

Thirsty River and People

Bratindi Jena



Image Credits: Wikimedia Commons

It was a hot summer afternoon when I reached village Kiakata. Madhopur, Kiakata, and Krushna Prasad are villages located on the bank of river Mahanadi and the centre point of three districts of Odisha – Subarnapur, Boudh, and Anugul. After a while, women and men gathered at the village community centre. We started talking about the weather and what they did during this time of the year, if all families were in the village and so on. Since the village is located on the bank of the Mahanadi, I wanted to visit the river. But it has moved miles away from the village in last two decades and it was not easy to walk on the hot river bed. During the hour-long discussion, many issues of the village and surrounding areas emerged and more were related to drying up of the Mahanadi in patches. However, the situation was very different two decades ago when the river was quite close to their village.

The Mahanadi basin extends over states of Chhattisgarh and Odisha, draining an area of 1,41,589 square kilometre (India-WRIS, 2018). The Reassessment of Water Availability, Volume 1, a report published by the Central Water Commission (CWC) in 2017, informs that the total basin area is 1,44,905 sq km (CWC, 2017). The Department of

Water Resources, Government of Odisha, on its [web page](#) informs that the total catchment area of Mahanadi River basin is 1,41,134 sq km. Area wise, Mahanadi has the sixth largest river basin in India and the third largest river basin in the peninsular India. Its basin area is nearly 4.3% of the total geographical area of the country (India-WRIS, 2018).

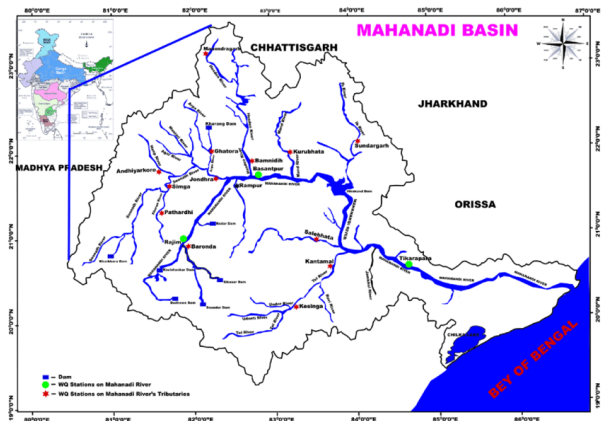


Image Credit: ResearchGate.com

Lifeline of People

Rivers have been the lifelines of most civilisations and have provided people with food, livelihood, cultural identities, community interactions and recreation. The Mahanadi River is no exception to this especially for the communities dwelling on its bank and catchment areas.

Cultivation on the river bank where the land was rich with top soil of floods has been a regular practice in many such villages. They even cultivated two crops in a year due to water availability. During lean period, women-headed households and landless people cultivated patches of river bank and produced varieties of fruits and vegetables. This seasonal earning helped them sustain for the entire year. River commons, both in shallow water and the bank, have been a good source for varieties of wild grown green leafy vegetables available all-round the year. This has helped women from the community manage their food and nutrition requirements, and earn livelihood by selling the surplus in nearby markets.



Image Credits: Wikimedia Commons

Agriculture and livestock rearing have been two interrelated activities in rural India. Majority of farmers have livestock and even other community members depend on small ruminants. River bank provides vast space for grazing and a variety of wild grass and water for livestock. People coming with their livestock for grazing always got ample space to rest and do their work while keeping a watch on livestock. Fishing is also major activity for fisher folk community living on river bank. When water was available in plenty, they could get variety of fish – good size and of good quantity. This was not only their source of livelihood but also it helped meet the food and nutrition needs of households. River has been a major source of livelihood for boatmen. Potters and brass artisans depend both on river soil and water to process their products. Collection of reeds and leaves are income generating works for many communities. Women have a special connection with the river. They are found near the river whole day for different household chores, relaxing and even sharing their concerns. This has been a place for counselling, venting out emotions, and relating to each other as a community. River bank has been a place to escape from the confinements of house and domestic violence for many.



Image Credits: Wikimedia Commons

As a place for social, cultural, and religious activities, many rituals are conducted on river banks related to birth, death, worships, and community gathering. In earlier days, it was mandatory to go to a river on certain occasions and the only alternate was a pond – some form of water commons for community gathering to express solidarity.

Bygone Days

Most of the activities related to livelihood and cultural activities are now facing a serious threat because of depleting water in Mahanadi. This has impacted both Mahanadi and the communities living on its bank for generations. Loss of livelihood has been a major issue. People have either abandoned their traditional occupations and have migrated in search of work or have become labourers in other's factories. A variety of river commons freely available foods are nearly lost due to water scarcity and increasing dryness on the river bed. Both agriculture and fishing suffered a lot and in many places abandoned fishing tools were laying in a corner. Land fertility has reduced over the years in the absence of any enhancement of the top soil with floods. The land now needs more fertilizer and good amount of water for growing crops. Both cost the farmers more than they used to. So many people feel farming to be a non-profitable and arduous work now and prefer other jobs instead. Shifting of the river course and sand mining has deprived seasonal fruit and vegetable

cultivators utilising river commons for some income and availing food. Varieties of wild grown leafy vegetables in shallow water have declined in many patches. This has deprived communities from getting some amount of free food as rice and green leaves have been the staple food for many families who could rarely afford vegetables from the market. Wild grown reeds on the river bank dried up and families engaged in weaving baskets and other household items are now losing both skills and livelihood. Fishermen folks are struggling to meet their daily needs even.



Image: Fishing tools are no more in use

Image Credits: Biren Nayak

With no water on the bank, women have stopped coming to the bank for household chores. 'Women's Space' to relate with each other, sharing concerns and happiness is also lost. Most cultural activities like taking community dip, making an offering to ancestors in river water, making of idols for worship and many cultural activities have nearly stopped. It's quite a challenge to walk kilometres in sand to reach the water flow. Slowly people are increasing their dependency on hand pumps.

Death of a River

Ramaswamy Iyer while studying both living and dying rivers of India found that most rivers assumed to be living were also on the verge of dying. "...it is difficult to find living, healthy rivers,

and even the few that exist are under threat of decline. Heavy pollution is a major cause of this situation, but there are also other factors, such as excessive abstractions or diversions of waters, and violence to their physical components such as the river-bed, banks, floodplains, and so on... underlying such abuses is a poor understanding of what constitutes a river" (Iyer R., 2015).¹



Image Credits: Wikimedia Commons

Massive deforestation and degradation of indigenous forests, forest fires, commercial plantation and monoculture in the upstream and along the river bank are destroying forest and river ecology, resulting in river bank erosion and drying up of streams in the mountains. Forest fire is also furthered due to such monoculture and dry ground conditions.



Image Credits: Wikimedia Commons

¹ Iyer Ramaswamy (2015), Living Rivers, Dying Rivers: A Quest through India. Oxford University Press

Human interventions through dams and barrages have completely disrupted the natural flow of the river. The river is literally stapled within a few kilometres from its origin. There are more than 150 dams on Mahanadi and more are planned. This not only disturbs regular flow but dries up river in many patches. Also natural flood that enriched the agricultural fields on river bank has stopped due to such human interference. Even if flood occurs, with heavy flow, it washes away the shore in the absence of adequate sand bed.

Further, with the increasing demand for infrastructure development and construction work, sand is the most sought-after raw material sourced from the river bank. Sand has its own function on the river bed. It holds water during summer and is habitat to a variety of living organisms that live in the sand and shallow water. In many places, people collect drinking water from the river bed by digging small pits on sand. Sand helps in dealing with flood intensity.

Excess pollution of river water with both visible and invisible pollutants is killing most Indian rivers to a great extent. Generally it was felt that a river, as a drainage system, would carry away whatever gets dumped into it. But over the years, the water carrying capacity of the river has shrunk. As pollutants are dumped, those remain static in the river at the local area or some distance away leading to contamination of the water body, thus risking survival of aquatic flora and fauna. Even when consumed by people, it becomes reason for many water-borne diseases.

Civil Society Interventions

The civil society has played an important role in informing people about the ground reality on water conditions by organizing meetings and seminars at both state and national levels, highlighting the issue in the media and collating expert voices. *Padayatras* were organized several times in past few years from different communities involving both states of Chhattisgarh and Odisha.

Continuous efforts were made to draw attention of the public, policy makers and elected representatives. The progress on Mahanadi tribunal is followed up regularly.

The central government constituted the Mahanadi Water Disputes Tribunal on March 12, 2018 (under Section 4 of the Inter-State River Water Disputes Act, 1956) to adjudicate the dispute between Odisha and Chattisgarh over sharing of Mahanadi water. The tribunal was constituted following orders of the Supreme Court which was petitioned by the Government of Odisha to stop the construction of barrages and dams by Chattisgarh in the upstream of Mahanadi. These constructions allegedly lacked necessary environmental clearances and affected the flow of Mahanadi water into Odisha.

Looking Forward



Image Credits: Biren Nayak

Mahanadi, being the lifeline of millions of people, needs to be protected. Water requirement for agriculture needs to be fulfilled on priority. Apart from that, the river bed needs to have some amount of water to facilitate cultivation of seasonal vegetables and fruits by landless people as it is their sole income source for the entire year. Fisher folks need certain level of water for fish to survive and regenerate. Fish is a major source of protein for poor people and needs to be protected. All other artisan communities dependent on river water need to be compensated for loss of their livelihood. All efforts should be made to restore

river water rather than displacing lakhs of people from their livelihood.

Sand and boulder mining has to be controlled and done in specific areas not everywhere in the river. Sand deposit level has to be maintained in the river bed to ensure ecological balance of the river and sustain other aquatic creatures on sand. Regular monitoring and stringent mechanism to deal with sand mafia is also the need of the hour. Promotion of indigenous forest is equally important. Indigenous variety of trees will help retain ground moisture and replenish aquifers. This will also help maintain the natural cycle of rains as a process of 'nature based solutions'. Such type of plantation is needed on the river banks, other water bodies, and in the mountains.

River water pollution needs to be addressed because both visible and invisible pollutants of different forms are pumped into river without giving it a thought. 'Polluters Pay' provision has given many corporates liberty to further pollute water beyond repair. Now stringent action needs to be taken against polluters of water as no amount of finance can free water from pollution. The National Green Tribunal (NGT) and Pollution Control Boards need to be strict in their actions. Not only the quantity but also the quality of the river water should be the focus. It should be ensured that water in all the stretches of the river is potable.

'Right of River' and 'Right to River' need to be protected for survival of the river and all living beings. A river is already recognized having its rights as a living entity and such status has been given to both Ganga and Yamuna in 2017. This stands for all Indian rivers across the country. Maximum water should be allowed to flow in the river with minimum amount being diverted. Only then river will be able to function fully. Apart from this, all living beings have their right over the river for their survival. All forms of aquatic creatures living in water and all those who depend on river have every right to get clean water, even the

vegetation on river bank need to grow healthy. Rivers are not created for human consumption only but for larger ecological balance and all living beings have right to 'Access River'.

Many believe that 'water going to the sea is a waste' and as much possible, water must be retained and not allowed to flow down to the sea. This argument has serious consequences for both the survival of rivers and ocean ecology. River water going to the sea is a natural process and through this, it performs very important ecological functions. These include balancing ocean water temperature, building the coastline with sand and silt, controlling salinity-ingression, recharging ground water in the flood plains, maintaining the bio-diversity and growth of mangroves to deal with climate change, sustaining livelihoods and culture.

Any commercial use of river and commoditization of water needs to be stopped with immediate effect. Diversion of river water for exclusive commercial purpose and changing its route completely like river Kishan Ganga getting diverted through a tunnel for a hydro-project changes the basic function of river to flow free. A community-led conservation and protection plan for rivers needs to be done in a natural process not by concretizing its bank and putting benches while the river dies beneath.

A river has no boundaries and both upper and lower riparian communities play an important role in maintaining good health of the river. Inclusive and people-centric river basin water governance using indigenous technology and knowledge will ensure access and benefit sharing for dependent communities; and will deal with the major issue of community alienation from the river.

It's time to respect nature's creation and the purpose. Rivers bind peoples of different geographies, languages, cultures and practices. Rather than claiming ownership on the river travelling through any territory, maximum efforts should be on keeping it healthy. The conflicting situation between Mahanadi basin states like

Odisha and Chhattisgarh may result in irreparable damage to the economy, lives, property, and social fabric in the basin in both states. These basin states are inseparable – culturally, historically, and ecologically. The river Mahanadi has been the common natural, social, cultural, and economic heritage that the people of both the States share. All possible options for a peaceful resolution of the conflict are required to be promoted through riparian community inclusive process.

Let river as a gift of nature flow free as 'Blues beyond Boundaries' being a messenger of peace, not of conflict. River and people are inseparable. Even if water is expected to flow from the tap, rivers and all other water bodies need to be alive so that along with human beings all other living organisms survive in a sustained manner and environmental equilibrium is maintained.