18. Wetlands of the Western Brahmaputra

In the Bongaigoan, Kokrajhar, Dhubri, Goalpara, Barpeta, Nalbari and Chirang districts of western Assam, a few large wetlands like Urpad, Tamronga, Doloni, Dheer and Diplai were well known. There are many small wetlands, however, which were unexplored until recently. Here hundreds of migratory birds come each year, but there are also several which are degrading or degraded due to human disturbance and encroachment. Ill-advised construction of embankments that prevents annual floods from flushing out from the beels weeds like water hyacinths, speeds up eutrophication. Loss of wetlands is also loss of livelihoods and cultural elements of the communities who are dependent on them.

Arnab Bose, NGO Nature’s Foster

Bongaigaon

In the Bongaigoan, Kokrajhar, Dhubri, Goalpara, Barpeta, Nalbari and Chirang districts of western Assam, there are many wetlands which were not explored before. We knew well of a few large wetlands like Urpad, Tamronga, Doloni, Dheer and Diplai. Equally important are some small wetlands, where many kinds of migratory birds come every year. Since 2014-2015, in the Brahmaputra floodplain wetlands, among these some of the important wetlands that were not covered such as Puthimari Beel – we have recorded birds we had not recorded before. We are also seeing some wetlands degrade. One of these is Bongaigaon’s Hatimutura Beel which is totally degraded and
no longer has water or fish. At one time we recorded thousands of ducks and other birds. There are many wetlands which have degraded, by a natural process of eutrophication that has been speeded up because of human intervention. There are several factors responsible for this. One, for example, is the weed, water hyacinth. Most wetlands of the Brahmaputra valley have feeder canals, along which water comes up in the opposite direction of normal water flow during the floods. Along with the flood water comes fish, insects and plant species. There is a similar movement out towards the river during the receding, during which the water hyacinth also gets washed out. The system is therefore naturally balanced. However, we see in some wetlands that government policy is sometimes implemented without much study or thought having gone into it. For example, embankments have been built where they should not have been built, blocking the water hyacinth from being annually cleared by flood waters. Thick mats of water hyacinth then destroy the wetlands. Another problem of wetlands is siltation and yet another major problem is encroachment and conversion to agriculture, such as we see in beels like Urpad. Some people we ask say that they prefer there are no wetlands, because that area can be used for farming. Other people disagree, and lament the loss of wetlands because their livelihoods and culture are connected to them. A loss of a wetland is not only the loss of the water cycle of an area. Peoples’ stories, living and livelihoods also disappear. For example, the Doloni wetland, the largest in Bongaigaon, is famous because Srimata Sankardev had visited there. A place there is called Sankarghola, a lovely place where tourists visit. Near it is the Bishnupur Satra, a culturally important place. Now, if the wetland disappears, so will the story associated with it. In addition to culture and custom, there is the fish of the wetlands. Local people live on fish they catch, they do not buy fish. If we do not protest and make the government and people aware, then we will lose our wetlands one after the other. In Barpeta district, I had toposheets from the 1950s which showed a wetland that has disappeared. Now people do not even remember that there was a wetland. Change of landform is a natural process, but the rate at which it is happening is not natural.
Photo: Diplai Beel in Kokrajhar with Chakrashila WLS hills in the background.

Insan Khan, Dheer Beel

Kokrajhar
Eight to ten streams feed the Dheer beel here, where the water collects, then goes into the Brahmaputra 5 kms from here. Thousands of people from various communities like the Muslims, Bodos and Rajbongshis live off the fish here. The government leases fishing rights for 4-5 lakh rupees, and the fish is sold in Barpeta and Bongaigaon. During the rains the water rises and fills the beel. From April onwards, fish come up from the Brahmaputra with the flood waters that stays for 7-8 months. People make good harvests of fish and they sell their catch in different places. In November and December when the water recedes, people grow Bodo, aijong and iri rice here. They also block the fish from returning to the river and continue to fish. There are 10-15 fish species here like rou, borali, catla, baim, sal, tenegena, magur, singi etc. During the winter season, many kinds of wild water birds like ducks, geese and openbill storks.

Photo: Women collect firewood from the zizyphus scrub on Rupshi Airfield, Kokrajhar next to Sareshwar Beel. On the same abandoned runway are droppings of rufous-tailed hare (right). Leopards also prowl the scrub jungle.
Girish Ray and Mukul Kalita, Sareshwar Beel, Parbatjhora, Kokrajhar

Sareshwar beel drains into the Gadadhar river, which in turn connects to the Brahmaputra. During the rainy season, water comes back up to the beel through the same connections. There are large mats of kosoripana or meteka (water hyacinth) dotting the lake, under which the fish like rou, catla and ilish, take shelter. Fishermen surround the mats with bamboo stakes to keep the fish inside. When they have to catch the fish, they net the area around the mat all the way to the bottom of the beel. They then remove the water hyacinth. One man dives in to keep the net to the beel floor, then draws the net in with the fish; he can stay up to several minutes underwater. Some days about 100 quintals of fish are caught.
Photo: A signboard of the Forest Department of the Deepar Beel Wildlife Sanctuary, part of a larger wetland, notified as such in 2009. It typifies many of the problems of wetland degradation.

Deepor Beel, Kamrup

In May, June and July much water comes in to Deepor Beel from the Brahmaputra. Along with the water comes fish fingerlings in huge numbers. In years before, these
fingerlings would feed on natural feeds and grow very quickly. Now, however, the water of the Deepor Beel is very dirty from the sewage of Guwahati emptying here through the Bharalu and Bahini rivers and the city’s garbage is dumped here. The water is now toxic. Before, we used to count birds from October but now it is already November and there are no birds to be seen. Fish have reduced, so have the birds. The elephants drink water here. The government has much to do, starting with pollution testing of the waters.

People used to do ‘Bao’ paddy before, but now as they germinate, the water comes in and the paddy rots. People have stopped cultivating now. The local people have appealed to the government several times about the death of fish and disappearance of the aquatic herbs and water lilies, and the government has much to do, but unfortunately, our appeals are not heard. Before the pollution happened, the ground was only mud on Deepor Beel. But now it is now dangerous to step on the ground of the beel – there are pieces of hospital syringes, plastic, broken glass, tyres and rods

The water hyacinth is a problem when it spreads into large areas of the beel. They remain stuck on the highland areas, where the floods cannot clear them out. The hyacinth chokes the aquatic ecosystem and some species of fish like rohu, bahu, bhokua, miriga which need clear water, cannot survive in water-hyacinth invaded areas. On the other hand, some species like goroi, sol, senegeli, singi and magur thrive in areas with hyacinth. For all species to survive, with their various requirements, the beel needs to have a mix of habitats – clear water, some with hyacinth or reeds.

In March, the beginning of summer, the water in the hills begin to dry out. At this time, the elephants come down from Rani and Garbhangha forests to Deepor Beel for the water and to feed on an aquatic plant locally called Mokhona *Euryale ferrox*, a favoured food that grows well in various patches in the beel. During this time, when they cross the railway line, elephants sometimes get killed. In the last 8-9 years, some 14 elephants have died from small calves to adults. In the last two years, 25-30 local people have been engaged to patrol the tracks, but there is not enough incentive.