



Photo: S. Mann

PUTTING RESEARCH INTO USE:

# BANGLADESH TAKES UP THE CHALLENGE

The Research Into Use (RIU) Innovation Challenge Fund (ICF) 2008-2011 will distribute £4.6 million over the next three years to thirteen projects in South and Southeast Asia. The projects chosen will have innovative approaches to getting DFID funded natural resource research outputs<sup>1</sup> into use in order to reduce poverty (Box 1).

### Box 1. Criteria used to select RIU Challenge Fund projects

- Activities relevant to RIU's purpose, for example maximising the impact of previous DFID natural resource research and, in so doing, learning lessons on how to get research into use
- Activities and outcomes feasible within 3 years
- Activities relevant to national poverty reduction policies and the international development agenda
- Benefit the poor and other vulnerable groups
- Add value to existing development efforts
- Effective exit strategies
- Track record of solid partnerships in up- and out-scaling development options
- Activities environmentally sustainable
- High quality communication/ engagement strategies
- Comprehensive and appropriate learning/monitoring and evaluation plans
- Appropriate capacity-strengthening initiatives
- Appropriate costs and spending

<sup>1</sup> DFID funded research under the renewable natural resources research strategy (RNRRS) 1995-2006



Photo: R. Mckenna

Four projects get under way in mid-2008 in Bangladesh (Box 2). Each project will be led in-country and each emphasises the importance of learning by doing. Project teams draw together end-user groups and intermediaries, such as farmer organisations, extension agents, NGO networks, credit agencies and policy makers, as well as researchers. Each team has put forward strong communication strategies to encourage the knowledge flows between actors in the particular systems that are likely to be critical to success. The projects awarded funds have also considered the problems and aspirations of socially excluded groups (including women, tribal and/or ethnic communities) in the target locations to ensure that their needs are voiced and that they are not disadvantaged by scaling up activities.

### Box 2. Innovation Challenge Fund projects in Bangladesh 2008-2011

- 1 Rat management for rural communities
- 2 Integrated Floodplain Management
- 3 Promoting sustainable coastal aquaculture
- 4 Enhancing the impact of decentralised (fish) seed production

## Project 1: Rat management for rural communities

**What?** Acting and innovating in unison, communities will develop and implement ecologically-based methods for rat control. Businesses will be encouraged to invest in producing traps, and communities, intermediaries and pesticide stockists will be trained in rat control through a comprehensive media programme.

**Why?** Rats cause more human suffering and more economic damage than any other vertebrate pest. They are directly responsible for losses to crops, houses and possessions and, indirectly, for contamination and losses of food. A rat can eat the equivalent of 7% of its body weight daily, which translates into losses of approximately 7 kg of grain per year per adult rat. Rats' urine and faeces also foul stored produce and they carry infectious diseases that harm both people and livestock. Households acting in isolation have had little impact on rat control but research has shown that whole communities acting together can have long term impacts.

**Who will benefit directly?** Approximately 6,000 men and 14,000 women in 100 agricultural communities will benefit directly. They will be less dependent on rat poisons, and children and livestock will be less susceptible to accidental poisoning. Opportunities for entrepreneurs and suppliers involved in producing, marketing and selling improved traps should be enhanced.

**Who will benefit indirectly?** Communities outside the project area should benefit indirectly as they see, learn and adopt similar tactics. The public and policy makers will be more aware of the impacts of rats on their lives, the risks of disease and real costs

of crop damage. Misconceptions about the efficacy of poisons will be addressed.

**Where?** The project will cover rural areas in southwest, southeast and northwest Bangladesh.

#### **Rat management in rural communities project partners**

*Lead partner:* Association for Integrated Development-Comilla (AID-COMILLA)

*Coalition partners:*

Mukti Nari-O-Shishu Unnayan Sangatha (MUKTI)

Association for Reformation of Basic Need (ARBAN)

Landless Distressed Rehabilitation Organization (LDRO)

Mawts Institute of Technology Bangladesh Ltd. (MAWTS)

Bangladesh Rodenticide Manufacturer Association (BRMA)

Promoting Participation and Training (PromPT)

Shushilan

Department of Agriculture Extension (DAE)

Bangladesh Agriculture Research Institute (BARI)

University of Greenwich, Natural Resources Institute (NRI), UK



Photo: **S. Mann**

## **Project 2:**

### **Integrated Floodplain Management**

**What?** This project will enhance water management and improve the productivity of fisheries and agriculture in floodplains. The voice of the poor will be strengthened through participatory approaches.

**Why?** Over half of the population of Bangladesh lives in floodplains and depends on wetland services, particularly for agriculture and fishing. But wetlands are risky places to live and the inhabitants are vulnerable to cyclones, storm and tidal surges, drought, and other shocks and stresses that will be amplified in the future as a result of climate change. Embankments and sluice gates control the impact of flooding, but while these result in better water management they also result in conflicting demands on water use. Previous DFID research identified participatory methods that tackle these competing uses and demands. Promoting these methods more widely should boost incomes and growth in affected communities while ensuring that the poor are not disadvantaged.

**Who will benefit directly?** The project will directly engage 264 community-based organisations and an estimated 440,000 poor households in developing and implementing consensual plans for the rational use of floodplain ecosystem resources. The project team will specifically address the empowerment of poor women.

**Who will benefit indirectly?** Approximately 500 other community-based organisations in floodplain ecosystems, and government departments such as the Department of Agricultural Extension, will benefit indirectly.

**Where?** The project will cover floodplain environments in Bangladesh.

#### **Integrated Floodplain Management project partners**

*Lead partner:* Bangladesh Environmental Lawyers Association

*Coalition partners:*

Banchte Shekha

Center for Natural Resource Studies (CNRS)

Middlesex University, Flood Hazard Research Centre, UK

Marine Resources Assessment Group (MRAG), UK

## **Project 3:**

### **Promoting sustainable coastal aquaculture**

**What?** This project will promote and improve simple low-cost ways to produce, store and market non-conventional marine products, specifically mud crabs, molluscs and seaweed. These have good potential for export markets and can be produced in government-owned water bodies (khas) and open access coastal areas. Promoting these non-conventional products will be done through a national forum, funded by the government and development partners, which will bring together the various actors. Lessons learnt by and about the forum, its membership, operations and the opportunities it offers for promoting research outputs, will be valuable to other RIU initiatives.

**Why?** Low-cost ways of producing and marketing quality products that do not need much investment give the poor in coastal areas entry points to the market economy and allow them to benefit from the growth in the fisheries sector. Plus, any produce that they eat themselves improves both the quality and quantity of food in their diet. From the consumer's point of view, better ways of handling fish mean better quality food. And for the economy as a whole, the export of these marine products adds significant value to local, national and international market chains.

**Who will benefit directly?** One thousand households in disadvantaged Adivasi (tribal) and low-caste Hindu coastal groups—poor coastal fish farmers, fishermen and fisherwomen—will benefit directly.

**Who will benefit indirectly?** Members of two NGOs, staff of the Department of Fisheries and project partners will benefit indirectly by acquiring hands-on experience and skills.

**Where?** The project will cover fifteen communities in eleven Upazilas in Cox's Bazar, Chittagong, Khulna, Satkhira and Bagherhat.

#### **Sustainable coastal aquaculture project partners**

*Lead partner:* Bangladesh Fisheries Research Forum (BFRF)

*Partners:*

Bangladesh Agricultural University, Department of Fisheries

COAST- Coastal Association for Social Transformation Trust

SHUSHILAN

Department of Fisheries

University of Stirling, Institute of Aquaculture, UK

Various 'community partners'

## Project 4:

### Enhancing the impact of decentralised (fish) seed production

**What?** This project will spread proven ways of producing fish seed in rice paddies and will put fish farming within reach of the poor. Producers and traders will be less dependent on central hatcheries for fish seed.

**Why?** Fish is the most important animal protein in South Asia but demand for fish seed and fingerlings to restock ponds frequently exceeds supply. This deficit provides an opportunity for poor households. By raising fish seed they will have more secure food supplies, for example in the periods between rice transplanting and harvesting in NW Bangladesh when employment opportunities decrease. As well as having fish seed to sell the poor will have a reliable source of protein. This will lessen their need to sell rice immediately after the harvest when market prices are low. Previous research has shown that raising fish seed has a high benefit cost ratio (7.4:1) on project investment. As raising fish seed involves eliminating pesticides in rice paddies there are environmental as well as financial benefits.

**Who will benefit directly?** In Bangladesh there are likely to be 21,000 primary beneficiaries—all poor rice farmers—as well as 500 in Nepal and 500 in West Bengal. Additional direct beneficiaries will be 3,000 households who will produce river carp fish fry in nursery ponds.

**Who will benefit indirectly?** Around 3,000 fish seed traders, 200 brood fish producers and 600,000 fish farmers who raise table fish will benefit indirectly. They will not have to rely on central hatcheries and will be able to get supplies of healthy fish seed when they need them.

**Where?** The project will cover seven districts in the northwest of Bangladesh, and five districts in the Barind Tract and Purulia, West Bengal, and in Chitwan and Nawalparasi, Nepal.



The RIU Innovation Challenge Fund teams will share their experiences with other RIU components as well as with other ICF teams in South Asia (India, Nepal, Cambodia and Vietnam) and in Africa as the RIU African country platforms begin implementation.

Reading Statistical Services are supporting RIU and the Innovation Challenge Fund teams on data management issues.

The RIU database describing the wealth of technologies, policies and processes developed by DFID programmes can be found on the RIU website

[www.researchintouse.com](http://www.researchintouse.com)

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**DFID** Department for International Development

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#### Decentralised fish seed production project partners

*Lead partner:* Rangpur Dinajpur Rural Service (RDRS), Bangladesh

*Coalition partners:*

Bangladesh Agricultural University (BAU)

University of Stirling, Institute of Aquaculture, UK

International Development Enterprises, Bangladesh (IDE)

Practical Action

Department of Fisheries (DOF)

People's Resource Oriented Voluntary Association (PROVA)

SACHETAN

Association for Community Development (ACD)

Tribhuvan University, Institute of Agriculture and Animal Science, Nepal

WorldFish Center, Bangladesh and South Asia Office

One-stop Aqua Shop, West Bengal, India

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