



# Evaluation of River Basin Programme in Bihar, India

Executive Summary

Oxfam GB Programme Evaluation

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## **Executive Summary**

This evaluation study report addresses the question of the impact of the Disaster Risk Reduction (DRR) interventions before, during and after floods especially on poor vulnerable households and target groups like women, disabled and minorities (religious, ethnic and castes) in the RBP assisted communities of Bihar state. The River Basin Programme has worked in Bihar since 1999 and has partnered with various local NGOs over the years. Initially it focused on relief, it has over time moved towards flood preparedness and small-scale mitigation activities, especially since 2000 with ECHO preparedness funding. Every year, Oxfam invests large resources (both human and financial) in these activities. However there are no explicit evaluative studies describing impacts during disasters of integrating DRR 'approach' and implementing interventions. Therefore as a commitment to assess and improve quality and understand impact of our risk reduction interventions, it is necessary to step-back from implementation and capture emerging lessons.

The current Bihar evaluation study in India was conducted as part of a cross-country evaluation covering three countries of India, Bangladesh and Nepal where the RBP is implemented. The assessment in Bihar was conducted during the month of December 2007. A total of 11 villages of the 41 villages in flood prone districts in North Bihar were assessed. The study used a combination of quantitative and qualitative data collection techniques that included household surveys, focus groups discussions, transect walks, hazard assessment, semi-structured interviews, seasonal calendars and stakeholder interviews.

### **Why flood risk is increasing: a community perspective**

The findings of the study suggest that flood risk is on the increase. From a community perspective some of the reasons that were commonly cited to explain this trend include the breaching on water reservoirs, flow of water much above its danger level due to inadequate capacity within the banks of the river to contain high flows and changes in the monsoonal seasonal patterns.

### **Disaster Preparedness**

In order to cope with the increasing flood risk various preparedness measures are being adopted locally at the individual, community and institutional level (government and NGOs) to reduce/mitigate the impact of floods and other water induced disasters. Some of the commonly cited disaster preparedness mechanisms include early warning systems, community contingency plans, village disaster preparedness committees, training and capacity building of local structures, and small-scale mitigation structures (homestead plinth raising, flood shelters, storage facilities and raising of tube-wells). The implementation and adoption of the disaster preparedness activities varied in the villages that were visited during the evaluation study. This largely depended on the level of integration of the DRR activities at the community level as well as the different technical capacities of the partners working in the RBP programme area.

### **Impact of floods**

The impact of flooding is devastating and varied from one location to another. In the context of Bihar it would appear that the west (Sitamahri and Benepatti) suffered more due to floods compared to the east (Andrathadi). Not only is the trend of flooding becoming of high magnitude; flood events are frequently being associated with severe damages and disruption to people's livelihoods. The commonly mentioned impact of floods includes loss of crops, loss of livestock loss of assets (both productive and non-productive), loss of housing infrastructure and loss of agricultural land.

### **Coping and Recovery from floods**

The programme has created an enabling environment to strengthen their traditional coping mechanisms to mitigate the increasing risk to flood disasters. The use of contingency stocks such as boats, life jackets, searchlights and megaphones was key to household and community during the flood period. The small-scale mitigation structures such as flood shelters were particularly an important coping mechanism for household living in the low-lying areas during the flood period. Relief efforts by both the government and non-governmental organisations were key to community survival during and in the aftermath of flooding.

Different households have different ways of defining what recovery means for them. In general recovery is typified by some sense of normalcy in the community and, reconstruction was mentioned to be something that can last several years and is characterised by rebuilding infrastructure and community livelihoods in the village. It is important to highlight that some are not able to bounce back

to normalcy before the next flood season. As a result it was observed that a majority of households rarely go beyond the recovery phase to complete reconstruction.

### **Conclusion and Recommendations for programming**

Based on the analysis of the evaluation study, a number of recommendations have been identified to scale up and further improve the RBP programme in Bihar. The need to implement an integrated model for disaster management must be given high priority and adopt more structural measures in villages where this is not currently being done. Capacity building for integrated disaster management needs to be considered, as there is an apparent skills gap in the areas risk assessment, risk reduction measures and community/social mobilisation among related subjects. There is need to explore suitable options for agriculture in the flood prone areas as the traditional practices continue to be heavily affected by continued flooding. Crop selection and alternative farming practices/techniques need to be considered. The RBP needs to consider strengthening its activities in the livestock management sector. Such activities may include organising vaccination campaigns during the pre and post flood period, provision of fodder and the construction livestock shelters in high flood prone areas. Linkages with the local authority and government structures including advocacy for greater responsibility should be further strengthened.

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