



**UST**

**Unnayan Shahojogy Team**

**IRRI**

**International Rice Research Institute**



## **SRSPDS Project of UST**

UST is a national NGO, working for 27 years with the vision of "People's Development is in People's Hand". UST has been implementing Food Security and Livelihoods program in the different parts of Bangladesh. The ultimate objective of this program is to ensure food for all and poverty reduction. UST has innovative ideas to introduce small farming, integrated farming, vegetables gardening, eco-agriculture etc. It has notable experiences and unique concept on off farm and on farm activities, which are appropriate for the poor and ultra poor HHs.

In the southern part of Bangladesh (salinity increasing area), farmers are commonly habituated to grow local and low yielding rice varieties. Following this process, rice production in these areas is decreasing day by day. Lack of knowledge and non availability of appropriate rice seeds (Saline tolerant) are the main reasons behind this. Thus, it has found that there is a need to scale up the production and distribution of high quality rice seeds to make them available among the farmers of the southern coast.

Considering the issue of less yield of Aman and Boro rice in the southern part of Bangladesh, Unnayan Shahojogy Team (UST) initiated a sixteenth (16)

month collaborative research project titled "Sustainable Rice Seed Production and Delivery Systems for Southern Bangladesh" with the support of IRRI. The project is a USAID funded CSISA-Bangladesh sub-project. The project targets to improve food security by enhanced and sustained rice productivity through the promotion of high yielding stress / saline tolerant rice varieties. The project area is Amtoli Upazila of Barguna District. The project achieved 160 demonstrations (both in Aman season (2012) and Boro season (2012-2013) with covering 160 farmers. The major activities of the project are simultaneous promotion of seed multiplication and awareness generation to ensure seed demand and supply; strengthen the capacity of local institutions involved in the production and distribution of high quality rice seeds including farmers and extension personnel.

UST in collaboration with IRRI, facilitated the whole process for scaling up, the cultivation of saline tolerant rice variety to grow more food in the southern part of Bangladesh. In this 'News Letter', it has tried to present different events and activities of this project as a brief.

In September, 2012 IRRI and UST signed in an agreement Letter for conducting collaborative research to grow saline tolerant rice varieties in the southern part of Bangladesh. On behalf of IRRI, Mr. Corinta Quijano-Guerta, Director for External Relations, IRRI signed on this Agreement Letter and Mr. Shah.Md. Anowar Kamal, Executive Director, UST signed on this Agreement Letter on behalf of UST.

## Farmers Group / Beneficiary Selection

At the initial stage of the project, UST staff conducted a survey in the proposed community for farmer selection. Department of Agricultural Extension (DAE) and Bangladesh Agricultural Development Corporation (BADC) along with Local Government Representatives extended their hands to UST for this process. Through this process, 1752 farmers are listed as project beneficiaries for Amon season-2012 and 2024 farmers for Boro season-2012-13. Among them, 160 farmers are selected for creating demonstration plots. Then the selected farmers are oriented about the goal and the objectives of the project by UST.

## Capacity Building of the Farmers

It has found that the knowledge level of the farmers of Amtoli Upazila, Barguna District on stress tolerant / saline tolerant rice variety is very poor. They do not know about the recently released saline tolerant rice varieties. They were totally unaware about the yield of recently released saline tolerant rice varieties. They did not know that the yield of recently released varieties is much higher than the local varieties. So, the capacity building of these farmers was taken as a significant event in this project.

Through this project, 800 farmers received training on cultivation and promotion of high yielding stress / saline tolerant rice varieties in the coastal areas. UST organized 8 batches of training courses, where 100 farmers both male and female participated in each batch. The main discussion of the training was -production technology sharing like; seed bed preparation, age of rice seedling, fertilizer management, pest and disease control, intercultural operations, seed collection and preservation. Local DAE was engaged in these training courses



Capacity building training on promotion of high yielding stress/saline tolerant rice varieties

## Seed Distribution

All the beneficiaries of this project received 2.5 kg rice seed for cultivating saline resistant rice. On the other hand, the farmers who were selected for establishing demonstration plot; they received 5-10 kg saline resistant rice seed for cultivating rice following modern method, designed by the SRSPDS Project.

UST organized a workshop on the occasion of seed distribution to marginal and small farmers at community level with the cooperation of DAE, LGIs and NGOs. UP Chairmen, UP Members, Sub Assistant Agriculture Officer, marginal and small farmers actively participated in this workshop. The main objective of this workshop was - how to prepare seed bed, fertilizer management and linkage and networking with DAE and respective agencies to ensure necessary services from respective agencies.



UST has distributed 4880 Kg Amon rice seeds in different varieties like : Bina-7- 500 kg, BRRI- 44- 2000 kg, BRRI-49- 1180 kg, BRRI-51- 200 kg, BRRI-52-1000 kg to 1752 marginal and small farmers of six villages of Gulishikhali Union under Amtoli Upzila.

In Boro season, UST 5360 kg rice seeds in different varieties like: BRRI Dhan-28 (ST): 1000 Kg, BRRI Dhan-29: 1100 Kg, BRRI Dhan-47: 1600 Kg, BRRI Dhan-54: 10 Kg, BRRI Dhan-55 : 50 Kg. among 2024 marginal and small farmers in the operating areas.



Farmers are receiving rice seed from local BADC in the presence of LGI representatives, DAE Personnel, BADC Personnel and Personnel from UST Central Office



Land preparation for demonstration plot

**Demonstration Plot**



In Amon season -2012, the project successfully established 160 demonstration plots by the selected farmers. After planting of seedlings in all the demonstration plots, UST project staff ensured close monitoring and follow-up with the selected farmers. They also ensured all the selected farmers on crop cutting system of modern agriculture. At the end of the rice harvesting, they collected data on what quantity yield per decimal in their demonstration plots. They have analyzed all the collected data and found that the

average yield per demonstration plot is 16-18 kg per decimal (3.95 -4.44 ton per hector).

**Field Day**

During the project period, UST organized several 'Field Day' program on the occasion of harvesting. About 500 male and female farmers attended in this 'Field Day' cum Training / Mass Gathering Program. This event was presided over by Advocate Direndro Nath Shombo, Honorable Parliament Member (MP), Barguna-1. Upzilla Nirbahi Officer (UNO), Agriculture Officer, Sub Assistant Agriculture Officer, UP Chairmen, UP Members, NGO representatives and also different level stakeholders in the project area participated in this event.

In this Mass gathering, discussion and sharing on the project goal, objectives, activities, progress, leanings etc took place. Farmers also shared their new experiences, challenges and opportunities in this event.



Guests on the occasion of Field Day



Crop cutting on the occasion of Field Day

## Findings and Learning

Barguna, a southern district of Bangladesh is facing severe problem of soil salinity of various levels. Salinity affects rice crop most during the Boro season as the salt concentration becomes high during the dry season. During the Aus and Aman seasons, the salinity gets diluted due to the monsoon rains and its effect on rice yields is not significant. There seems to be good prospects for increasing the rice area and production in these salt-affected districts like Barguna by using the new saline tolerant BRRI Dhan- 47, BINA Dhan-8, BINA Dhan-10, BRRI Dhan- 53, and BRRI Dhan- 54. In this collaborative research project, UST ensured to use the said varieties in the farmers paddy land.

Using these varieties, farmers are now very happy to cultivate this saline tolerant rice in their lands as they are getting more production.

However, it has been found that there is a big demand to disseminate these varieties rapidly in these salinity prone areas to cover more farmers as well as more areas. So, replication of this collaborative project needs to be further extended. Finally, it can be mentioned here that if we can replicate such project in the future, food security of the marginal and small farmers will be increased and the country will go one step ahead towards our self sufficiency in food.



Harvesting stage of a paddy field

## Success Story of Altu Bepari



Dr. Bashar and Dr. Neogi from IRRI visited Amtoli fields during Amon season-2012. During their field visit, they shared their skills among the farmers of Amtoli, Barguna.

Altu Bepari, a farmer of Gulishakhali village, Union: Gulishakhali, Upazila: Amtoli, District: Barguna, cultivated saline tolerant BRRI-52 rice during Amon season in 2012. He applied all the cultivation methodologies designed by SRSPDS Project in his paddy field. In this connection, UST Field Staff provided all the necessary measures and cooperation to Altu Bepari. Following this, Altu Bepari got a tremendous yield, about 4.9 ton/hectare Aman rice in his paddy field. Now, he is fully convinced that the saline tolerant rice varieties are very suitable to cultivate in their saline prone areas. Now, the neighbor farmers of

Altu Bepari are very curious about this rice variety. They are sharing with Altu Bepari about this new rice variety. Through this sharing, neighbor farmers are also learning about the cultivation method of saline tolerant rice variety. Altu Bepari is trying to share the cultivation technologies regarding this rice among the neighbors. In addition, Altu Bepari is giving assurance that he will sell this rice seed in the coming Amon season to them with the aim of increasing more food for more people in the southern coast.

