



Photo: Md. Munimur Rahman

CYCLONE AFFECTED AQUACULTURE REHABILITATION PROJECT

BACKGROUND

On 15th November 2007, Cyclone Sidr ravaged the southern coastal districts of Bangladesh causing loss of life and rendering thousands of people homeless and destitute. Sources from the Department of Fisheries (DoF) estimated that a total of 0.14 million ponds and enclosures (or shrimp farms), covering 17,700 hectares were affected. This led to stock losses of 5,721 tons of fish worth BDT 230 million and 800-tons of shrimp valued at BDT 197 million across the 11 affected districts of Bangladesh.

The Cyclone Affected Aquaculture Rehabilitation Project (CAARP) is working to re-establish and enhance the productive capacity of Cyclone Sidr affected fish, prawn (*Golda*) and shrimp (*Bagda*) farmers.

The WorldFish Center, established in Bangladesh in 1989, has built a reputation of being one of the most important organizations in the country to successfully deliver on providing solutions for research and development in the field of fisheries and aquaculture. An added advantage of WorldFish working on this type of project is its ability to implement field activities rapidly, through its vast network of partners and ready-to-go technical solutions, delivered by a cadre of highly qualified and experienced scientists and development professionals.

OBJECTIVES

Re-establish and enhance productive capacity of cyclone Sidr affected fish, prawn and shrimp farmers to contribute to the restoration of the poorest families' livelihoods living in five Districts across the south and south-western areas of Bangladesh: Bagerhat, Pirojpur, Jhalokati, Barisal and Patuakhali.





DURATION AND DONOR SUPPORT

The project is being implemented by the WorldFish Center with US\$ 3 million funding from the United States Agency for International Development (USAID), for a period of one year. CAARP started its operation from March, 2008 and expected to finish by February, 2009.

PARTNERS

The WorldFish Center, Bangladesh and South Asia Office is working in partnership with 11, well established NGOs in the south-western region of Bangladesh, to implement this project. In order to do this effectively, 165 NGO field staff will receive basic training in aquaculture production technologies and farmer field school (FSS) extension training techniques. A team of 13 highly qualified technical specialists will support NGO field staff to ensure effective project implementation, especially our added goal of enhancing the farmers' capability to improve aquaculture production performance beyond pre-Sidr production levels.

WHO BENEFITS

Using pro-poor criteria, a total of 37,328 fish, prawn and shrimp farmers will receive complementary starter packs, consisting of mainly seed and fertilizer. They will also receive follow-up training, so that not only may the farmers re-establish their farms to pre-disaster status but improve their management approaches to increase productivity of their farm units. In this way, approximately 90% of targeted households will experience improved livelihood gains. This means, using average family size data (including dependents) of 6 persons, almost 2,01,570 persons may benefit from this project. This is important for the here and now but also, improved incomes help families to build resilience (e.g. savings, better and stronger housing, flood protection measures for ponds and stock etc.); helping them be less vulnerable to future disasters.

The project aims to benefit other key stakeholders by improving supply and marketing value chains from and to those farmers assisted in the rehabilitation program. Improved product quality and distribution efficiency is envisaged, involving farmer groups, well trained entrepreneurs (markets and supply agents) and associated processors and suppliers.

CROSS-CUTTING DIMENSIONS

Special attention to gender, environmental protection, and adaptive capacity for climate change has been incorporated into the overall program approach.

Gender and Youth

The project will prioritize female-headed households and later, as the backward and forward linkages become established, a gendered value chain analysis approach will be introduced, which seeks to maximize the returns of both men and women at different points of the chain.

This project seeks to, wherever possible, adopt affirmative action approach when selecting beneficiaries to include youth either as custodians of the ponds/ghers but also as family members.

Environmental protection

To ensure the project does not cause environmental degradation, the field staff are being trained to use simple environmental risk assessments; basic guidelines to follow during the rehabilitation process especially when treating ponds for polluted water. However, risk to environment for this project is extremely low.

Adaptive capacity for climate change

Central to discussions of adaptation to climate change are the concepts of vulnerability, adaptive capacity and resilience. Awareness is rising among communities to consider mitigating measures, such as increasing the height of pond walls, species change to reflect changes in salinity and reduced culture periods.

KEY PROJECT DELIVERABLES

The following quantifiable indicators highlight important project targets necessary to underpin project objectives:

- 37,328 households receive benefits, including training/group sessions
- 33,595 households managing fully functional farms, contributing to improved livelihood status
- 26,876 fish farmers, 4,031 *Golda* farmers and 2,688 *Bagda* farmers benefit

	Fish	<i>Golda</i>	<i>Bagda</i>
Fingerlings/juveniles/WSSV-screened PLs distributed	15 Million	4 Million	12 Million
Metric Tonnes (MT) produced	3,413	121 <i>golda</i> +153 fish	118
Estimated total income*	BDT 132.45 Million	BDT 52.93 Million	BDT 32.33 Million
Average net benefit per farm **	BDT 4,928	BDT 13,130	BDT 12,030

* Inputs provided by project and where applicable partial support for post-stocking inputs. Total is BDT 217.71 million equivalent US\$3.2 million.

** Average farm holding 10 decimal fish, 20 decimal *Golda* and 40 decimal *Bagda*.

- 165 NGO staff trained for future aquaculture support
- 37,328 technology guide books, 250 technical booklets and 175 technical training manuals distributed to fish/*Golda*/*Bagda* farmers, fry traders and NGO staff respectively
- A disaster response for aquaculture recovery; published scientific papers and booklets produced

COMMUNICATIONS

The primary goal of the Communications Unit (CU) in the project will be to strive towards maximizing collective effort and complementing other agencies' rehabilitation work by taking a pro-active role in sharing pertinent information about beneficiaries operation, localities and positive lessons learnt.

Additional work will focus on developing and distributing essential learning material for beneficiaries and other stakeholders. Also, the CU will manage all lesson sharing events (workshops and seminars) and the publication of final, lessons learnt communication products and science materials for the international audience.

ACTION RESEARCH AND MONITORING

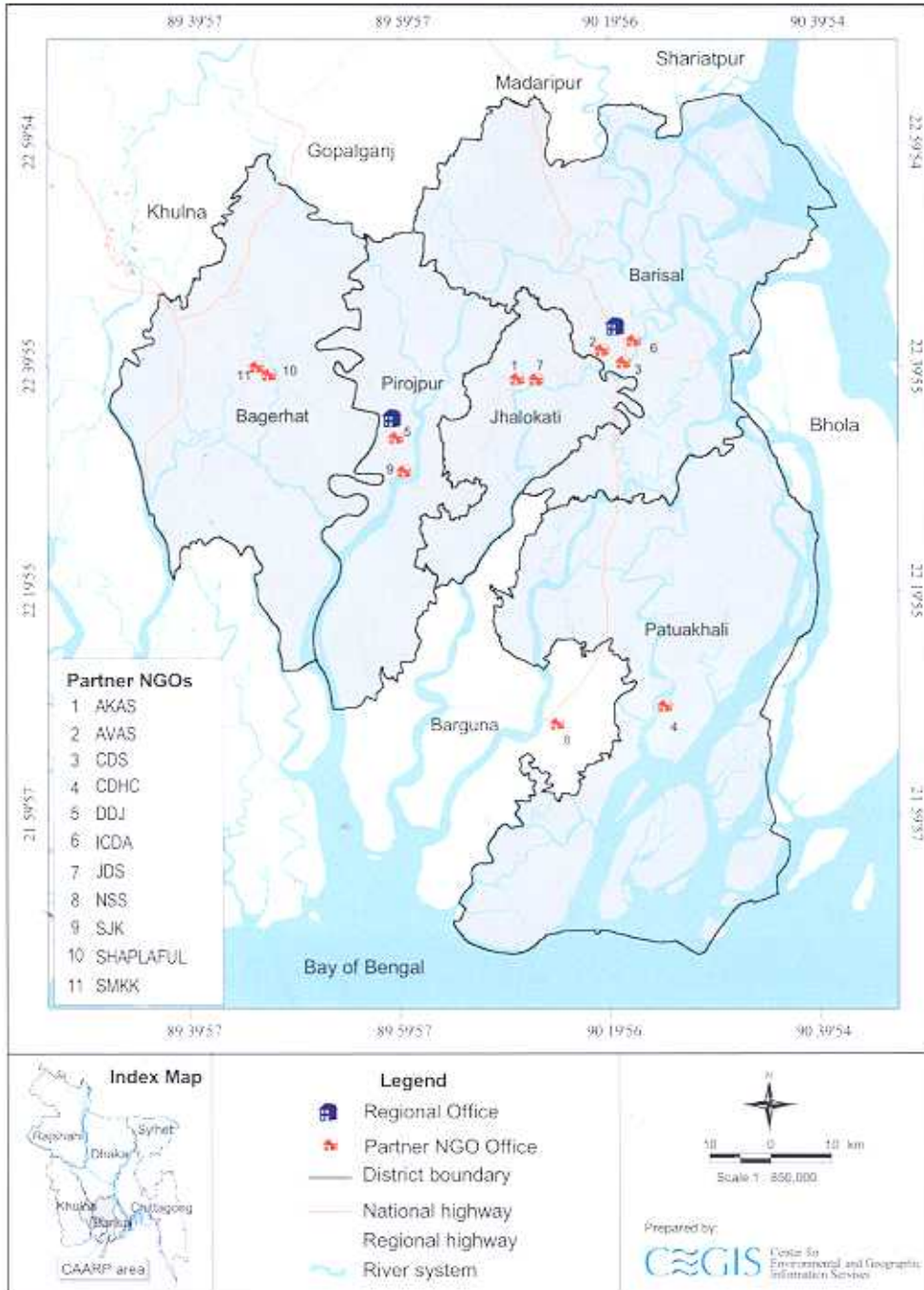
Standard monitoring practices will be done including statistical analysis to assess project performance. In addition the project will use the opportunity whilst working with post-disaster victims and rehabilitation approaches to carry out action research to:

- Analyze farmers' coping strategies and relationship with setting livelihood status, extent of damage, external support mechanisms etc.
- Analyze the importance of aquaculture to the coping strategy
- Identify best practice approaches for post-disaster interventions by monitoring, in-depth NGO program delivery mechanisms.

Building on previous WorldFish work in Aceh (post-tsunami) and Solomon Islands, the project will generate important learning, to guide more efficient post-disaster targeting and interventional strategies.



CAARP WORKING AREAS



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Partners



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