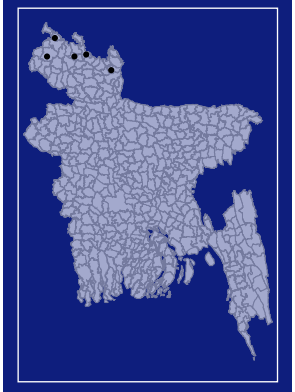
PETRRA

Uptake sub-project brief no. 10.2.7

Federation model of quality seed production and marketing (SP no. 07 00)

SP location:



Kurigram
Lalmonirhat
Nilphamari
Panchagarh
Thakurgaon

SP duration:
July 2002 - June 2004

SP organizations:
RDRS
Federations

SP team:
M. G. Neogi

Introduction

More than 70% of the seed used in rice production in Bangladesh comes from farmers' own saved stocks. But the quality of this seed is often poor, resulting in yields far below the potential of the variety. To enhance food security at the rural household level, the uptake of improved seed production and storage technologies amongst the farming community needs to be speeded up.

The lack of effective linkages between research and extension is a major constraint to the dissemination of such technologies. Research activities are often restricted to institutes and campuses, to which farmers have no access. Equally, researchers themselves often have limited opportunities to share their work with farmers and gather feedback.

The Rangpur Dinajpur Rural Service (RDRS) works with the rural poor through federations. A federation is an association of marginal and landless farmers, formed with the intention of attaining greater collective strength, cooperation and unity, and of creating a more productive agency to achieve the broader objective of sustainable development on behalf of their membership and community.

Objective

The objective of this sub-project (SP) was to develop improved rice seed production and storage technologies and thus to ensure more sustainable livelihoods among resource-poor farmers (RPFs), by facilitating collaboration between the RDRS federations and the Bangladesh Rice Research Institute (BRRI), Bangladesh Agricultural University (BAU), Department of Agricultural Extension (DAE), local non-governmental organizations (NGOs) and community-based organisations (CBOs).

Methods

Fifteen federations in five districts (Lalmonirhat, Kurigram, Nilphamari, Panchagarh, Thakurgaon) of northern Bangladesh were selected to participate in the SP, based on their interest and on the availability of resources such as suitable land and seed

DFID Department for International Development
IRRI International Rice Research Institute
Bangladesh Rice Research Institute

godowns. Each selected federation, along with RDRS staff, nominated households to participate, the men to work as seed growers and the women as seed processors. The following criteria were followed to select RPFs to participate in the SP:

- Farming less than 1.5 acres of land (own or rented);
- Farming rice;
- More than 50% of living costs come from agriculture; and
- Both males and females in the same household.

The SP established seed storage facilities at the federation level, based on the organic cocoon, an insecticide-free storage device which controls humidity, temperature, oxygen and pests.

BRRI and DAE jointly provided training to participant farmers and RDRS staff, through participatory 'learning by doing'. Master of Science (MSc) students from BAU selected research topics according to the needs of local farmers. Research findings were made available to the local farmers.

Results

Farmers in the SP area benefited through the utilization of research findings. These findings allowed them to increase their land productivity, utilize their limited resources more efficiently, produce quality seed and develop effective storage facilities. Rice yields have increased by more than 50%.

The lower moisture content, reduced oxygen level and reduced insect attack provided by organic cocoon storage improved seed health and germination rate. Demand for cocoon seed increased day by day.

Integrated and coordinated extension services have created an opportunity to build upon the strengths of different stakeholders to enhance the farmers' capabilities, in terms of human, natural, financial, physical and social capital.

Women are directly involved in agriculture, especially in post harvest operations, but previously they had no access to technologies that could improve the effectiveness of their work. The uptake model developed in this SP addressed this issue by directly involving the women farmers in a way that was village based and friendly to the social environment.

Conclusions and recommendations

Through the collaboration of government organisations (GOs), NGOs, research institutes and farmer federations developed in this SP, RDRS has built bridges between technology providers and RPFs at the community level. This SP has created a model for ensuring sustainability. RDRS staff will continue to provide skill training and follow-up on quality seed production, preservation and marketing to 300 farmers' trainers (FT) and 2,500 farmers, even after donor support is over.

RDRS has already initiated more of the same activities based on the learning of this project. With positive results accruing from the exposure of teachers and students to the reality of farmers' lives, BAU and RDRS have agreed to replicate the student internship action research, and have signed an agreement on this for a ten-year period.

The challenge for the future is how to continue the partnership model developed under this SP, to build on the strengths of partners and make all stakeholders responsive to the needs of farmers for quality services.

Suggested citation:
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