

## **WATER WITHOUT BOUNDARIES**

During a train journey with a friend from Nagaland we discussed about water. He said, you have so much water in the Brahmaputra valley and your lands are always flooded but we have to struggle for a drop of water in the hills. I said you can retain that water in the higher ranges of hills and save us from the catastrophe of floods every year. He asked me to explain and then I said that if the forest cover is thick in the ridges of the hills around the North East then probably the water which rushes down to the valley will not be carrying silt and raise the riverbeds and lead to the havoc of floods every year. He said but we survive on firewood and need the trees for survival. But you can manage without water and forest you are in the cities and you have all kinds of gadgets to create these resources artificially. I could not argue much with him. But this issue did remain with me for a very long time.

Water is such a concern now that we cannot imagine life without it. Most of the conflicts in mountain ecosystems are dependent on water sources, water sharing and water use. Water is gradually becoming a commodity of great value. The question of commons arises here as far as water is concerned. Does water continue to be a common property resource in the context of the hills in North East India? Community lands, water sources and forest areas are gradually being owned by individuals, chieftains of clans, powerful elites and corporations who are imagining a modern development model for the remote hills of Arunachal Pradesh, Meghalaya, Mizoram, Sikkim, Nagaland and Manipur. While travelling through the terrains of these states, I have observed the innovative techniques to channelize, store and transport water in different parts of Nagaland, Mizoram and Meghalaya specifically. Bamboo channels in villages of Nagaland channelize the water and stores water in the community tank from where the entire village gets their share. In every terrace field in Phek district of Nagaland where I have travelled to there is a farm pond to retain water for the field and aquatic life forms like fish, frogs, crabs and snails which is a very important part of the diet. Water quantity in mountain lakes, springs and streams is also gradually shrinking due to over use, thin forest cover and heavy erosion and landslides during the monsoon season in the North East Region.

Mountain villages are gradually turning in bigger towns and smaller cities. These cities cater to a huge population for all commercial, business and personal purposes. As the city concept is growing in the mountains the demand for city needs is also growing. Water is one of the key needs for cities to sustain. Global cities promote quality drinking and potable water which is available with the switch of a button. This is the sign of adequate development and modern lifestyles. In the plains where cities have such facilities they are accessible to larger rivers and there is an abundant supply of ground water which is used for regeneration of water sources on the surface. The infrastructure development in cities is such that it does not take into account common property resource sharing and runs on the principle

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of polluter pays. Higher the building, higher is the cost of its maintenance and resource use. Water in cities in plain areas is becoming a rare commodity with an extremely high cost. Equitable distribution of water in the city context has become an impossible reality. More and more water conflicts are turning violent and people are pushed to the fringes to compromise with unsettled disputes. In contrast, the emerging cities in North East Mountain region are adversely affected by the water scarcity issues. Whether it is Gangtok in Sikkim, Aizwal in Mizoram, Kohima in Nagaland, Tawang in Arunachal Pradesh, Shillong in Meghalaya even hill ranges of Guwahati in Assam, water scarcity is a blatant reality. More and more these cities have become terrible nightmares during rainy season. There are flash floods and drinking water scarcity which hits the hardest during the monsoons. Heavy pressure due to high raised buildings, commercial multi-storied buildings, flats and pent houses, enormous establishments of hospitality and private medical institutions have played a major role in water scarcity for common people. People have become dependent on private providers of water for household use. The unregulated prices of private water supply is creating more and more water conflicts in these cities in mountain ranges. The rate of drinking water is soaring up every day in hill towns and cities like Shillong, Kohima, Guwahati and Aizwal. The water prices range between Rs 300-350 for 1000 litres in Shillong and Rs 900 for 2000 litres in Aizwal. In Kohima also the rates are very high and range between Rs. 600-800 for 1500 litres and in Guwahati it is Rs. 250-300 for 1000 litres. Mountain springs are no longer recharged due to erratic rainfall patterns and climate variations. Water has turned into liquid gold which is gradually becoming a privilege of a few. Meanwhile the state responsibilities of providing water to households are gradually shrinking as people can manage with private sources. Many consumers are still paying huge bills for water supply but at the same time buy water for daily consumption as the state water supply is not regular and water quality cannot be assured.

The growing pressures of population in the cities of hill states in North East Region are also due to the emergence of opening up of the economy through the Look East Policy. The trade corridor with India's eastern neighbours like Myanmar, Thailand, Bangladesh, Nepal, Bhutan, China and other South East Asian countries through the in-roads of the North East Region has led to many possibilities. But issues related to common resources like water supply, rainfall, climate variations and high seismic zone and ecological factors of the natural world have to be seriously reconsidered. The blind aping of development models of fast growing economies of the West and the Oriental south cannot be the norm for the policy makers and technocrats in India. Water related issues cannot be determined only by huge funding projects of public-private partnerships and bilateral treaties between developed nations. Privatization for infrastructure development for water testing, water quality up gradation and effective water supply may be useful in the context of bigger metropolitan cities in India, but in smaller towns and cities in the hills of North East

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India, such processes will lead to severe ethnic and exploited implications which will only create conflict. In the hill states, water use is amicably distributed through community user groups and people's committees which are community based and managed by community people. If this community thread is snapped and the entire water supply and user group process is privatized through international funding support, there will be adverse impact on the common people. People who can afford to pay will only benefit from this system. Most marginalized categories of the society will be automatically excluded from this process. Water is directly linked to land, property, land based activities, social, public and rural health of people and animals, habitat management and food chains.

In the current scenario water usage and need have exceeded the human limits and technological advancement has reached such soaring heights that water is consistently used for producing electricity. Hydro-electric dams in most of the mountain rivers across North East India have resulted in severe socio-economic and natural imbalances. Arunachal Pradesh, Meghalaya, Manipur, Assam have been bearing the brunt of these dams. Thousands of natural flora and fauna and villages have been uprooted due to these modern monuments of civilization. Rehabilitation and resettlement of any kind always short of the original habitat. People's movement groups and communities have been still struggling to make the planners understand the implications of natural disasters. Recently, Uttarakhand floods have created hazardous conditions for the mountain population in these states. This is a natural reality which is true for all concerned authorities to understand the impact of large dams on the lives of millions of innocent people who live in the downstream ranges of the mountain ecosystem. The violent struggles of people for their land and property in the dam sites in Tipaimukh in Manipur, Subansiri in Arunachal Pradesh and Assam Border are indicators of people's understanding of nature more than the scientific speculative indicators of technocrats who promise to have no casualties after the construction of such big dam projects. In the north east region only some of the existing dam sites in Karbi Anglong hills Assam, Barapani area in Meghalaya and Khuga Dam in Churachandpur in Manipur have become just tourist attraction sites more than becoming power supply hubs for the villages, towns and cities in the neighbouring areas. If the electricity generated in these areas is not benefiting the communities and local population in the region then why should people give away their farm lands, livelihoods, residences and villages which come under the submergence of these dam sites? Who is included to benefit from the tenets and apostles of the large dam development projects and who decides to exclude the most marginalized sections of the society is a huge dilemma today for all stakeholders who are associated with the water dam building and opposition process.

In this entire debate of understanding the water resources of a mountain eco system we tend to overlook the 'do'ables and alternatives to resolve water conflicts  
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in the region. We are at a constant tug of war amongst our own kin and kith within our territorial boundaries, state boundaries and within our ethnic identities. But water is such a resource which goes beyond the borders and boundaries. This calls for an eco-system approach rather than a state specific response. The topography of North East India is such that it has a common ecosystem for the entire region beyond the international borders as well. Upstream activities of Bhutan, China and Nepal will have a direct impact on the hill ranges and flood plains of Assam and Bangladesh. Unless we create a common ground to think about possibilities as an International Regional Ecosystem Collective, no viable solution can be drawn from the inevitable disasters which are at the doorstep of the North East Region. Somehow North East Region needs to develop a platform for cooperation for alternative local technologies and innovations which will minimize the impact of water woes on the region. This process needs support from all related quarters.

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