

Environmental and Socio-economic Impacts of Grasim Industries at Mavoor on the Chaliyar River and Surrounding Communities in Kerala

Abdul Kareem O C *

*Assistant Professor, Government College Kodanchery, Kozhikode, Kerala, India
ocakareem@gmail.com

Abstract

This research paper examines the multifaceted impacts of Grasim Industries' operations on the Chaliyar River and the adjacent communities in Mavoor, Kerala. Established in 1963, Grasim's pulp and fiber factory has been a significant industrial presence in the region. However, its activities have led to severe environmental degradation and health issues among local populations. Through an analysis of historical data, health surveys, and environmental studies, this paper highlights the adverse effects on the river ecosystem and the livelihoods and health of nearby residents.

Key Words: Grasim industry, effluent discharge, contamination of water, environmental impacts, respiratory diseases, ecological degradation

1. Introduction

The Chaliyar River, once a vital water source for several communities in northern Kerala, has experienced significant ecological degradation due to industrial activities, particularly from Grasim Industries' pulp and fiber factory in Mavoor. The Grasim Industries plant in Mavoor, Kerala, known as Gwalior Rayons, has been a significant source of environmental and socioeconomic issues in the Chaliyar River area. The factory's effluent discharge and water extraction have caused severe pollution and conflicts, leading to health problems, loss of livelihoods, and displacement of communities, according to several sources. This paper investigates the extent of pollution caused by the factory and its repercussions on the environment and local populations.

2. Objectives of the study

- 1) To understand the industrial activities of Grasim Industries
- 2) To explore the socio-economic and environmental impacts of the Grasim industries

3. Methodology

The research utilizes secondary data obtained from various published sources like Administrative Reports, Forest Department, Government of Kerala, journals like Economic and political weekly, Down to Earth, Newspapers etc.

4. Industrial Activities and Environmental Degradation

Grasim Industries commenced operations in Mavoor in 1963, producing pulp and fiber. The factory's effluent discharge into the Chaliyar River introduced toxic substances, including mercury, lead, and chromium, leading to the river's contamination. The pollution resulted in the death of aquatic life and rendered the river water unfit for consumption and other uses. Some of the main environmental impacts were water scarcity, air pollution, hazardous wastes, the improper handling and disposal of hazardous waste can contaminate soil, water, and air, posing risks to human and environmental health etc.

The ecological impacts of contamination have appeared in several forms, significantly altering the natural environment of the area by damaging its resources. The river suffered the most, bearing the brunt of pollutant dumping. As a result, the river's ecology has been severely disrupted. This contamination led to the death of numerous fish species along the affected stretch. According to local residents, native fish from the Western Ghats—such as the *Poozan*—have now become rare and are considered threatened. Although the river water has become relatively cleaner since the factory shut down years ago, concerns persist that pollutants still linger in the water

5. Health Impacts on Local Communities

The factory discharged pollutants into the Chaliyar river, contaminating the water and leading to increased cases of respiratory illnesses, asthma, and other diseases. The factory also caused air pollution, affecting the health of nearby residents. Proximity to the factory has been linked to various health issues among residents of nearby villages such as Vazhakkad, Peruvayal, and Areekkode. A health survey conducted between 1991 and 1995 reported 199 cancer-related deaths, alongside numerous cases of respiratory diseases, skin ailments, and gastrointestinal disorders. The presence of toxic pollutants in the environment has been identified as a significant contributing factor to these health problems.

6. Socio-economic Impacts

Soon after the commencement of its operations in 1963, environmental pollution from GI became a burning issue. The pollutants discharged by the factory into the Chaliyar were contaminating its water, affecting the health and livelihoods of hundreds of people in Mavoor and nearby villages. Further to this, the emissions from Grasim Industries caused large-scale air pollution, unleashing fatal diseases. The river's pollution and the factory's operations have disrupted traditional livelihoods such as fishing, mussel collection, and sand mining, affecting approximately 200,000 people living along the Chaliyar River. While the factory provided employment to some, the overall socioeconomic fabric of the community has been adversely affected by environmental degradation and health issues.

7. Environmental Movements and Remediation Efforts

In response to the adverse impacts, local communities and environmental activists initiated the "Save Chaliyar" movement, advocating for the closure of the factory and the restoration of the river. By the 1980s and 1990s, rising environmental awareness and public concern led to a series of protests and movements against the pollution caused by the factory. The movement gained momentum, leading to the eventual shutdown of Grasim's operations in 2001. Post-closure, the Chaliyar River has shown signs of ecological recovery, though challenges remain. Environmental activists, fishermen, farmers, and local residents organized protests, demanding accountability and clean-up from the company.

Remediation Efforts: After the closure of the factory, attention shifted toward remediation and ecological restoration. However, the efforts have been slow and uneven. They include:

Partial Improvement in Water Quality: The Chaliyar River has shown signs of recovery, with water becoming relatively cleaner over time. However, residual pollutants are believed to persist in the riverbed and surrounding soil.

Lack of Comprehensive Clean-up: No large-scale, government-led remediation project has fully addressed the contamination of soil and water in the affected areas.

Community Monitoring: Local communities and environmental groups continue to monitor the area and advocate for more robust clean-up efforts.

Government Involvement: While there have been studies and sporadic assessments by governmental agencies, a coordinated, long-term ecological restoration plan is still lacking.

The environmental movement against Grasim Industries in Mavoor stands as a powerful example of grassroots activism leading to corporate accountability. However, the legacy of pollution still lingers. Comprehensive remediation, involving both government and community participation, remains essential for the full recovery of the Chaliyar River and surrounding ecosystems

8. Conclusion

The company uses a large amount of water and chemicals to produce a small number of products. And it discharges the effluent into the river, downstream of its uptake point. Moreover, as the Kerala Pollution Control Board (KPCB) points out, the factory does not even meet the stipulated standard for effluents. The figures indicate that the factory must be polluting the river. And that is just what the local community complains about. They point to a rise in incidence of cancer and respiratory diseases in the region due to pollution caused by the factory. The case of Grasim Industries in Mavoor underscores the critical need for stringent environmental regulations and corporate accountability to prevent ecological degradation and safeguard public health. As a result of sustained pressure, and due to economic reasons, Grasim Industries eventually shut down the Mavoor factory in 2001. While the closure of the factory marked a significant victory for environmental justice, continuous efforts are necessary to restore the Chaliyar River and address the long-term health and socioeconomic impacts on the affected communities.

References

- *A River Reborn*. (n.d.). Boloji. Retrieved from Boloji
- Administrative Reports, Forest Department, Government of Kerala, (various years).
- Chaliyar Athijeevana Paadangal (Chaliyar - Lessons in Survival), Chaliyar Samarakshana Samiti, Vzhakad, Malappuram, 2007 - 08.
- Chaliyar Struggle (Malayalam), A Chaliyar Samarasamithi publication.
- Faizi, S. (1999). *Environment-India: Kerala Villagers Determined to Reclaim River*. Inter Press Service. Retrieved from IPS News
- Indian Express, July 28, 1999.

- Babu P Remesh, (2008) *Mavoor a Story of Corporate Social 'Irresponsibility' and Lost Livelihoods*, available on - <http://www.labourfile.org/ArticleMore.aspx?id=1009>
- *Poisoned River*. (1998). Down To Earth. Retrieved from Down To Earth
- Seethi, K. M. (2000). *Cleaning Chaliyar River: Pollution Control or Jobs?* Economic and Political Weekly, 35(3), 97-99.