

CASE STUDY

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Inside and Outside the Kosi Embankments: A tale of lost livelihoods



The Kosi project and its construction work has had an effect on the basin ecology, the villagers, and farmers, whose livelihood have been badly affected. Migration has increased and thousands of acres has been rendered useless by the waterlogging prevalent in the area. For hundreds of villages in the Kosi basin, basic amenities such as education facilities, health, safe water, electricity, travel are still a distant dream.

The worst condition is that of the villages inside the embankment. Their harrowing tales are often unheard. Inside the embankments both erosion and silt deposition is increasing every year. Before the construction of the embankments the river flowed over a vast area. Now it is

restricted between the two embankments. With silt deposition that occurs every year, the land inside has risen. If one stands on the embankments one can easily see the height disparity, the land inside the embankment is higher than the land outside. This has in turn worsened the flood situation inside the embankments.

Shri Prasad Singh of Manna Tola village in Khokhnaha *Panchayat* says, "When the Kosi barrage was constructed it took into account nine lakh cusec water discharge. But when in 1984, a survey was carried out it was clarified that with only two third of that quantity, that is six lakh cusec, the barrage would collapse. After this the nine km Nirmali- Majhari barrage, and then a five km barrage were constructed. The result is that

even with two lakh cusec water discharge, the villages inside the embankment have to deal with 2-3 feet of water. The authorities give us one and a half kg *Choora* and fifty grams sugar, and are done with their part of the commitment and wash their hands of us."

The ex- *sarpanch*, Vinod Prasad Yadav, questions the validity of the continuous construction of safety embankments. He asks "When the eastern and western embankments of Kosi were constructed, it was directed that no other embankments would be constructed in a twenty five km range from them. But so many embankments have mushroomed everywhere, and our problems exacerbated."

And now the condition is such that even with much lesser

discharge in the river, this web of embankments worsens the flood condition in these inside villages during the monsoon season. For the villagers, the only way to survive is to move away from the rising waters, displaced from the land they own and live on.

Describing the condition inside the embankment area, Ramchandra Yadav, a resident of Manna Tola village in Khokhnaha, elaborates, “In the last ten years, my home has been lost to the floods six times. In the year 2015, our whole village was flooded, and my house too was inundated by five feet of water. For 15 days we lived on a *machan (Raised Shelter)* on the roof of our house; we were positive we would not survive this time. We then decided to leave the village, so put our children on a boat and paid the boatman Rs 1500 to take us to safety. Halfway through the turbulent waters, the boat was about to capsize and we held on to it for our dear lives. We survived that day, but decided to leave our village forever. Even today, when I recall that night, my heart is in my mouth. And when the whole village is undergoing the same trauma, trying to save their loved ones, who will come out and help you?”

Lost my land, my livelihood

The land inside the embankments is no longer fit for cultivation. Tracts of land have been left useless by the yearly deposition of silt on them. The rest of the land is ravaged by floods, incapable of sustaining any crops in most places.

Farmers grow wheat and corn in patches, wherever feasible. As it is, they themselves are displaced every year, and their fields too change shape and size. Secondly, their fields are flushed with sand and silt, and to make them ready for cropping involves considerable expenses and immense hard work, which is difficult for most. And after years of being beaten by rain induced floods, land erosion and lack of government help; they have lost the will to work on their land any more. Migration, especially for the young seems to be the only option left, and has gradually increased here. And even in such a state where there is negligible or no income from the land, they have to pay a yearly revenue for their fields.

Amin Tola's Pulkit Yadav adds, “Our village has a land of 3500 acres; but if you total the pieces on which farming is possible, it comes to a meagre 220 *bigha*¹ only. We irrigate whatever piece of land is cultivable with some

crop or the other. If we get a produce fine, else all the money and labour put in goes to complete waste, and we run into a loss. This year we grew *moong* pulse; rice is impossible to grow here. Had there been no embankment in Majhwaliya, Kosi River would have turned towards the west. This embankment has only increased our troubles. Whatever little we could cultivate, even that is lost to us now. And on top of that is the revenue payment expected from us. Last year itself I paid Rs 5000 even though I was unable to grow a single crop. Officials tell us that if this is not updated, no compensation for lost crop will be given to us.”

The direct effect of loss of irrigation can be seen in the migration pattern in this area. The villages inside the embankment show an increased rate of migration, with people moving out in search of livelihood. Ramchandra Yadav adds, “Men from Manna Tola



¹ 1 *bigha* = 1.2 acres

have mostly moved out. Come and look at the village, you will only see women there now.”

Inside the embankment area, the Kosi River has more than half a dozen streams. And there are more than 300 permanent villages at a distance of more than 20 km from each other. To reach any of these villages even today is a herculean task. Neither the government nor its schemes are visible here. Since the last one year, solar energy plants have been installed in a few villages and they have electricity now. But education, health, roads, water or even boats for travelling to and fro are still nowhere present.

Ramchandra Yadav further elucidates on the prevailing circumstances, “There is nothing like education in our villages, our children are barely literate. We rarely ever go the village now; the boats that the government has promised us are only on paper.”

Shri Prasad says that of the children in the age group lesser than 14 years, only 10 percent are literate. The village residents in the land inside the embankment accuse the government of not sticking to their promises of government jobs and not charging them any revenue for their agricultural land. Vinod Yadav says, “The displaced people inside these embankment areas are not taken into account for any government scheme, but left out because they live in temporary settlements.”

Nasimull Haq of Amin Tola, in Khoknaha says, “The government assurances were



given to my grandfather, my father and even to me. But what happened on ground? We do not want government charity, but a permanent solution to our problems". With this in mind, the villages inside the embankment area boycotted the 2019 elections, and did not cast a vote for any of the parties.

The villagers claim, “A lot of partiality takes place when the development of the villages is in consideration; Dhooran village is way ahead of us. Powerful people ensure that all the work occurs there, and we are left in the lurch. We beseech the government not to look at vote bank, instead solve the problems of the people.”

**Inside the embankment is clear water, and outside is dirty, stagnant water
Water, water everywhere: Black outside, white inside the embankment**



The construction of the eastern and western embankments definitely benefitted the villages outside the embankments. In that area thousands of acres of land were saved from floods and siltation and farming began with great enthusiasm there. People were free from the cyclic, yearly floods that would create havoc in their lives. But today, that land is badly waterlogged. Seepage and rain water accumulates here, the people face a situation similar to floods, but of a slightly lesser degree. This situation is not just for 2-4 weeks but continues for nearly 4-6 months every year. This affects the farming in these areas, and no concrete work has been carried out to reduce this water logging. The *gram panchayats* find it impossible to work at their level and reduce waterlogging, as this requires considerable technical knowhow and deep pockets.

Two decades after the construction of the embankments, the areas that lie

outside the embankments began to face water logging issues. In the year 1977-78, the Planning commission had said that the area at a distance of 5 km from the embankments were showing signs of water logging, and the produce here had reduced considerably since before construction of embankments.

The problem of waterlogging has only intensified with time. Chauhatta, a village situated outside the embankment is badly affected by waterlogging. A resident of this village, Anju Mishra tells that their *gram panchayat* has 11 wards under it. Of these 8.5 wards lie outside the embankment while the remaining 2.5 lie inside. Fifty percent of the wards numbering 1, 2 and 3 lies inside, while the rest are outside. Before the construction of embankments, Kosi River used to flow close by, but since then has shifted further away. She adds, "We definitely gained from the embankments, there was prosperity, we were

free from all earlier troubles and could travel anywhere easily and conveniently. A lot of good things happened, but it also came with a different baggage of problems. Now, seepage from embankment and rainwater causes waterlogging, and we face a flood like situation for nearly half the year."

The produce from the fields has been affected considerably in the areas outside the embankment. Satya Ram of Chauhatta says, "Inside the embankment there is *ujala paani*, the river water, while outside is *kala paani*, the water stagnant in the waterlogged area. The bright water appears and flows back into the river, but the dark water continues to be make its presence felt from July till November/ December, and stays stagnant in the fields and our villages." He adds that the worst affected are the crops; rice can no longer be cultivated here now. Explaining further he states, "The fields stay wet all the time, the minute you plough it, water gushes out. The year there are heavy rains, problems increase manifold. Last year there was lot of rainfall, so obviously the water logging too was greater. The standing rice crop turned rotten, and keeping in mind the losses that we incur in paddy cultivation, we have simply stopped growing this crop anymore."

With reduced paddy cultivation, the farmers here have shifted over to *makhana* crop. For them there is no choice but to grow *makhana* in their water submerged fields. Satyendra Ram says, "When we realised there is no guarantee from any other crops, we switched over to

makhana farming. If the expenses for paddy were Rs 1000 then for *makhana* it is double, Rs 2000, but at least there is a guarantee of some returns in its farming.”

Chauhatta villagers have been following cultivation of *Garma dhan*² for the last two decades. This variety is suitable for waterlogged areas, and the crop is ready before monsoon season. Ramchander says, “By growing *Garma dhan* the major advantage is that we have rice to eat, else we would have to live without *bhaat*, our staple food during the month of *baisakh* too.”

Chauhatta *gram panchayat* has a total land of 1200 acres as mentioned earlier. This complete land mass is waterlogged. In the block, out of the 16 *gram panchayats*, 10 are battling waterlogging issues. There is no possibility of farming there, and stagnant water can be seen till a distance of three kilometres. The farmers here insist that there is no help coming from the government in terms of compensation for lost crops.

People affected by floods are given ration and cash, helped out by the government, but those farmers whose land is waterlogged for six months in a year; there is no help what so ever. And for the crops that are lost, there is no reimbursement for the damages incurred either. To find a solution to this growing menace, many discussions have been carried out at the *panchayat* level. There was a consensus to build channels to drain out the water, but finances were not available, and this work could not be carried out. Work of this scale and magnitude is not possible at the *panchayat* level. The government had once initiated the process of a channel construction. The work began and digging was carried out at a few places, but suddenly the work stopped. The dug trenches can be seen lying open even today.

The story of Chauhatta is the story of all the villages outside the embankment today.

² Traditional paddy variety