# RAT HOLE MINING AND ITS ADVERSE EFFECT ON MEGHALAYAN ENVIRONMENT

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# INTRODUCTION

Meghalaya, the 'abode of clouds' and often referred to as the 'Scotland of the East'. It is one of the seven sister States of North east India endowed with incredible natural beauty of Flora and Fauna and is richly blessed with mineral deposits including coal. It is said that from the very beginning man has always been looking up to his environment for his own requirements namely, food, clothing, shelter etc and take environment for granted because he believed that air, soil, water, plants and animals will always be available in the nature for his basic requirements. But, with the passage of time and advancement of science and technology coupled with rapid growth of population, man himself destroys the environment and the impact of such destructive act subsequently led to environmental changes. The Constitution of India clearly states that it is the duty of the State to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.<sup>1</sup> A great American Judge emphasizing the imperative issue of environment and Environment above big business, individual liberty above Government and Environment above all.<sup>2</sup>

However, more importantly the concept of 'Sustainable Development' becomes a very common phenomenon in almost all the democratic countries but sad to say that the outcome is not very encouraging and the main reason behind such failure is the lack of efforts by the States to implement various legal and social doctrines for protection of the environment. Though one should not pass over the importance of Stockholm Conference, 1972 in relation to the

<sup>&</sup>lt;sup>1</sup> Article 51A(g) of The Constitution of India, 1950.

<sup>&</sup>lt;sup>2</sup> Tarun Vs. Union of India, AIR 1992 SC 514.

maintenance of a healthy environment<sup>3</sup> but it was undoubtedly the Rio Declaration of 1992 that gave emphatic attention to and adopted the value of sustainable development as a leading concept of environmental policy at international level.<sup>4</sup>

The maxim 'sic uter tou ut alienum non laedass' which means 'Principle of good neighborliness' casts an obligation on States to offer due regard to protection of environment. We know that law is a regulator of human life and work, and the law plays an important role in the protection of environment by regulating the human activities. The concern for environment protection has not only been raised to the status of fundamental law of the land, but is also wedded with human rights. <sup>5</sup> The concept of enviro-human rights has become one of the live issues in the first changing international scenario. The Supreme Court in the case of *Vellore Citizen's Welfare Forum vs. Union of India*<sup>6</sup> held that the essential feature of sustainable development such as Precautionary Principle and the Polluter Pays Principle are part of the environmental law of the country.

In India, particularly in the State of Meghalaya, there has been major environmental degradation due to urbanisation, explosion of resources, population explosion and many other factors, yet serious effort has always been made time and again to tackle all problems to ensure a clean, safe and healthy environment. On the other hand, though mining of natural resources can never be abolished, but it must borne in mind that it has to be done without leaving an adverse impact on ecology.<sup>7</sup> In a landmark case of *Rural Litigation and Entitlement Kendra, Dehradun vs. State of Uttar Pradesh*<sup>8</sup> the Supreme Court has held that preservation of the environment and keeping the ecological balanced unaffected is a task which not only the government but also every citizen must undertake. It is a social obligation and let us remind every citizen that it is the fundamental duty as mentioned in Article 51A(g) of the Constitution of India.

<sup>5</sup> P.S.Jaswal, Environmental Law, Pioneer Publications, 1999, p. 36

<sup>&</sup>lt;sup>3</sup> H.O.Agarwal, International Law And Human Rights, Central Law Publications, 2010, p.633

<sup>&</sup>lt;sup>4</sup> Mrs. Sufia Ahmed and Mr. Javeed Ahmed Bhatt, "Environment and Sustainable Development : A critical Appraisal of Law and Judicial Response in India", Journal of Minorities Rights, Vol.6, 2015, p. 86.

<sup>&</sup>lt;sup>6</sup> AIR (1996) 5 SCC 647

<sup>&</sup>lt;sup>7</sup> P.Leelakrishnan, Environmental Law In India, LexisNexis, Butterworths Wadhwa, Nagpur, 2008, p.118

<sup>&</sup>lt;sup>8</sup> AIR 1987 SC 359

# COAL MINING (RAT HOLE) IN MEGHALAYA

Meghalaya is one of the tiny hill states of India but rather significant because of the presence of large mineral deposits like coal, limestone Silimanite and more importantly is the discovery of the presence of uranium in large quantity at Domiasiat - Mawthabah area in the South Western region of South West and West Khasi Hills District and at Wahkaliar in Cherrapunji (Sohra) area. Though the digging of coal in Laitryngew – Cherrapunji (Sohra) area and Sillimanite in Mawthengkut region in West Khasi Hills has carried out well before 1947 but the massive digging and extraction of coal and limestone reserves in the entire state of Meghalaya that consequently resulted in major natural disaster was done mainly after Meghalaya achieved its statehood in 1972.<sup>9</sup> In Meghalaya Coal extraction is done by primitive mining method commonly known as 'rat-hole' mining. In this method what people commonly used to do is, first they clear the land by removing and cutting all the ground vegetation and then large crane are used to dig the pits vertically ranging approximately from 100 to 300 feet into the ground until they hit or reach the layer of coal seam. Then thereafter, horizontal tunnels are made into the seam for extraction of coal, which is brought into the pit by using a conical basket or a wheel barrow. The coal is taken out of the pit and dumped on nearby un-mined area, and from there it is carried to the larger dumping places near highways for its trade and transportation. The entire process of mining is done manually employing small implements. Most of the mining activities are small scale ventures controlled by individuals who own the land.10

Though the economic production and sale of extracted coal have immensely contributed much to the overall state's economy but the environmental damages caused by the extraction, digging and decimation of coal deposits (Rat Hole mining) leading to water pollution has in the process led to the destruction of the mother earth that resulted in major environmental changes. Consequently, this poses a threat not only to human life but also to the many living species. Thus, unscientific mining pave way to a colossal disaster on the environment which is a matter of great concern to the people of the State.

<sup>&</sup>lt;sup>9</sup> Amena N. Passah, "Unwritten Law: Environmental Concern During the Pre- Colonial Period in the Khasi – Jaintia Hills of Meghalaya" in Naveen Kumar, (ed.) Forest and Environment in India, EBH Publishers, Guwahati, 2015, pp. 231 – 238.

<sup>&</sup>lt;sup>10</sup> Available at

http://www.indiaenvironmentportal.org.in/files/Status% 20 of% 20 water% 20 quality (meghalaya).pdf

# ADVERSE EFFECT ON THE ENVIRONMENT

Continuous unscientific coal mining activities has an adverse impact on the environment and directly creates greater risk for the health and safety of the residence and workers engaged at the site of operations, as they are hazardous and dangerous. Moreover, it damages the environment and ecology to an unacceptable degree and there is a need to balance between mining and environmental requirements. Following are some of the impact of mining on environment.

### 1. Impact of mining on water

The Meghalaya's coal economy has devastated the environment beyond repair. Now, the question is how far Meghalaya Mines and Minerals Policy 2012 been effective? To what extent has Meghalaya adopted a scientific method for coal mining? Whether the Government has taken initiative in inviting scientist to take a look at those rivers like Lukha River in East Jaintia Hills and some other streams in Jaintia Hills which are today so polluted, and they no longer fit for human consumption and is a clear cut violation of the right to clean drinking water as human right. The water bodies of that area are the greatest victims of coal mining.<sup>11</sup>Our worst fear is that by the time the State Government wakes up from its slumber (like in the case of the dead river) it will be too late. We have lost all the exotic aquatic life in that area due to pollution caused by acid mine drainage from coal mining. If the government is serious about it, all the materials to curb water pollution are available in the state. Limestone is widely used to neutralise the acidic effluent or Acid Mine discharge from coal mines.<sup>12</sup> Therefore, safe drinking water is a human right and a fundamental requirement for the people to live a healthy life.<sup>13</sup>

### 2. Impact of mining on Air

Most of the mining operations produce dust. The major operations producing dust are drilling, blasting, hauling, loading, transporting and crushing. The uncontrolled dust not only creates

<sup>&</sup>lt;sup>11</sup> Available at http://www.researchgate.nett

<sup>&</sup>lt;sup>12</sup> Available at https://www.hindustantimes.com/india/curse-of-the-black-gold-how-meghalaya-depends-on-coal/story-EJdAsvmMJhtztTK1BusDYM.html

<sup>&</sup>lt;sup>13</sup> Available at http://www.meghalaya.gov.in/Draft\_Meghalaya\_State\_Water\_Policy\_2013.

serious health hazards<sup>14</sup> but it adversely affects and reduced the life of the citizen if not checked.<sup>15</sup> In Meghalaya, the life support system that included air, land, water and vegetation are at present under considerable strain.<sup>16</sup> Now the question that stand outstanding is whether the State Control Pollution Board functions effectively and fulfilling its task? Or is there any lacuna or flaws in the laws? If yes or otherwise, then why are the laws implementing functionaries silent in many aspects?

### 3. Impact of mining on Land

We all know that mining is one of the huge industries in the world. Mining activities include a variety of operations and every extraction processes differ for different kinds of minerals. Mining operations are carried on in vast area of land which ultimately led to the destruction and disturbance of the land. Land impacts are very large especially if the mining pits are left open and this was witness in some parts of Jaintia hills resulting to road cracks, buildings etc. Moreover, plant communities get disturbed due to extensive coal mining activities and piling of coal damage the natural vegetation.

# **ROLE OF NATIONAL GREEN TRIBUNAL**

No doubt, the NGT (National Green Tribunal) has played a very active and significant role in the protection of environment and many PIL's have been instituted for environmental safeguarding including that of the State of Meghalaya. Moreover, the ban was issued following a complaint by the All Dimasa Students' Union of the adjoining Dima Hasao district of Assam, which contended that rat-hole mining in Meghalaya had polluted the Kopili river and turned its water poisonous.<sup>17</sup> *The All Dimasa Student Union vs. State of Meghalaya and Impulse NGO vs. State of Meghalaya*, the tribunal directed the State Government to prepare the mining map, policy and guidelines keeping in mind Sustainable Development and Principle of Polluter Pays contemplated under Section 20 of the NGT. But delay from the government to submit the

<sup>&</sup>lt;sup>14</sup> Dr. gurdeep Singh, 'Environmental Issues with Best Management Practice of Coal Mining in India' in Naveen Kumar, V.V.Ramani ,(ed.) Indian Industry and Environment Policies and Practices, The ICFAI University Press, 1<sup>st</sup> Edition,2008, p191.

<sup>&</sup>lt;sup>15</sup> L.K.Koolwal vs. State of Rajasthan, AIR 1988 Raj 2.

<sup>&</sup>lt;sup>16</sup> Environment Report, Meghalaya, 2005, p.1

<sup>&</sup>lt;sup>17</sup> Available at http://www.thecitizen.in/index.php/en/NewsDetail/index/3/3019/NGT-TO-DECIDE-THE-FATE-OF-COAL-MINING-IN-MEGHALAYA-TODAY

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mining plan is the reason for the ban on coal extraction for now. Also, the Supreme Court in the case of *Lafarge Umiam Mining Private Limited v. Union of India & others*<sup>18</sup>issued direction to the Central Government to set up an environmental regulator at national and state level and to take care of the various policies issues related to environmental clearance and to follow the environmental laws for this purpose, and, if necessary, to impose penalty on polluters. Thus it imposes obligations on the government to reform the whole environmental clearance and to the clearance process and to put some check on the existing faulty process.

Although on April 17, 2014, the NGT passed an interim order stopping mining and transportation of coal in the state, and nearly everyone in the coal belt curses the NGT,<sup>19</sup> but the NGT bench has never stated that the ban was a permanent one but they wanted the coal extraction to be regularized through a proper mining plan. Time and again we see and hear reports of people in the coal mining business violating the NGT order and the coal mine owners are using illegal immigrants who provide cheap labour at the cost of the local labourers. Interestingly, another issue that brought to light is the concern about the threat to the exotic caves from illegal extraction of coal. It took million of years for these caves to form but it takes a moment to destroy them. All concerned citizens felt the need that the state government should proposed new and effective policy in the areas in which there are caves and declared that area as no mining Zones. It is no wonder that the state government is not interested to preserve and protect both the cave and the cave's rare flora and fauna. Therefore, it is implied that the state government in order to achieve the goal of sustainable development, important measures to protect and preserve these valuable natural heritages which hold as a badge of honour to the state is the need of the hour.

### LAWS AND POLICIES RELATED TO MINING

The Environment (Protection) Act, 1986 which came as a direct consequence of the Bhopal Gas Tragedy<sup>20</sup> is an umbrella legislation designed and enacted to provide for the protection and improvement of the quality of environment and preventing, controlling and abating

<sup>18 (2011) 7</sup> SCC 338

<sup>&</sup>lt;sup>19</sup> Available at https://www.hindustantimes.com/india/curse-of-the-black-gold-how-meghalaya-depends-on-coal/story-EJdAsvmMJhtztTK1BusDYM.html

<sup>&</sup>lt;sup>20</sup> M.C.Mehta vs. Union of India, AIR 1987 SC 1086.

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environmental pollution. The Constitution of India also recognises the need to protect and nurture the right to environment which includes Article14, 19(1)(g), 21, 32,48A,51(A)(g), 226 etc and the Directive Principles of State Policy makes it obligatory to the state to ensure congenial conditions to good health which contained in Article 39(e),39(f),41,42,47,49. It is clear that our Constitution enshrines ample provisions to deal with environmental issues pertaining in the country as well as to the State concern. In order to stop the widespread ramification of environmental problems and issues, but to promote a right to clean environment, a joint and collective work of both the centre and state to frame Bills, Acts, Rules, Policies etc.

The Meghalaya Mines and Minerals Policy, 2012, was enacted with an aim to facilitate systematic, scientific and planned utilization of mineral resources and to streamline mineral based development of the State, keeping in view, protection of environment, land, health and safety of the people in and around the mining areas. The Policy will also dwell on ensuring optimal utilization of available mineral resources, realization of vast mineral potential, generate revenue for socio-economic development, uplift the economy of the State and enhance employment opportunities.<sup>21</sup>

The Draft Meghalaya State Water Policy, 2013<sup>22</sup> was drafted with a view that water is a public good and every person has the right to demand drinking water. It is the lifeline activity of the state government to ensure that the basic requirements of the people are met. This policy is an alarming call for all the concerned citizens irrespective of caste, creed, religion, language, sex etc to take appropriate steps for the preservation of the natural resources of the earth.

The Meghalaya Air (Prevention and Control of Pollution) Rules 1988,<sup>23</sup> was framed for the very purpose to curb the menace of pollution in the State. Environmental problems are complex, not only in their causes and effects, but also in how they relate to each other. Keeping in mind the need to preserve and protect the environment from the scourge of pollution both at

<sup>&</sup>lt;sup>21</sup> Available at

http://indiawaterportal.org/sites/indiawaterportal.org/files/meghalaya\_mines\_and\_minerals\_policy\_2012.pdf, <sup>22</sup> Available at http://www.indiaenvironmentportal.org.in/content/382792/draft-meghalaya-state-water-policy-2013

<sup>&</sup>lt;sup>23</sup> Available at

http://meglaw.gov.in/rules/Meghalaya\_Air\_Prevention\_and\_Control\_of\_Pollution\_Rules\_1988.pdf

the state and the national level, we are duty bound not to abuse, misuse, pollute or distort our natural resources as each succeeding generation is entitled to benefit from these.

# CHALLENGES FOR CREATING A MORE SECURE ENVIRONMENT

Human ability has devised several ways and means for facing the challenge to the environment and one of these is the concept of Carbon Marketing. Carbon Marketing in lay man understanding means a method which encourages developed countries to help the less developed or developing countries to invest in and use Clean Energy Technologies i.e., those technologies which produce negligible or less Green House Gases.<sup>24</sup> Expert claim that to reduce the emission of Carbons and other Green House Gases, will change the global climate drastically in the long run. By this method, the developed countries get the emission deduction credit for taking effective steps to curb CFC (Chloro Flouro Carbon) emissions which can be transferred to other less developed or developing countries so that the developed countries can use these emission deduction credits to meet their own Nation's Emission Deduction Goals. On this basis, a new and effective way has been devised to meet the challenge faced by the Environment.<sup>25</sup>

During the former Meghalaya United Alliance (MUA) Government under the chiefministership of Dr. Mukul Sangma expressed optimism to resolve the crisis following the NGT imposing a blanket ban on mining and transportation of coal in the state. The Assembly adopted a resolution urging the Centre to invoke Para 12A(b) of the Sixth Schedule<sup>26</sup> through a presidential notification to ensure relevant provisions of two Acts viz; Mines and Minerals (Development and Regulation)Act, 1957 and Coal Mines Nationalisation Act, 1973, were exempted in Meghalaya.<sup>27</sup> At present, it was a challenging trend to the new Meghalaya Democratic Alliance (MDA) Government under the chiefministership of Conrad Sangma to create a more secure environment by holding talks with the Union Coal Minister to restart coal mining in Meghalaya and all cooperation and support has been extended by the Centre to resolve the ban on coal mining in Meghalaya. Effective effort of the government to constitute

<sup>&</sup>lt;sup>24</sup> A.N.Karia, Environmental Law, C.Jamnadas & Co, Educational & Law Publishers, p.227

<sup>&</sup>lt;sup>25</sup> Ibid.,p.228

<sup>&</sup>lt;sup>26</sup> P.M.Bakshi, The Constitution of India, Universal Law Publishing Co. Pvt. Ltd, 9th Edn, p. 352-353.

<sup>&</sup>lt;sup>27</sup> Available at https://timesofindia.indiatimes.com/city/shillong/New-mining-policy-will-ensure-environment-protection-Sangma/articleshow/51412035.cms

Group of Ministers (GoMs) comprising of Mining and Geology, Law, Environment and Home to study the National Green Tribunal ban on coal mining in the state and to understand the issue and take feedback of all stakeholders, NGO's, Legal fraternity, Schlolars, etc and prepare a master plan as to how it can be taken forward<sup>28</sup> to avoid future adverse effects on the environment.

# CONCLUSION

The Khasis indigenous people of Meghalaya are believed to be the lovers of nature. The damages caused by unscientific mining (Rat hole) have devastated the environment beyond repair. Now a days the new processes and technologies have been developed in mining industry to ensure the environmental friendliness of mining activities. However, if the Government is serious enough to solve the present problem of unscientific mining and to restart the coal mining activities again, new technology should be adopted and the laws that are already available should be effectively implemented otherwise the situation will remain a farce. As the saying goes, we did not inherit the natural resources from our brother and sisters but we borrow from our future generation. Though Meghalaya is in serious danger of dipping into a serious man – made environmental trauma, yet there is a glimmer of hope for environmental recovery and restoration with proper legislation and serious implementation. Therefore, protection and improvement of the environment and safeguarding the eco-systems are not only important but necessary for global and human continued existence, survival and sustainability.

<sup>&</sup>lt;sup>28</sup> Available at https://steelguru.com/coal/meghalaya-government-to-constitute-gom-on-coal-ban-cm/505748