Mining in Rajasthan (India) and Effects on Earth-Environmental Issues, Affecting Human Rights and Burning Legal Aspects. Published in International Academic Forum on The European Conference on Politics, Economics and Law 2014 Official Conference Proceedings

8. Rajesh Kumar Yadav, Sarita Kumawat, Deepmala Verma, 2014, Impact of Mining on Human Health and Environment in Chittorgarh District, Rajasthan: A Case Study, Research Journal of Chemical and Environmental Sciences ISSN 23211040, Vol-3, pp. 75-78