

Report on Visit to Atal Tea Industry by the Department of Environmental Studies

Date: 26.05.2023

Location: Atal Tea Estate, P.O.: Hatighisa, Dist: Darjeeling



On 26.05 2023, the Department of Environmental Studies of Birsa Munda College conducted a field visit to the Atal Tea Estate, a prominent tea industry in the region. The primary objective of the visit was to assess the environmental impact of the tea production processes and to explore potential areas of collaboration between academia and the industry to promote sustainability.

Team Members: The visiting team consisted of:

1. Faculty Members: Sulagna Ghosh (Bose), Piyali Ghosh, Lolita Ghosh
2. Students from the Department of Environmental Studies
3. Non-Teaching Staff: Roshan Baraik

Overview of Atal Tea Estate: Atal Tea Estate is one of the leading tea producers in the region, known for its high-quality tea production. The estate employs a significant number of workers from nearby communities. The estate follows traditional methods of tea cultivation along with modern techniques to ensure optimal yield and quality.

Observations and Findings: During the visit, the team conducted a comprehensive assessment of various aspects of the tea production process and its environmental implications. The following observations and findings were made:

1. Land Use and Biodiversity: The estate's extensive tea plantations have resulted in the conversion of natural habitats into monoculture landscapes. This conversion has led to a reduction in biodiversity and loss of habitat for native flora and fauna.
2. Water Management: The estate utilises water resources for irrigation and processing purposes. Efforts to conserve water and prevent contamination were observed, including the implementation of drip irrigation systems and wastewater treatment facilities. However, further improvements in water management practices could enhance sustainability.

3. **Chemical Usage:** Pesticides and fertilisers are used in the tea cultivation process to control pests and enhance yield. While the estate demonstrated adherence to regulatory standards regarding chemical usage, there is a need for greater emphasis on organic and integrated pest management approaches to minimize environmental impact.
4. **Waste Management:** The processing of tea leaves generates significant organic waste, including leaf residues and wastewater. The estate has implemented measures such as composting and biogas generation to manage organic waste effectively. However, there is scope for innovation in waste management practices to maximise resource recovery and minimise environmental pollution.
5. **Social Impact:** The estate plays a crucial role in the socio-economic development of the surrounding communities by providing employment opportunities and supporting local infrastructure. Efforts to enhance social welfare, such as healthcare and education initiatives, were noted positively.

Recommendations: Based on the observations made during the visit, the following recommendations are proposed to promote environmental sustainability at Atal Tea Estate:

1. Implement agroforestry and biodiversity conservation measures to enhance ecosystem resilience and restore habitat diversity.
2. Invest in renewable energy sources such as solar power to reduce dependence on fossil fuels and mitigate greenhouse gas emissions.
3. Encourage the adoption of organic farming practices and integrated pest management techniques to minimise chemical usage and promote soil health.
4. Strengthen monitoring and enforcement mechanisms to ensure compliance with environmental regulations and standards.
5. Foster partnerships with academic institutions and research organisations to facilitate knowledge exchange and innovation in sustainable tea production practices.

Conclusion: The visit to Atal Tea Estate provided valuable insights into the environmental challenges and opportunities associated with tea production. By implementing the recommended measures, Atal Tea Estate can not only mitigate its environmental footprint but also enhance its long-term sustainability and resilience in a rapidly changing climate and market dynamics.

Acknowledgments: The Department of Environmental Studies extends its gratitude to the management and staff of Atal Tea Estate for their hospitality and cooperation during the visit.



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