

Mangroves, Coastal Communities and Environmental Human Rights: Judicial Protection of Coastal Ecology in Mumbai

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Abstract: *Mangroves are one of the most ecologically valuable coastal ecosystems, which offer important protection of the environment to biodiversity, stability of coastal, and storage of carbon. Floods and climate resilience Mangrove forests are very important in mitigating floods as well as climate in a densely populated city such as Mumbai. Nevertheless, the high rate of urbanization, development of infrastructures, and reclamation of lands have led to high levels of degradation of these ecosystems. This paper discusses how Indian courts, specifically the Bombay High Court, have helped to preserve the mangrove forests due to the expansion of the environmental human rights law. The article asserts that the conservation of mangroves has now become not only a matter of regulation but also a constitutional mandate According to the Article 21 of the constitution of India, through a study of the constitutional principles and legal systems including the Environment (Protection) Act, 1986, along with the Coastal Regulation Zone rules. The study proceeds to contextualize the argument of preservation over mangroves within the frame of climate justice and the privileges of the coastal residents.*

Keywords: mangroves, coastal communities and environmental human rights: judicial protection of coastal ecology in Mumbai

I. INTRODUCTION

The mangrove ecosystems are one of the most productive ecological systems worldwide that provide vital services including habitat, carbon sequestration as well as defense of coastlines of the marine biodiversity. These marshlands serve as natural barrier to storm surges and flooding especially in the highly populated cities on the coast.

The thriving urbanization and the massive construction of infrastructures in Mumbai have led to massive destruction of mangrove ecosystems. Reclaiming of land, disposal of construction waste, and property development have been involved in the erosion of the natural drainages and coastal ecosystems.

The catastrophic floods that hit Mumbai in the year 2005 not only revealed the environmental vulnerability of the city, but also brought into focus the ecological impacts of the destruction of the mangroves. In reaction, the environmental groups started going to the courts under the guise of public interests' litigation with the aim of protecting the mangrove ecosystems.

The conservation of mangrove forests and the enhancement of environmental governance in the Mumbai Metropolitan Region- Judicial intervention- particularly that of the Bombay High Court.



II. CONSTITUTIONAL FOUNDATIONS OF ENVIRONMENTAL HUMAN RIGHTS

The Jural interpretation has extended Article 21 of the Indian Constitution to contain the environmental defense, though there is no specific provision of the correct to clean environment in the Constitution.

The landmark decisions by the Indian Supreme Court have promoted notable progress in the law of the environment. In the case of M.C. Mehta vs. Union of India, the Supreme Court set the principle of full responsibility and connected the process of environmental degradation to the defilement of the human rights.

The Supreme Court handed down its ruling in the Subhash Kumar v. case. The right to life includes the state of Bihar's access to safe drinking water and air. The right to exist in connection to the natural world has been the premise of these rulings.

The efforts to conserve the environment are further supported by provisions in the constitution. Article 48A requires the State to conserve as well as enhance the atmosphere, upon which animals and forests have to be defended. The preservation of the environment is an inalienable obligation of everyone as prescribed in Article 51A(g).

III. COASTAL REGULATION ZONE LAW AND MANGROVE PROTECTION

The conservation of mangroves is another ecological regulation that is guided by legal environmental rules and regulations including The Environment (Protection) Act, 1986. The Indian administration applied this law to give a guideline towards coastal growth through the Coastal Regulation Zone (CRZ) Announcement of 1991.

Coastal Regulation Zone framework classifies coastline into more and less developed areas, depending on the sensitivity of the area to the effects of the environment. Mangrove habitats which are categorized CRZ-I have a severe limitation in construction and industrial activities.

The 2011 and the 2019 Coastal Regulation Zone Notifications represent the further examples of the revised regulation, the enhanced protection of the mangrove ecosystems through the limitation of constructions in the areas of the given buffer-zones. These control processes tend to strike a balance among sustainable coastal growth and ecological conservation.

IV. JUDICIAL DOCTRINES STRENGTHENING ENVIRONMENTAL PROTECTION

Indian courts had adopted various standards of environmental legislation on a global scale. adopted them, and made them part of Indian law.

In the decision of The case of M.C. Mehta vs. Kamal Nath established the public trust doctrine, which states that the government owns and controls the nation's natural resources cannot be sold or otherwise transferred to make a profit at the expense of the environmental interest.

The environmental legislation in India incorporates the polluter-pays and precautionary principles as laid out in the Vellore Citizens Welfare Forum vs. Union of India case.

Considering intergenerational justice, Indian environmental law stresses the significance of preserving natural resources for the benefit of subsequent generations.

V. JUDICIAL PROTECTION OF MANGROVES IN MUMBAI

The decision of The Bombay High Court heard arguments in the environmental group's petition against Maharashtra's government was the turning point in the protection of mangroves.

Various significant guidelines which the Court made, in this case, were the notification of mangroves as registered forests, destruction of mangrove ecosystems, satellite mapping and fencing of the mangroves, and compelling construction within the buffer zone of the mangroves.

Also to enhance greater protection of mangrove habitats, The case of T.N. Godavarman Thirumulpad vs. Union of India was decided by the Supreme Court expanded the definition of forests to cover land under the category of forests regardless of ownership.



VI. MANGROVES AND COASTAL COMMUNITY LIVELIHOOD

Mangrove life forms are also vital to the lives of the coastal fishing communities and especially the traditional Koli community of Mumbai. The mangroves give fish and crustaceans a breeding ground, which supports local fisheries, and ensures food security.

Mangrove destruction therefore has direct impacts on the economic livelihood of fisherfolk communities. In *Olga Tellis vs. Bombay Municipal Corporation*, the Supreme Court acknowledged that right to life as in Article 21 encompassed of having the right to live to satisfy one of her basic needs. In this way, environmental degradation of the coastal communities can be regarded as the infringement human rights that are fundamental.

VII. CLIMATE JUSTICE AND URBAN SUSTAINABILITY

Mangroves are also being noted to have a contribution in climate variation mitigation as well as adaptation. The carbon contained in the soil as well as plants of these ecosystems is large and they therefore make good carbon sinks.

There is also an erosion of the coast by the mangrove and ensures the community is not affected by storm surges and floods. Mangrove conservation in climate vulnerable metropolises like Mumbai thus sustainably plans cities and makes individuals adjust to the alteration of climatic conditions.

VIII. KOLI INDIGENOUS RIGHTS AND ENVIRONMENTAL JUSTICE

The conservation of mangroves is directly associated with the cultural and economic rights of the indigenous people living at the coastline. Koli community, which is also regarded to be among the first residents of the coastal areas of Mumbai, has been relying on marine ecosystems to make a living in the past.

The environmental justice theory emphasizes that minority communities are usually the ones that experience unfair environmental impacts. Mangroves destruction will therefore not only impact on biodiversity also, but also on the cultural assets and the rights of the indigenous people to carry out their sustenance. To address these issues, the environmental governance should include the involvement of the community and safeguard the traditional ecological knowledge.

IX. BLUE CARBON AND MANGROVES IN CLIMATE LAW

The importance of mangrove ecosystems in the climate governance context has been on the rise because of their role in blue carbon sequestration. Salt marshes, mangroves, and seagrasses, coastal habitats, accumulate and store carbon, also known as blue carbon.

Carbon sequestration was one of the areas that mangroves perform well and thus they are very essential in terms of controlling climate change. Conserving mangroves consequently helps in meeting the global climatic objectives and enhances climate resilience in the coastal areas.

X. CONCLUSION

Mangrove conservation in Mumbai is a significant constitutionalism on environmental issues in India. By gradual interpretation Permitting to Article 21 of the Indian Constitution, Indian courts, especially the Bombay High Court have converted ecological conservation to a human right that is constitutional in nature.

Meanwhile, legal frameworks like Coastal Regulation Zone regulations are regulatory mechanisms of costal ecosystem protection. Sustainable environmental governance thus needs to adopt a combination that is coordinated with elements of judicial checks and balances, good statutory provisions as well as active involvement of coastal communities.

Footnotes

1. Article 21, Constitution of India.
2. Food and Agriculture Organization, *The World's Mangroves 1980–2005* (FAO 2007).
3. Government of Maharashtra, *Mumbai Floods Fact Finding Committee Report* (2006).



4. M.C. Mehta v Union of India (1987) 1 SCC 395.
5. Subhash Kumar v State of Bihar (1991) 1 SCC 598.
6. Coastal Regulation Zone Notification 1991.
7. M.C. Mehta v Kamal Nath (1997) 1 SCC 388.
8. Vellore Citizens Welfare Forum v Union of India (1996) 5 SCC 647.
9. Bombay Environmental Action Group v State of Maharashtra, Bombay High Court.
10. T.N. Godavarman Thirumulpad v Union of India (1997) 2 SCC 267.
11. Olga Tellis v Bombay Municipal Corporation (1985) 3 SCC 545.

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