

# CCDRER NEWSLETTER

December 2013

Collective Action to reduce climate disaster risks and enhance the resilience of vulnerable coastal communities around the Sunderbans in Bangladesh and India  
Contract No. DCI-ENV/2010/221-426



## Climate Change's Impact on Village Livelihoods in Sunderbans

*A series of interviews were recently conducted in the Sunderbans region by Matthew Nicewinter who was accompanied by another DRCSC employee who helped to facilitate interviews and provide translation assistance.*

### Working Area

The interview collecting project that took place this past October focused on two different locations: a small village on the bank of the Matla river called Anandabad and another village slightly closer to the Bidyadhari river called Harekrishnapur in

the Basanti Block of South 24 Pgs. These two sites were chosen by Harshit Mahato who works at a partner organization's facility in this region.

### Interview Findings: Problems and Awareness of Climate Change

The findings of these interviews illustrate the plight of local people despite their resilience and continued work to cope with the effects of climate change and severe natural disasters. The first village where interviews were conducted is

called Anandabad. The people in this community described how their livelihoods have been effected by endemic flooding, cyclones, and other natural disasters. One of the more severe weather events in this region was the cyclone Aila that destroyed much of this village and many others in May 2009. The people have since rebuilt their village, but spoke with us about problems with heavy rains and their concerns about food security. Many of the fisheries in these villages have been devastated by saline contamination. The villagers also mentioned an increase in



Climate change and salinity increases have significantly impacted fishing yields in the Sunderbans region



Village meeting in Anandabad to discuss current environmental problems

the presence of diseases among the fish that made them inedible. The people in this village rely heavily on fish for sustenance and their primary source of income comes from selling the surplus fish at larger markets. Salinity increases have caused many problems and forced the people in Anandabad to try to find new food sources and alternative means of earning a living. The villagers spoke of efforts to collect crabs in larger numbers to sell. However, this has done little to offset the loss of fish resulting from salinity increases, parasites, and diseases. Rice agriculture has also suffered as a result

of salinity and harsh weather conditions. On the second day of interviews, a storm swept through the area ruining many of the rice stalks. The paddies in Harekrishnapur were subject to

strong winds and torrential rain that caused a considerable amount of damage to this recently recovered area. The farmers were expecting greater yields of rice this year after working hard to get back to pre-Aila production levels. However, in the wake of this storm, the villagers were doubtful that they would be able to get a bountiful yield this year. Harekrishnapur is closer to the coast and has been subject to higher levels of saline water intrusion than many other villages. The harvests have also been effected by an increase in pests. The villagers mentioned seeing more leaf hoppers, caterpillars, and stem borers in recent years, which can be devastating to both vegetable and grain agriculture. While discussing climate change with some boatmen in the region, they mentioned that disasters,



Destruction of rice paddies by severe wind and rain

such as floods, water spates, and storms have increased in severity and frequency. These boatmen expressed their concerns about the sudden onset of storms, which makes taking their boats out in the river in order to catch fish and fingerlings quite dangerous. Early warnings about severe weather events are also rarely received in enough time. These weather changes have also reduced the availability of fish & fingerlings in the river.

### **Critical Needs of Villagers in the Sunderbans Region**

Throughout the course of the interviews, the people in both villages candidly expressed the precarious nature of their lives in this region. Among their list of top priorities, they stressed a critical need for shelter during disasters. While the villagers have been able to seek refuge in a school some miles away, they discussed their desire to have a more permanent building constructed for refuge during and immediately after disasters. The construction of a flood shelter in the area would provide the villagers with the critical refuge that they need during disasters and could also serve as a meeting place where NGOs could implement education initiatives. The construction of this type of structure would help in the



Villagers in Anandabad meeting with a DRCSC volunteer during an interview session

critical time after disasters, but it would not avail the need for disaster prevention measures. The people of Harekrishnapur and Anandabad both voiced their desire for disaster prevention initiatives specific to their geographic locations. The locality of Anandabad is directly beside a riverbank. The people interviewed in this village expressed the need for a dam further upstream to lessen the severity of the flooding during heavy rains. The villagers in Harekrishnapur cited a similar desire for a barrier near the coast that would prevent copious amounts of seawater from being

deposited inland, which contaminates the essential fisheries and paddies. The villagers proposed that trees be planted in the coastal regions to act as a natural buffer and also create a more balanced ecosystem. The people in both villages expressed a concern for the lack of food security particularly in after disasters. Neither village has a food bank. In Anandabad, the villagers indicated that they needed a new water pump installed as they currently have only one and it does not adequately meet their current water needs. During our discussions, the need



The people of the Sunderbans region are heavily reliant on the income and sustenance provided by local fisheries.

for an early warning system for weather events of a significant magnitude also emerged.

The people in both villages expressed a degree of frustration over the lack of government intervention. Those in Harekrishnapur noted that since the devastation of Aila they have noticed a slight increase in government intervention and aid. After Aila, the people were provided with a small quantity of tarps (tarpolin), chera (flattened rice),

gur (jaggery), and other dried foods. However, the villagers noted that the aid provided in the past was insufficient to sustain them in the critical period after a disaster. They also talked about how the availability of aid was influenced by political biases.

### Current Alternative Approaches and Coping Strategies

When asked about the current coping strategies they

employed, the villagers from both areas cited migration as the primary means of handling the aftereffects of disasters. While this migration is often temporary and occurs immediately after disasters, there is a growing concern among villagers that they may not be able to sustain themselves on this land in the future. The villagers in Harekrishnapur, however, have worked to adapt their agricultural practices. They adopted the use of some saline resistant crops and were hoping to get a greater yield this year as a result. Those in Anandabad are more reliant on fishing and have turned to collecting crabs in the wake of the devastation to their fisheries due to salinity increases and disease. However, both villages expressed concerns about their ability to cope with future disasters and disruptions to their livelihoods.



Published and Designed by

**Development Research Communication and Services Centre**

58A Dharmotala Road, Bosepukur, Kasba, Kolkata - 700 042 | Ph: 2442 7311, 2441 1646 | e-mail: drcsc.ind@gmail.com | webpage : www.drcsc.org