

FROM WASTELANDS TO LIFELINES: THE POWER OF PUBLIC PARTICIPATION IN WETLAND CONSERVATION

What are Wetlands?

India, while home to over [7,50,000 wetlands](#), is struggling with the challenge of how to save them. The important question that remains is how to raise awareness about protecting these wetlands amongst the growing population of the country. India's wetlands are disappearing at a rapid rate, and for a country where millions of people depend on rains to fill rivers, lakes and ponds for drinking water, food, and livelihood. This degradation of ecosystems is not merely an ecological data but an alarming emergency. According to estimates by Wetlands International, two out of five wetlands in India have lost their natural existence in the last 30 years. While [40% of water bodies](#) have lost quality for the survival of aquatic animals.



The Navi Mumbai Airport Construction site is in ecologically sensitive areas. Source: The CSR Journal

Being a developing nation, the challenge that lies ahead of India is to ensure there is a balance and that the short-term economic gains do not overpower the environmental

policies. Most of the policy framing happens because of environmental trade-offs. The Navi Mumbai International Airport was approved despite having ecological concerns. The proposed plan covered 2054 hectares, which consisted of wetlands and mangroves. These areas fall under the Coastal Regulation Zone (CRZ), an environmentally sensitive zone. CIDCO (City and Industrial Development Corporation of Maharashtra Limited) acknowledged that more than 160 hectares of mangrove will be destroyed and hills will be flattened. As compensation, [350 hectares of mangroves will be planted in Dahanu, 200km away](#). The development rate has continuously preceded conservation, and the communities that are mostly affected do not have or have only limited participation in arenas where all important decisions take place. Public participation in policy framing is one of the fundamentals that can prevent social injustice and ecological collapse. Especially in the environmental domain, it is meaningful when done actively and not relying merely on the rule book. Wetlands are degrading at an extensive rate, and the question is whether the conservation tactics are keeping up with it, and what is the extent of public participation and knowledge. Kerala wetlands have witnessed a rapid loss and slow conservation between [1990 and 2011](#). Approximate reduction from [2.35 lakhs to 1.6 lakhs](#) hectares, which is on an [average annual loss of 3750 hectares per year](#) due to encroachment.

There are [networks of organizations](#) helping with technical supervision in different parts of the country. World Wildlife Fund - India, Wildlife Trust of India, Wetlands International South Asia, and a few more, are continuously working not just to spread awareness and safeguard wetlands but also to restore these areas, along with safeguarding many species of birds and animals that are being adversely affected by it.

Conservation is Everyone's Responsibility

The Chilika Lake degradation started in the early 1990s, when the old outlet that connected the sea began closing. This increased salinity resulted in biodiversity loss. In 1992, the Chilika Development Authority was created by the government of Odisha, involving many scientific researchers. After long research, they could not implement a worthy solution. When NGOs came into the picture, they explained the scientific findings in the village meeting in layman's language. In these meetings, the villagers expressed that a new mouth should be opened. On 23rd September 2000, [a new channel was opened](#), which reduced the length by 18km and improved ecological conditions as well. The truth of the matter is that degradation would be at an exponential rate, if policy response is unhurried and public opinion is buried. The communication gap between policymakers and the locals can be bridged with the help of non-profit organizations (NGOs) working in proximity on the ground.

This is because environmental governance should neither be the sole responsibility of the government nor should it be outsourced to the private sector in the name of Corporate Social Responsibility (CSR). Instead, it should be a collaborative governance framework involving government, private stakeholders, local communities and NGOs. A model that creates a system of checks and balances, reducing policy inaction and blame shifting.

There are NGOs like Vanashakti that are known for protecting several major wetland ecosystems through advocacy and having strong citizen science programmes. [Vanashakti](#) acted as an intermediary and successfully brought over 26,778 hectares of mangrove land across Maharashtra under legal protection as forest land. Such effective systems can also be built by an interdisciplinary partnership approach between the public, private, NGOs and the local communities.

Social Perceptions on Wetlands

One of the major problems that lies is societal priorities. In urban areas, wetlands are seen as wastelands, and in rural areas, birds are seen as crop destroyers. This reflects genuine animal-human conflict at wetland interfaces. Here, the challenge is how to protect something one does not understand or benefit from, especially in a country like India. Land is viewed as a source of mere revenue, with various economic activities being performed, whether cropping or as real estate. Also, these low swampy lands are often used as dumping grounds for waste, especially in rapidly urbanising areas. Major cities like Bengaluru have seen a decline in lakes over the decades, water bodies in Chennai have shrunk due to urbanisation, and in Delhi, nearly 500 water bodies have vanished due to garbage dumping, highlighting [a critical lack of conservation focus in urban planning](#). As these ecosystems shrink, cities lose natural systems that help manage floods, recharge groundwater, and improve water quality. The [Pallikaranai Marsh](#) in Chennai was about 5500 hectares in 1965, and has been reduced to 600 hectares. The cause of degradation is the dumping of waste within wetlands. This has caused degradation not only to the habitat of that marshy land but also to the primary contributor to increasing floods in South Chennai. Wetlands also play a crucial role in climate regulation by [carbon sequestration](#), and protecting coastal regions from storms and erosion. Their loss not only disrupts ecological balance but also increases the vulnerability of cities to extreme weather events, making conservation an urgent necessity.



The Pallikaranai Marsh is threatened by excessive waste dumping. Source: The New Indian Express

One side of India is expanding cities and deteriorating wetlands under the name of development, where a home to several species overnight becomes home to the human species when one real estate developer is given a permit to build a high-rise. On the other side, there is the rural community of the country, which sees these lands as a cause of destruction, because they serve as habitats for many species that are viewed as enemies to the agrarian society, perching on their crops.

Farmers of Macazana and nearby villages in Saxtti in Goa have complained about [Purple Swaphan](#) (*Porphyrio porphyrio*), locally called “Tel Combo”. They consider it the cause of crop destruction. There is no scientific backing for this, but it is an assumption based on their observations. This perception gap further creates a second barrier that prevents effective conservation work from reaching the actual conditions found in local communities, which results in pushback against environmental protection efforts. The local communities need to be involved in decision-making processes together with their need for awareness, because these two factors create the obstacles that prevent effective wetland conservation work from proceeding.

Ecotourism as an Outlook

Ecotourism is one of the ways to balance conservation with community and generate income for locals. This needs appropriate management. Visitor numbers should be

controlled through a pre-booking system, fixing the daily capacity. Guided nature walks headed by a trained, knowledgeable local. A mandatory pre-visit briefing promotes responsible behaviour of the tourist. Rather than large infrastructures, activities like eco-walks and educational tours by schools. These models are a seasonal revenue system for extra income. Platforms like Instagram and ticketing interfaces such as BookMyShow can bring wetland ecotourism into the public eye and make it more accessible. Once it becomes a trend, the algorithm of social media will play its game. This increased visibility will encourage greater formal recognition and intervention by the government. Unfortunately, not all wetlands are Ramsar-recognised sites, but every Ramsar site is a wetland.

From Public Participation to Public Action

History has witnessed that public participation has led to changes in environmental policies. The [Chipko Movement](#) in the 1970s in Uttarakhand and the [Appiko Movement](#) in the 1980s in Karnataka pushed the forest governance to rethink its policies. This change was reflected in [Forest Policy 1988](#), which emphasised conservation, ecological balance and local community participation. These movements were not just about trees but also represented a deeper understanding that environmental protection is inseparable from the involvement of local communities. There is a clear need for such people-led movements today, especially in the context of wetlands. Trees are called the “lungs” of the Earth because of their role in regulating atmospheric gases. Similarly, [wetlands are known as the “kidneys”](#) of the landscape due to their ability to filter sediments, pollutants, regulate water flow, recharge groundwater, improve water quality and processes like denitrification. The mean nitrogen removal rates range from [20 - 1100 and 368 - 2310 kg N ha⁻¹ yr⁻¹](#), approximately, depending on wetland type and condition. The ongoing deterioration of wetlands demonstrates how environmental policies fail to achieve their intended purposes. Wetlands need to be seen as essential ecosystems that protect life to reverse the current trend of treating them as purposeless.

Public participation contributes to more effective conservation efforts by incorporating local knowledge and shared responsibility. Greater public awareness enables citizens to engage with policy. We, humans, are not owners of the wetland, but one with it. Meaningful change can only be brought through unity, and today, more than ever, conservation of wetlands is not a choice but an urgent necessity.

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