

Humana People to People India

Farmers' Clubs - Uttar Pradesh

Project Report: October 2011 to June 2012



Submitted to:

The GAIA-Movement Trust Living Earth Green World Action

Farmers' Clubs - Uttar Pradesh

Introduction – The Food and Agriculture Organization of the United Nations in support of the project “Seeds of Life – Action with Farmers in Uttar Pradesh – Indo-Gangetic Plain region to enhance Food Security in the context of Climate Change” approved the Farmers club project of HPPI in August 2011. On getting the written approval the project area was selected, and the project staff was put in place in anticipation of the agreement to become effective from October 2011. The processes of MOU signing got delayed by FAO and on May 2, 2012, the Chairperson of HPPI, Dr. Akula Padmavathi signed the agreement with FAO. Since the project activities had already started from October, the GAIA Movement Trust expressed its interest to support the startup project activities. Hence the present partnership came in place.

Background - By mid-century India will have added 470 million people to its population. The country possess the multiple challenge of growing sufficient food for its increasing population in a sustainable way, while at the same time facing increasingly unreliable and unfavorable environmental conditions for food production.

In the project’s operational area in Uttar Pradesh, numerous species of fully domesticated but little-known crops majorly in rice and wheat remain neglected and underutilized, under-protected and threatened by genetic erosion or extinction. Such losses of agricultural bio diversity lessens the capacity of the system to deal with change (i.e., decreased resilience) with respect to climate change, which directly affect farmers’ management of the system and overall food security and economy of the region. The area observes old and conventional practice of farming, which is already stretched to fulfill market demand and future sustainability needs.

The main problems this project is looking forward to addressing in the suggested operational area are:

1. Increasing food insecurity and dangerously high dependency on wheat and rice as main staples – considering that these crops are vulnerable to climate change.
2. Lack of promotion of nutritive alternatives to wheat and rice

On this background, the project seeks to contribute to the development of sustainable food security in a rice and wheat producing region vulnerable to climate change in the Indo-Gangetic Plain – covering 50 villages with following specific objectives:

1. To establish on farm seed conservation practices with farmers.
2. To establish System of Rice Intensification (SRI) and improved wheat cultivation practices among farmers.
3. Diversification of the farming system in the context of Climate Change by introducing new crops and more varieties of rice and wheat.

The proposed activities of the project

Establishment of gene banks - 10 farms based gene banks will be established (with area \approx 400 sq. ft. each) evenly distributed in the field of the implementation area. These gene banks will have cool and dry chambers, shelves and containers to store and conserve seeds. The objective of these gene banks is to conserve a small part (\approx 1%) of the collected seeds for two years' period or more. The seeds can be shared with a national-level gene bank. They can also be dried, stored (\approx 99%) and returned to the farmers in the next season. The farmers and Self Help Group members will be given a demonstration on how to operate the gene bank. The selected members will be trained in the operating process so that Farmers' Clubs and SHGs can themselves operate and maintain the gene banks after the project is over. In the first two years, the farmers will not be charged for the seed storage. Thereafter, the Farmers' Clubs and SHGs that are running the banks may decide themselves if some nominal fee should be charged.

Training of farmers and SHG members on seed selection and conservation - Training (through various need based workshops) will be designed and organized where experts from agencies like Bioversity International will share their knowledge with the participants. Training will be organized over 1-3 days and will include topics like seed identification & selection, sampling, on farm conservation techniques, gene bank operation & maintenance.

Training of farmers to access the "PVA" – Plant Varieties Authorities – India for registration of local seed varieties – These training sessions will be of 3-6-hour duration and will be organized once a quarter. Farmers will be informed of Intellectual Property Right implications and how they can benefit from it and use it as opportunity and as a protective mechanism for their indigenous variety of crops, and charge fees in form of royalty. They will be connected with Protection of Plant Varieties and Farmers' Rights Authority, Delhi for registering their seed varieties or conservation techniques if not previously registered.

Training of farmers on seed selection & conservation - Farmers/participants will be trained by experts from Bioversity International and project staff over seed selection protocols/methods. They will also be trained on establishment and operation & maintenance points of the dryers. This cost of establishment will be borne by the farmers and project will assist them in availing subsidy from the government and provide the training cost.

Training of farmer's club members (SRI and improved wheat cultivation) - India has developed many eco-friendly methods for increasing agricultural yield, which needs to be propagated among farmers through trainings. The project will hold such on-farm and off-farm training sessions on rice and wheat, which will be instructed by resource persons from HPPI on SRI and from Agricultural Technology Management Agency (ATMA), Uttar Pradesh for wheat. Farmers will be mobilized to use the facilities and prepare demonstration fields. The farmers creating demonstration fields will be suitably compensated by the project. The improved cultivation methods will be demonstrated in model fields against control fields.

Training of farmers - introduction of three new crops - The project wishes to promote three new crops in the area, namely Amaranth, Moringa and Quinoa that may increase farmers' production and income during fallow seasons. Farmers will be informed of the utility and nutritive properties of Amaranth, Moringa and Quinoa, and will also be trained on producing various edible items out of them for both in-house and market consumption. They will be encouraged to grow these crops alongside the staple crop or during fallow seasons. The project will simultaneously find the market for the new edible products. This is expected to generate an extra income for the farmer during the fallow seasons. Amaranth, Moringa and Quinoa are high in protein content, and are valuable as additional food to the traditional diet. The technical support over these crops will be provided by Humana People to People Federation, Bioversity International and ATMA. This is an experimental activity in 50 villages and when successful it will be further replicated by the project in more areas.

Establishment of marketing forward-link and backward-link - The project perceives establishment of marketing forward-link and backward-link as a crucial necessity for sustainability of the project's impact. The project will therefore seek to establish the following marketing links with farmers' participation:

Forward links:

- Market link for contract supply or direct sale of finished products of Amaranth, Moringa and Quinoa (*for direct sale, the SHGs and Farmers' Clubs will be encouraged to form a Federation among themselves*)
- Market link for supply or direct sale of extra seeds from the gene banks.

Backward links:

- To and fro link with national-level gene banks over transfer of conserved seeds between the project gene bank and national-level gene bank or its subsidiaries.
- Link with PVA resources for crop variety registration and royalty redemption
- Link with technical resources such as Bioversity International, ATMA, KisanVikasKendras (Farmers Science Centres), etc.

Training of SHG members on preparation and use of new food items in their cooking - The SHG members will be trained in preparation of edible items out of the newly introduced crops - Amaranth, Moringa and Quinoa. The members will be trained in packaging for household level consumption, contract supply or direct sale in the market. The project will organize food fairs where agricultural produce will be exhibited by the farmers, and examples of tasty meals with Amaranth, quinoa and moringa will be presented and shared with interested visitors.

Activities conducted from October to June, 2012

Introduction meetings - The project completed its round of introduction of the project to community members, including farmers, women, and influential community leaders, elected village council members and block & district level officers from the local administration. More meetings were held with agriculture scientists and agriculture specialists at the KVK (Agriculture Science Centre) to make plans for varietal seed trials, new methods of the farming in case of SRI (System of Rice Intensification), SWI (System of Wheat Intensification) and other areas of cooperation.

Meeting with Farmers - The initial meetings with farmers about the program were done in all 50 villages where the project addressed its idea, objectives, and why this program is needed for the area as well as for the future. The farmers were also encouraged to form Farmers' Clubs.

The interested farmers were selected for the trial of model fields of rice cultivation with 14 improved varieties of seeds.

Meetings with Self Help Groups - The project team held the meetings with existing 150 Women Self Help Groups about the new agriculture program in their area. The women play a lead role in the agriculture work in India, therefore, as a strategic move; the project has planned to train 1700 SHG members on new crop varieties and improved farming methods as cash crops and to grow nutritious food as a healthy diet for their families. A round of the orientation has been done by the project team for all the SHG members and also orientated the women farmers on diversification of the farming in context to the changing climate and to use new seed varieties of rice and wheat.

Experiment with new crop- The project received 3 grams of seeds of *Quinoa Chenopodium* from AMITY University, Lucknow, which is a new crop. The project mobilized one farmer to make a Quinoa nursery in his farm. The farmer established the nursery, but the germination was not successful due to delay, as the right time for Quinoa nursery is in the month of October and the seeds were sown in the nursery in November. It had not been possible to get the seeds, which are seldomly available, through to the project at the right time. For the up-coming season the project has already planned the purchase of seeds in order to establish the nurseries timely.

Conference on Plant Genetic Resources - The two project leaders and the project director participated in a three-day workshop from 23 to 25 January, 2012 on introduction and strategy to implement projects under The International Treaty on Plant Genetic Resources for Food and Agriculture, hosted by National Bureau of Plant Genetic Resources (NBPGR) and Indian Council of Agriculture Research, (ICAR), New Delhi. HPPI made a presentation about the idea, objective, and the implementing strategy. The project was commented by the participating scientists, of whom some were sceptical to the idea of growing Quinoa, Moringa and Amaranth as the project is only two years and for farmers to adopt new things normally takes a long time. It was then suggested, that the project along with Quinoa, Amaranth and Moringa, also should try to introduce more varieties of pulses, which the farmers could more easily accept and which also can play a big role in food security.

Collaboration with Agriculture Department and Krishi Vigyan Kender (Farmers Science Centre) - During the reporting period, the project focused on establishing good liaison with the government department, especially the Department of Agriculture in the districts where the project is being implemented. The idea was to leverage the technical, financial and service resources from the department in line with the project activities. Meetings were conducted with KVK officials to orient them about the project and to seek their support and knowledge inputs in the project implementation. The officials from both the department have visited the project, and a good relationship is established.

Project participation in the Farmers Fair - The project was invited to have a stall in the Annual Farmers Fair on 20 March 2012, in KVK Ujhani (Badaun) where more than 400 farmers, local stakeholders, and officials from seven blocks, and the district participated. The Chief Development Office (CDO) and District Agriculture Officer were the chief guest in the fair. The chief guests visited the project stall and learned about its idea and objectives, and assured to provide all support from the concerned departments to make the Project a success.

Initial Meetings with Farmers to form farmer' clubs - During the reporting period, the project conducted meetings with farmers to form farmers' clubs in each village of the 50 project villages. The project oriented the farmers about benefits of organizing in a club and participated to create models of sustainable farming for themselves and the farmers in their villages. The interested farmers' list was made during the orientations to form the clubs.

Formation of the farmers clubs - Fifteen farmers' clubs have been formed with an average of 12 farmers per club in the fifty project villages. The project is in the process of forming Farmer's clubs in the remaining villages of the project.

Selection of the fields for the trials of the new varieties – The project has mobilized 40 farmers to establish a trial fields for rice cultivation using 14 new seed varieties selected by Bioversity International, the technology partner for the project. 10 farmers expressed interest to cultivate rice using System of Rice Intensification (SRI) after being oriented on the method. The Project Leaders received the seeds from Bioversity International. The rice nurseries were completed in the last week of June, and the transplantation will take place in the 1st week of July. The project also received 350 rice germplasm for which one field is in the process for trial. The germplasm was supplied by the National Bureau of Plant Genetic Resources, which is following the project with great interest.

Attachment 2: Pictures from the Project



The farmers in the villages are being informed about the project.



The farmers, during a pre formation meeting understanding the concept and benefits of the Farmer's Club.



The farmers preparing fields to raise the nursery of rice. 40 farmers have come forward to cultivate rice using System of Rice Intensification.



The farmers have started sowing the rice seeds in their nurseries.



The farmers are getting seeds for raising rice nurseries. The improved variety of seeds was received from Bioversity International.





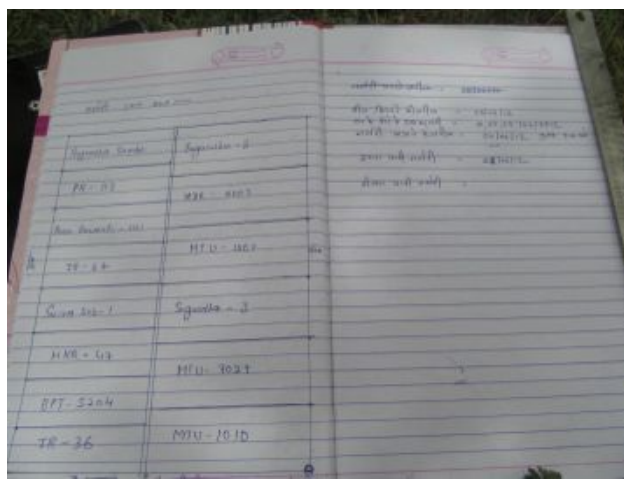
The seed distribution to the farmers



The farmers curing the seeds before sowing in the nursery



The layout of nursery for sowing 14 varieties of seeds



The farmers maintaining register of the nursery to record the type of seed sown in a particular bed



The seeds germinating in the nurseries



The Project Leader monitoring the nursery beds and interacting with the farmers on the trial