

## **A CRITICAL ANALYSIS OF THE ILLEGAL COAL MINING ACTIVITIES INSIDE DIHING PATKAI NATIONAL PARK**

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### **Abstract**

The Dihing Patkai National Park, commonly referred to as the “Amazon of the East”, is a hub of rich and diverse biodiversity located in the Tinsukia and Dibrugarh districts of Assam. The coal mining operations in this region have a historical origin that can be traced back to the colonial era. During this period, the fuel resources extracted from this region were primarily utilized to power local enterprises. However, lately, it has been alleged that certain illegal coal mining activities carried out in this region have greatly affected the region surrounding the National Park and have sparked protests among the local population against such activities. This paper discusses the impact of illegal coal mining activities inside Dihing Patkai National Park. At the same time, it will also discuss the reasons why stopping all the coal mining operations near the region will also affect the development and employment in the region. The research also highlights the historical background of the mining of coal in the region surrounding Dihing Patkai National Park. And the various environmental impacts on the region due to coal mining activities as well as its effects on the local population. This research also discusses the doctrine of public trust along with some important Supreme Court decisions and the One-Man Enquiry Commission Report under retired Justice B. P. Katakey. Moreover, this research aims to maintain a balance between ecology and economy.

**Keywords:** Coal Mining, Ecological Degradation, Forest Conservation, Public Trust Doctrine, Right to Life.

### **Introduction**

The Dihing Patkai National Park, also popularly known as the “Amazon of the East”, is a hub of rich and diverse biodiversity located in the districts of Tinsukia and Dibrugarh in Assam. Out of all of the national parks in Assam, it is the most recent one to be declared as such and the only one falling under the category of tropical rainforests. Because of its rich biodiversity, this place is of immense significance for the forest conservators and activists of Assam. The vast spaces of this landscape are a haven for species of flora and fauna exclusive to this region such as the slow loris, hoolock gibbon, big-tailed and stump-tailed macaques, Asian elephant, and various other species. It is spread over an area of two hundred thirty-one point Sixty-Five square kilometers (89.44 sq. mi) of rainforest. On 13<sup>th</sup> June 2004, it was declared to be a wildlife sanctuary.<sup>2</sup> Its status was elevated to National Park by the Government of Assam on 13<sup>th</sup> December 2020.<sup>3</sup> On 9<sup>th</sup> June 2021, it was notified as a national park by the Forest Department of Assam.<sup>4</sup>

Apart from its attractive biodiversity and natural beauty, this region also greatly contributes to economic benefits as it has a rich concentration of natural resources and minerals, particularly coal. Coal mining activities in this region were carried out long before the independence of India, during the period of British rule and col-

1. Advocate, Gauhati High Court, Assam.
2. Dihing Patkai National Park, <https://tinsukia.assam.gov.in/tourist-place-detail/276> (last visited on Oct. 10 2022).
3. *Id.*
4. *Id.*

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onization of Assam. The coal found here mainly serve the purpose of generating power for the industries, both local and outside the State, and generate huge revenues for the State. However, it has also been observed that some illegal coal mining activities were taking place in the guise of authorized activities.

### **History of Coal Mining Operations in the region surrounding Dihing Patkai National Park**

The history of oil drilling and coal mining operations in the Brahmaputra valley of Upper Assam encompassing the districts of Dibrugarh, Tinsukia, and Sivasagar have a close nexus with the establishment of the tea industry in Assam by the British colonizers. After the Treaty of Yandabu was signed in 1826 following the period of Anglo-Burmese wars, the East India Company gained a foothold over the tea plantation business as it acquired greater control over the land of Assam from its erstwhile Ahom rulers. This new industry that served as a gateway business for East India Company was the founding stone enabling colonial rulers to assert their political and economic dominance over the region. In order to run this industry, cheap labour and power were required to transport the raw materials from one region of their business empire to the major urban centers of the world. Thus, oil drilling and mining operations were originally ancillary activities that later became their autonomous industries.<sup>5</sup> However, over the decades the mining activities that led to the economic growth, employment, and development of the region have also resulted in significant impacts on its social and geographical landscape.<sup>6</sup>

In 1825, British surveyor Lieutenant Wilcox reported the presence of coal in this region for the first time.<sup>7</sup> For this purpose, C.A. Bruce who is the sibling brother of Robert Bruce Foote<sup>8</sup> explored this region around the

year 1828. Following the creation of the Assam Company in 1838 for the development of the tea business, the demand for mining and the supply of minerals for power generation, such as coal, increased. A coal committee was formed in 1838 to report on the quality and deposit of coal. Much of the tea industries, however, still depended on coal imported from Bengal. Nevertheless, the expenses associated with transporting freight experienced a significant tenfold rise, prompting the Assam firm to commence coal mining operations in the Jeypore region located along the banks of the Disang River during the early 1840s. John Berry White, a British brigadier and civil surgeon, is widely recognized as a key figure in the development of the coal business in Assam. He is credited with the discovery of Makum, which is now known as Margherita, and played a crucial role in establishing the Margherita Coalfields.<sup>9</sup> In 1882, the coal mining operations commenced for the first time in Ledo by Railway Engineers when the Assam Railway and Trading (AR & T) Company was building its meter gauge line.<sup>10</sup> Later, collieries were established in Tikak (1884), Namdang (1896), Tirap (1904), Namdang Dip (1904), Baragolai (1909), and Tipong (1924).<sup>11</sup> All of these mines were nationalized after 1975 which became the coal industries of Margherita.

### **Environmental Impacts on and Around the Region of Dihing Patkai National Park Due To Coal Mining Activities**

This part of the research examines the impact on the environment resulting from coal mining activities in the vicinity of Dihing Patkai National Park, as well as the geographical and ecological consequences of coal mining activities in the Margherita Coal Fields. The reason behind the impact of mining activities on this region needs to be explored to understand how the said

5. Sanjay Barbora, Sarat Phukan, *Mines, Plantation and Militarization: Environmental Conflicts in Tinsukia, Assam*, SAGE, 4-9 (2022).

6. *Id.*

7. *Id.*

8. Robert Bruce was a British geologist and archaeologist often considered to be the “Father of Indian Prehistory”.

9. Sanjay Barbora, Sarat Phukan, *Mines, Plantation and Militarization: Environmental Conflicts in Tinsukia, Assam*, SAGE, 4-9 (2022).

10. Makum Coalfields-An Insight-Assam (Nov. 25, 2022 6:00 PM) <https://kaziranganationalparkassam.in/makum-coal-fields-an-insight-assam-2/> m.

11. *Id.*

activities have resulted in environmental degradation in the region of Dihing Patkai National Park.

The region of Margherita Coal Fields consists of a total of five working mines, out of which three are underground mines and two are open-cast mines.<sup>12</sup> Although both open-cast mining and underground mining have some negative environmental effects, the impact of open-cast mining on environmental degradation exceeds far more than underground mining. Out of the five working coal mines in Margherita Coal fields, “Tikak” and “Tirap” are the two collieries used for open cast mining while the rest are used for underground mining (Tipong Colliery, Baragoloi Colliery, Ledo Colliery, Jeypore colliery).<sup>13</sup> There are heightened concerns pertaining to mining activities at the “Tikak Open Cast Project,” which is located in Saleki, a proposed reserve forest in Digboi, Assam. This is because the eco-sensitive area of Dihing Patkai National Park covers not only the districts of Dibrugarh and Tinsukia, but also extends to the Tirap and Changlang districts of Arunachal Pradesh. The nearest distance of the Tikak colliery from the Dihing Patkai National Park is 9.19 kms.<sup>14</sup>

In a report published by “India Today” on 13th June 2020, the NEC (North Eastern Coalfields) commented that the coal mining operations in this region were suspended since October 2019 under the direction of the Department of Forest, Government of Assam.<sup>15</sup> On April 24, 2020, the National Board for Wildlife (NBWL) issued a license for coal mining activities within the Elephant Reserve, therefore contravening the prescribed penalty of a fine amounting to Rs. 43. The Assam Forest Department levied a fine of INR 25 crore on Coal India Limited (CIL).<sup>16</sup> This NECF

proposal, which was approved by NBWL, resulted in the rerouting of 98.59 hectares of forested area in the Saleki forest area, which makes up a significant portion of the elephant reserve.<sup>17</sup> Such a move raises concern over the future environmental and ecological situation surrounding the national park.

### **Environmental Impacts Associated with Coal Mining**

Some of the environmental impacts due to coal mining activities have been discussed below:

- i. **Open cast mining:** Open cast mining drastically affects the topography and landscape as it removes the topsoil, leads to loss of greenery, erosion due to rainfall, removal of debris downstream of the water course resulting in siltation, health hazard due to storing of water in abandoned quarries, unplanned dumping of mine wastes.<sup>18</sup> The drainage of mine water from Lakowa and Geleki region has affected thousands of acres of agricultural lands making them unfit for cultivation.<sup>19</sup>
- ii. **Underground mining:** It includes loss of productive land due to underground mine fires, lowering of groundwater bodies, pollution of surface water bodies, noise pollution, occupational health problems, etc.<sup>20</sup>

The mining activities around the region of Dihing Patkai National Park have also led to acid mine drainage.<sup>21</sup> When this happens, metals are released into the surrounding environment, which affects the marine ecosystem. Fishes are exposed to these contaminated

12. Krishna Giri et al., *Ecological Degradation in Northeastern Coalfields: Margherita Assam*, 3, INT. J. SCI. ENVIRON. 881, 884 (2014).
13. Bijoy Gogoi, *Ecological Degradation, Displacement and Protest Movements in North Eastern Coalfields: A Study in Margherita Coal Fields Assam*, 1, IRJIMS 30, 36 (2015).
14. Hemanta Kumar Nath, *Assam: Thousands Protest Closure of North Eastern Coalfields, call to protect Dehing Patkai Wildlife Sanctuary*, INDIA TODAY (Nov. 25, 2022 6:00 PM).
15. *Id.*
16. Mathur Rahman, *Illegal Coal Mining in Dihing Patkai Elephant Reserve in Assam and Consequent Violation of the Provision of Forest Conservation and Wildlife Protection Laws*, 3, IJLSI, 562-575 (2020).
17. *Id.*
18. *Supra note. 13*
19. *Id.*
20. *Id.*
21. *Supra note. 12*

sediments when they ingest the pollutants resulting in chronic and acute toxicity.<sup>22</sup> In addition to this, in a research article published by “The Imperial Journal of Interdisciplinary Research”, it was reported that due to coal mining activities, there was a 29.76% decrease in the forest area in the period between 1996 and 2016.<sup>23</sup> Also, it was reported that there was a 129.9 % increase in the mining land in the same period which was at the detriment of forest and tree-laden areas.<sup>24</sup>

### Impact on the Local Population

Apart from physical, chemical, and biological degradation in the marine ecosystem of the region<sup>25</sup>, it has also affected the local population as it degraded the soil quality making it acidic and rich in inorganic components and thus unsuitable for cultivation of crops.<sup>26</sup> Besides this, illegal mining and trading activities have also displaced the local population, mainly the tribal people belonging to the Khamti, Singpho, Syam, Nocte, Aitom, Sema Nagas, and other communities.<sup>27</sup> Many of these tribes have migrated to the other districts owing to the loss of their livelihood that was based on forest resources. Besides this, there is an increase in human-animal conflict due to the clearance of forests used as pathways by the elephants. The Golai Corridor which is a stretch of land of 6-7 kms and joins the west and east region of Upper Dehing Reserve is used as a passage-way by three hundred elephants according to a census report of “Elephant Task Force”.<sup>28</sup>

### Economic Benefits and Development Due to Coal Mining Activities

While the harmful environmental impacts on Dihing Patkai National Park form one point of argument, there

is also no doubt that the coal mining activities in the same region have been generating huge revenue for the state for almost 200 years. Coal India Limited is a prominent global mining corporation that has significantly contributed to the fiscal prosperity of the State of Assam via the generation of substantial income in the form of dividends and taxes.<sup>29</sup> The North Eastern Coal-fields, have also taken rehabilitation measures for the local communities who were displaced due to mining activities. It supports direct and indirect employment to the local population.<sup>30</sup> They are also recommended to provide the local population with good road connectivity, drinking water facilities, employment, skill-upgradation training, etc.<sup>31</sup>

Now considering the economic benefits of mining, it is almost logical to assume that the closure of such a huge industry will affect the employees who earn their livelihood as daily wage workers. In a report by “The Press Trust of India”, it was stated that following the closure of the Tikak colliery, about 52% of the workers’ income decreased and 20% of them lost their jobs.

However, while it may seem that the Tikak Colliery has been reopened with the objective of utilizing the resources of this region for development, employment opportunities, and revenue generation, it is still unclear as to how will such a move also ensure that a balance between environment and development is maintained.

### Legal Issues Surrounding the Coal Mining Activities in the Region of Dihing Patkai National Park

The clearance given by the National Board for Wildlife (NBWL) to NECF as discussed earlier, raises a

22. *Id.*

23. J. Baruah et al., *Impact Analysis of Open Cast Coal Mining on Land Use/Land Cover using Remote Sensing and GIS Technique in Ledo Margherita Region of Assam, India*, 2, IJR 671, 676 (2016).

24. *Id.*

25. *Id.*

26. *Id.*

27. Anupam Chakravarty, Assam’s tribal communities lost land and forest to mining, MONGABAY (Nov. 26, 2022 6:00 PM) <https://india.mongabay.com/2020/11/assams-tribal-communities-lost-land-and-forest-to-mining/>.

28. *Id.*

29. Adil Akram et al., *Relationship of Tribal People with the Forest: A Case Study on the Issue of Open Cast Mining at Dihing Patkai*, 11 IJDR 45428, 45431 (2021).

30. *Id.*

31. *Id.*

matter of concern over the environmental impacts on the region of Dihing Patkai National Park. A total of four petitions were filed in the Gauhati High Court which alleged the illegality of open cast mining in the Saleki proposed reserved forest area of Dihing Patkai National Park. In the petitions, it was alleged that the said activities, if allowed without an environmental impact assessment or proper scientific research and study would lead to environmental disaster. However, no such Environment Impact Assessment report (EIA) was prepared before approving the mining activities. As such it not only violates the Wildlife Protection Act, 1972, but also the Forest (Conservation) Act, 1980. Section 5 C (c) of the Wildlife Protection Act, 1972 states that among the measures taken by NBWL for the conservation and development of wildlife, they should also carry out “impact assessment of various projects and activities on wildlife or its habitat”.<sup>32</sup>

### **The Importance of Public Trust Doctrine**

The doctrine of public trust puts the responsibilities upon the State as a “trustee” of the natural resources and condemns any kind of private ownership. As a trustee, the State is obligated with the duty to protect these resources for their use and enjoyment by the general public. The importance of this doctrine is also reflected in Article 48-A of the Constitution of India which states, “State shall protect and improve the environment and safeguard the forests and wildlife of the country.”<sup>33</sup> Article 51-A (g) states that “It is the duty of each citizen to enhance and protect the natural environment including forests, lakes, rivers and wildlife, and to possess compassion for living creatures.”<sup>34</sup> As such the mandate of NBWL violates the doctrine of public trust as well. The Supreme Court of India, in the case of M.C. Mehta versus Kamal Nath<sup>35</sup>, made use of the public trust concept as a means of safeguarding and conserving natural

resources. It observed that it is the positive role of the State to act as trustee of the natural resources, which was similarly upheld in the case of *Shailesh R. Shah v. State of Gujarat*<sup>36</sup>.

The case of *Tarun Bharat Sangh, Alwar vs Union of India*<sup>37</sup> is perhaps the most successful example of Supreme Court decisions, concerning illegal mining in the area of a wildlife sanctuary. In this case, the Apex Court ensured that the wildlife and forests must be protected from the illegal mining as no prior approval or license was obtained from the Central Government for obtaining clearance. Although this case seems relevant from the research point of view of this paper, it is to be mentioned that the NBWL did approve NECF for obtaining clearance of mining in 98.59 hectares of forest land in the Saleki proposed reserve forest area. However, this approval was given in disregard for an environmental impact assessment and violation of the public trust doctrine and the Constitution of India under Article 21, 48-A and 51-A (g).

### **Order of the National Green Tribunal**

It was for the first time in 2018 that the National Green Tribunal in the case of R. Sreedhar vs Union of India and Ors.<sup>38</sup> took up the matter of illegal mining in Dihing Patkai National Park. The Tribunal heard matters with respect to three main issues, “(i) illegal sand and boulders mining within the Dehing Patkai Wildlife Sanctuary/Makum Pani Reserved Forest, Digboi Division, (ii) illegal coal mining and operation of the coke oven plants around Margherita and (iii) impact of the North Eastern Coalfields due to overburden and acid mine drainage.”<sup>39</sup> The Tribunal ordered the Assam State Pollution Control Board, the District Mining Officers and District Magistrates Tinsukia and Tinsukia Districts of Assam, and Tirap district in Arunachal Pradesh to

32. Section 5 C (c), The Wildlife Protection Act, 1972.

33. Article 48- A, Constitution of India, 1950.

34. Article 51 – A (g) , Constitution of India, 1950.

35. M.C. Mehta v Kamal Nath, (1997) 1 SCC 388.

36. Shailesh R. Shah v. State of Gujarat, 2002 SCC Online Guj 164.

37. Tarun Bharat Sangh, Alwar vs Union of India, 1992 Supp (2) SCC750.

38. R. Sreedhar vs Union of India and Ors., Original Application No.11/2018/EZ.

39. *Id.*

verify the correctness of the allegations stated in the application and also inspect the areas in question.

### **Findings of “One-Man Commission of Enquiry” under Justice B. P. Katakey, Former Judge, Gauhati High Court**

On July 18, 2020, the Assam Government established a “One-Man Commission of Enquiry” led by former Justice B. P. Katakey of the Gauhati High Court, in accordance with Section 3 of the Commissions of Inquiry Act, 1952. The purpose of this Commission is to investigate the accusations of illicit coal mining operations within the Saleki Proposed Reserve Forest and the “Tikok Open Cast Project” located in the Digboi Forest Division. The report was officially released on April 17, 2021.

Annexure 17 constituted the report of the fact-finding team with respect to the use of ninety-eight and fifty-nine hectares of the Saleki forest area. The team consisted of the Director General of Forest (Central), IRO, Shillong; DFO, Digboi and other forest officials and officials of Coal India Limited. Concerning the lease period, it was found that the CIL applied for renewal of the lease to the Geology and Mining Department, Government of Assam on 17.07.2002. It was also observed that the said lease period was extended a further period of 30 years considering the energy security of the country by the Ministry of Coal and Mines, Government of India in 2004 under section 31 of the Minerals Mines (Development and Regulation) Act, 1957.

So, the fact-finding team found no violation of the lease period. However, with respect to the proposal of obtaining clearance of the 98.59 hectares of land vide the letter dated 02.04.2013, CIL continued to operate mining activities under the valid mining lease, but without obtaining forest clearance under the Forest Conservation Act. In addition to this, a site inspection conducted by the Regional Office, Shillong on 24<sup>th</sup> October 2019 revealed that an area of 44.57 hectares from 2003 to 2012 was mined despite the pendency of prior approval under the Forest Conservation Act. While these were the observations made for illegal mining activities, the fact-finding team came to the conclusion that all these coal mining activities have now been stopped as is evident from the absence of vehicle tyre track marks and the growth of vegetation in the region.

As such, the report concluded that these sites have been abandoned.

However, the following suggestions were made in case illegal coal mining activities start operating again in the guise of CIL activities if the Tikak OCP is opened again:

- i. Placement of a trained and armed contingent of Special Protection Force to identify the coal exit points and continuous patrolling of areas susceptible to illegal coal mining.
- ii. To address the livelihood issues faced by nearby community members engaged in illegal coal mining and trading of illegal coal.
- iii. Imposing a proper mechanism for selling legal raw materials and appropriate regulations for monitoring and stock verification of industries.

Therefore, it can be concluded that although there is illegal coal mining taking place in the region of Dihing Patkai National Park, much of the activities are being carried out legally and with the permission of the Central and State Government authorities. However, it cannot be denied that the legal activities cover only a fraction of the overall mining activities taking place in the region. It is only Coal India Ltd. which is the entity having the license to engage in such mining activities. As the report has stated, other illegal coal mining activities also operate in the said region. There is no doubt that there have been significant environmental impacts on this region as stated under the various research reports. So, while the legality of the coal activities forms only one point of the argument, the greater environmental impacts as discussed earlier could not be downgraded as well. The authorities entrusted with the granting of such approval or license should, therefore, employ systemic mechanisms, scientific research, and studies before granting such approval. The State needs to uphold the principles of public trust doctrine and the principles of the Constitution of India. As stated by the Supreme Court in *Tarun Bharat Sangh, Alwar vs Union of India*, 1992 Supp (2) SCC750, “The issues of the environment must and shall receive the highest attention from this Court”.

### **Conclusion and Suggestions**

Recently, India has been facing a coal crisis when thermal power plants ran short of coal. While sustainability

and alternate sources of energy could be the solution, yet there is no doubt that the primary source of energy for thermal power plants in India is met by coal. With the dependence on domestic coal increasing day by day, the greater impact on the environment and ecology also needs to be addressed by the citizens as well as the government. While it is true that coal mining activities have been resumed with the objective of increasing economic needs and employment generation, it should not be done at the cost of ecological degradation. The Dihing Patkai National Park is an important natural heritage of Assam. Proper executive action should be taken to ensure that no illegal mining activities operate inside the region. At the same time, the forest authorities should take effective steps to protect the elephant corridors from being destroyed to avoid human-animal conflicts. The State should also uphold the doctrine the public trust to avoid the resources being used for private gain or any ill motives. At last, it must be understood that development is not a one-way process. As reiterated by the Supreme Court, the need of the hour is to find a middle course to economy and ecology. The government and the citizens should therefore work together in protecting the natural heritage from further exploitation.

Following are some of the suggestions for ensuring that the mining activities in and around Dihing Patkai National Park are carried out safely and not at the cost of environmental degradation:

- i. Proper Environmental Impact Assessment should be made based on scientific research and empirical data about the impact of mining activities on eco-sensitive regions before any approval is given for forest clearance.
- ii. Since the status of Dihing Patkai has been upgraded to 'national park' from 'wildlife sanctuary', proper demarcation of the geographical area should be made in order to track any illegal mining activities having an adverse impact on the environment.
- iii. Placement of trained and armed special protection forces to patrol the areas susceptible to illegal coal mining is the need of the hour.
- iv. A proper mechanism for selling and trading raw materials and verification of the source from where the raw materials were obtained must be established.

- v. The needs of the local population (such as employment, displacement issues, road connectivity, etc.) affected by mining activities should be taken care of by the coal mining entities.

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