

PUTTING RESEARCH INTO USE:

INDIA TAKES UP THE CHALLENGE

Innovation Challenge Fund Brochure: 3

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 outputs¹ 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 three 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

 $^{\rm t}$ DFID funded research under the renewable natural resources research strategy (RNRRS) 1995-2006

Five projects in India get under way in 2008 (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 India 2008-2011

- 1 Coalition to diversify income through underused crops
- 2 Improving livelihoods in South Asia through sustained access to new technologies in rainfed agriculture
- 3 Promoting sustainable livelihood development
- 4 Knowledge to action: enhancing traditional dairy value chains
- 5 Poverty alleviation through rice innovation systems

Project 1:

Coalition to diversify income through underused crops

What? The coalition will promote the cultivation, processing and marketing of underused crops in rural communities in India and Vietnam. The project will set up food processing parks, organise village crop fairs and plant community orchards. As a result, communities will be able to obtain information, training and supplies for evaluating, growing, processing and marketing underused crops. The parks will also house business services and link producers to value chains locally, nationally and internationally.

Why? Underused crops have the potential to raise incomes in many rural communities. *Amla*, the Indian gooseberry, can be used as a raw material in ayurvedic products and cosmetics for example. The market for such products is booming and cultivating and selling underused crops will boost the incomes and confidence of women and tribal groups.

Who will benefit directly? In India, communities in marginal farming areas and those dependent on forests will benefit directly. In Vietnam, communities in marginal farming areas, women farmers and smallholder rice farmers will benefit. The coalition will train 29,000 people and they will, in turn, pass on what they learn to a further 140,000 people.

Tribal groups and other disadvantaged communities in India will also be reached through BAIF's Wadi Development Project and rural producers in Vietnam will be linked to rapidly growing urban populations through CASRAD-MALICA.

Who will benefit indirectly? The indirect beneficiaries will be businesses that supply inputs for cultivating and processing underused crops and transport enterprises. Rural and urban consumers, researchers, and private and civil society agencies will also benefit indirectly.

Where? In India, in Gujarat, Maharashtra, Karnataka and Madhya Pradesh and in Vietnam, in the Red River Delta region (Hai Duong and Ha Noi provinces), northern mountains (Bac Kan province) and central region (Thua Thien Hue province).

Coalition to diversify income through underused crops project partners

Lead partner: International Centre for Underutilised Crops (ICUC), Sri Lanka Coalition partners:

BAIF Development Research Foundation, India Centre for Agrarian Systems Research and Development (CASRAD), Vietnam Fruits and Vegetable Research Institute (FAVRI), Vietnam Winrock International India, India

Project 2:

Improving livelihoods in South Asia through sustained access to new technologies in rainfed agriculture

What? This initiative has two thrusts. The first is spreading rice varieties which have been produced by client-oriented breeding (COB) of upland and lowland rice. The second is the promotion of dry season legumes as a crop following rice. The new varieties will be promoted by providing both information and seed. Seed provision by the private sector will be initiated in order to provide a sustainable seed supply system. The purchase of new varieties of dry season legumes will be enabled through cash sales of improved rice in community-organised grain and cash banks.

The results of the initiative will be used to recommend changes to seed policies that will encourage the spread of new varieties to poor farmers.

Why? The early-maturing upland rice varieties developed by COB have many advantages. They are tolerant to drought, yields are high, and the grain is high quality and fetches good prices. So, growing them improves incomes. Dry season legumes provide farmers with a second crop after rice. But farmers do not know about the new varieties and cannot get hold of seed. This project tackles the need for seed, both to meet immediate and longer term needs and the necessity for pro-poor seed policies.

Who will benefit directly? Over 60,000 poor farmers, including tribal and other socially excluded groups, will benefit directly. Information provided through farmer field schools and organised field visits will reach another 120,000.

Who will benefit indirectly? All those along the value chain, such as producers, infomediaries and consumers, will benefit indirectly.

Where? In semi-arid, mainly rainfed rice systems predominantly in Madhya Pradesh, Chhattisgarh, Jharkhand and Uttar Pradesh.

Improving livelihoods in South Asia through sustained access to new technologies in rainfed agriculture project partners Lead partner: Centre for Arid Zone Studies-Natural Resources (CAZS-NR), Bangor University, UK *Coalition partners:* Catholic Relief Services (CRS) Gramin Vikas Trust (GVT) Oxfam India Department of Agriculture, Jharkhand, India GARC Seeds Private Limited Indian Federation Seed Services Association (IFSSA)

Project 3: Promoting sustainable livelihood development

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What? This coalition will scale up a community-development process based on the 'dialectic approach' to promoting the formation of self-help groups. A facilitator from within the community works with the poorest of their neighbours, encouraging them to form groups, and to make weekly savings of very small amounts which are held in a group fund. This fund is then used to make loans to members to meet immediate

needs (as well as to invest in micro-enterprise and to buy agricultural inputs). This reduces their reliance on (high-interest) informal credit and they can use their good record to access credit from banks and other public- and NGO-sector microfinance institutions.

This approach contrasts with that of typical microfinance programs, which encourage groups to deposit savings in a bank, rather than to use them immediately, thus circulating funds within the rural economy.

In parallel, the initiative will develop innovative agricultural services that meet the needs of its client base of predominantly poor and extremely poor people, and women. The project leverages investments from the Indian microfinance, insurance, and research and development sectors.

Why? Community development and agricultural services rarely reach poor people in rural areas. There are various reasons for this, including high transaction costs, and financial products and agricultural services that aren't geared to the needs of the poor and disadvantaged.

Who will benefit directly? The initiative will directly benefit 2,000 villages and around 10,000 self-help groups: about 100,000 group members and 500,000 direct beneficiaries in total. The direct beneficiaries are predominantly the extremely poor, marginalised castes and tribal groups.

Who will benefit indirectly? Each year another 100 villages will be reached without further funding.

Where? In Bihar, Uttar Pradesh and Madhya Pradesh, India.

Promoting sustainable livelihood development project partners Lead partner: GY Associates Ltd, UK Contracted coalition partners: Centre for Promotion of Sustainable Livelihood (CPSL) Society and CPSL Consulting Indian Council for Agricultural Research (ICAR), ICAR Research Complex for the Eastern Region (IRCER) Coalition partners: Bihar Rural Livelihood Promotion Society (BRLP) Madhya Pradesh Rural Livelihood Project (MPRLP) **ICICI Bank** Indian Bank Sa-Dhan BASIX Ministry of Water Resources and the National Rainfed Area Authority **BIRLA Sun Life Insurance**

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Project 4:

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Knowledge to action: enhancing traditional dairy value chains

What? This initiative will raise awareness and enhance demand for quality, locally produced fresh milk and the capacity to supply it through the informal sector. Training materials to improve production, processing and milk handling developed and used successfully in East Africa will be adapted for milk value chains in Assam. A social marketing campaign targeted at all members of the value chain will raise awareness, stimulate demand for quality fresh milk, and build trust in milk and dairy products.

Why? Most of the opportunities for small livestock farmers are in growing informal markets for fresh milk and dairy products.

However, safety standards are hard for small producers to meet. If small farmers can improve the quality of the milk they produce, consumers will have more confidence, there will be less wastage, and demand will grow. These changes will stimulate more investment in technologies and services that are already available but underutilised.

Who will benefit directly? Rural households in Assam will benefit. Most are poor and 82% keep cattle and sell milk. Poor traders along the value chain will also benefit. Women will be the major beneficiaries at the beginning and end of dairy value chains because they generally care for livestock, and buy and use dairy products.

Who will benefit indirectly? Consumers, both poor and rich, will benefit indirectly. Diseases and illness related to dairy products will decline.

Where? In seven zones with good potential for dairy production in Barpeta, Kamrup, Marigoan, Sonitpur, Nagaon, Jorhat, Tinsukia and Cachar Districts, Assam.

Knowledge to action: enhancing traditional dairy value chains project partners Lead partner: International Livestock Research Institute (ILRI), Kenya Coalition partners: Dairy Development Department (DDD) Fellowship for Agri Resource Management and Entrepreneurship Research (FARMER) Centre for Humanistic Development (CHD) College of Veterinary Science, Assam Agricultural University Brihattar Guwahati Gopalak Sangstha (BGGS) BASIX Group Catalyst Management Services (CMS)

Project 5: Poverty alleviation through rice innovation systems

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What? Farming communities, NGOs, the private sector, agricultural universities and research institutes will collaboratively develop new methods of knowledge transfer for the introduction of direct-seeded rice, to improve the productivity of rice-based cropping systems used by poor farmers in eastern regions of the Indo-Gangetic plains.

Why? The Indo-Gangetic plains account for 85% of the rice–wheat system in South Asia and the productivity of these systems is critical for regional food security. In the east, farm holdings are small (<0.5 ha) and labour intensive, and mechanisation and use of farm inputs are limited. Farmers continue to face variable monsoons, rising costs of irrigation and fuel, scarce labour because of urban migration, and a degrading natural resource base, depleted groundwater in particular.

Direct-seeded rice alleviates many of these problems and saves work by eliminating the need to prepare seedbeds and transplant seedlings. It uses less water and the rice matures earlier. Better harvests are produced from winter and spring crops because farmers can sow them earlier and get them off to a good start.

However, to grow direct-seeded rice farmers need information and to know that taking a risk with this new cropping method will be worthwhile. Poor farmers are rarely reached by research and extension, on a large scale. This project will redress this by making this approach and a range of options available to improve livelihoods.

Who will benefit directly? The project will directly benefit farmers in eastern India, home to 300 million people, 40% of whom are among the poorest in the world. Farmers will benefit from lower costs of production, greater flexibility and more reliable establishment of rice crops in droughts and higher farm productivity from fallow season crops.

Who will benefit indirectly? Benefiting indirectly will be 450,000 farmers who will have opportunities to exchange information through information hubs. Landless labourers will benefit indirectly from more work in the fallow season on postrice crops and Indian consumers through more stable grain prices. Women will also benefit indirectly from opportunities for work offered by dry season crops such as chickpea. This will ensure that they are not disadvantaged if direct seeding eliminates women's work transplanting rice.

Where? In eastern Uttar Pradesh, Bihar and West Bengal.

Poverty alleviation through rice innovation systems project partners Lead partner: Nand Educational Foundation for Rural Development (NEFORD), India Coalition partners: Professional Assistance for Development Action (PRADAN), Ramakrishna Mission, Narendrapur, India Agricultural universities (Govind Ballabh Pant University of Agriculture and Technology, Narendra Deva University of Agriculture and Technology, Rajasthan Agriculture University, Bidhan Chandra Krishi Vishwa Vidyalaya), India International Rice Research Institute (IRRI) Rice–Wheat Consortium (RWC), India University of Greenwich Natural Resources Institute Ltd. (NRI), UK Institute for Sustainable Water, Integrated Management and Ecosystem Research (SWIMMER), University of Liverpool, UK

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, polices and processes developed by DFID programmes can be found on the RIU website

www.researchintouse.com

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