“Welcome to the first edition of CSICA-BD Newsletter! Every month this newsletter will appear in both electronic and printed forms bringing you news, views and updates from CSISA-BD. This is the beginning of the year and we already have several major updates to share with. CSISA-BD hubs achieved some significant results in this short period. This edition primarily focuses the activities from hub. From next, we will include the wide range of activities of CSISA-BD.”

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CSISA-BD participation in America Week
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Expansion of Cereal Systems Initiative for South Asia (CSISA) in Bangladesh started its Faridpur Hub (central west) activities effective November 2011. At present, the domain of CSISA- BD consists of six hubs in Bangladesh. Four hubs - Jessore, Khulna, Barisal and Faridpur are located in the USAID Feed the Future “Zone of Influence” in Southwest Bangladesh. The Faridpur hub, the most recent one, opened for business from October 2011. The other two hubs are located in Mymensingh and Rangpur in the North of the country.

The farmers training was conducted on “Improved Rice Production Technologies” with emphasis on using guti urea by guti urea applicator and alternate wet and drying (AWD) technology at Gerda, Faridpur Sadar, Faridpur on 18 January 2012 organized by CSISA-Faridpur Hub. Thirty farmers including five women farmers participated in the day-long training. Farmers were contented knowing about new rice production technologies. During the training they came to know about the guti urea applicator and water pipe. They expressed their keen interest on the cost effective technologies. Discussions held on CSISA activities for increasing of household income, the conservation agriculture and sustainable technology. The training was organized with the help of Department of Agricultural Extension (DAE). Representatives from DAE, IRRI, CIMMYT and World Fish Center attended the training session.
Cage Aquaculture – a unique income generating opportunity for poor landless households particularly women
A brief note on adaptive trials in Batiaghata, Khulna

“I would not have to sale my labour if I could have more cages from which I could earn such a regular income” – said Ms. Amari about the cage technology that was introduced by CSISA-BD. She is one amongst the nine women who received this technology as an alternated livelihood source. CSISA-BD took advantage of the underutilized water resources lying close to these women’s houses. Without much effort and from the comforts of their own homes, these women earned money and now consume more fish at home. The details are provided below.

Aquatic resource-rich Khulna hub (Khulna, Bagerhat and Satkhira districts) has 70 rivers and 1,000 canals with an approximate area of 22,253 hectares. These water resources provide sustainable livelihood for poor household wives by introducing selected aquaculture technologies like the cage culture.

Keeping in mind the importance of promoting cages that fit within different resource systems, context specific technologies of cages were developed for both food fish and fingerling production to augment household incomes hence creating alternative livelihood options.

The CSISA-BD project established adaptive trials with nine cages in a canal of Batiaghata Upazila under Khulna district. Nine women from nine poor households have been selected for cage aquaculture. The cages were suitably located in water bodies close to these women’s homestead.

The size of each cage is 3 x 2 x 1.5 m = 9 m$^3$ with effective culture volume of 8 m$^3$ and each cage was constructed with locally available materials. The women operators were provided with a day-long orientation on cage aquaculture before starting the activities. The cages were stocked with all-male (mono-sex) tilapia fry at three different stocking densities (density: 200, 300 and 400 fry/m$^3$) and the day to day management including feeding are undertaken by the women. Based on demand and technical feasibility, the cages are being used for both food fish and fingerling production but during the wet season and the dry season, respectively.

CSISA-BD project staff has been providing regular assistance both technical and in recording the information properly. Out of the nine cages, four cages were stocked on 19th August 2011. The fish stocked in first cycle have already been sold. Among the nine operators, Ms. Gurudashi sold 307 kg and 169 kg of fish for Tk. 20,047/- and Tk. 11,051/- respectively. The highest & lowest net profit earned was Tk 3523/- and 1381/- by Shikha & Amari respectively.

The cages have been restocked for the 2nd cycle at 200/m$^3$ considering the upcoming winter season. The skills and knowledge of the women in operating the cages have improved through the experience gained in the 1st cycle. Being new with this, commercial feed costs together with over feeding and the high costs of fingerlings have raised the operation costs for the 1st cycle. Late stocking was the reason for not only the high fingerling costs but also harvesting was not possible at the peak marketing time when the women could have been able to fetch higher prices. However, with the lessons learnt, hopefully the women will improve their feeding and management efficiency and hence reduce the production costs in the subsequent cycles. The women expressed their happiness with this activity and a willingness to continue.
In order to address the nutritional status of households, CSISA-BD is promoting the cultivation of household based Orange Flesh Sweet Potato with the help of women who can play a major role in fighting nutrition deficiency. Orange Flesh Sweet Potato (BARI SP-2, BARI SP-4, BARI SP-6) is a Beta carotene rich nutritious and delicious tuberous food crop. Its young leaves and twigs are also consumable as a sort of vegetable and carries the potential in solving different vitamin A deficiency problems. Recognizing the importance of this crop, CSISA-BD has distributed 75,500 vines to 651 households which include other projects and organization participants like HKI, Nobo Jibon and IFAD funded “Linking Fisheries and Nutrition” project for wider coverage. Below is a case example of Nurjahan Begum.

According to Nurjahan Begum, vegetables like brinjal, potato and small micro nutrient rich fish make a nutritious curry dish with the OFSP leaves. “My five year old daughter loves to eat cooked OFSP leaves with rice”- said Nurjahan Begum. She is an active member of CSISA- BD World Fish of Chapatola village of Prembag union under Abhoynagar Upazilla, Jessore. With the help of the women CSISA-BD World Fish project collects the herbs from BRAC, imparts field level technical assistance and distributes the herbs among the women to initiate the introduction of rich beta-carotene OFSP in homesteads. After collection, Nurjahan Begum planted the herbs in her one percent of homestead land. She never cultivated OFSP previously. Within the total time of 70-80 days since plantation, she gathers the leaves of OFSP from field to consume as greens which is high in rich vitamins. Nurjahan Begum also added that sweet potato leaf tastes like kalmi greens, even better than kalmi greens. Other women members, who collected herbs through CSISA-BD World Fish project for cultivation of sweet potatoes in their homestead, have all consumed the high nutritious leaves as vegetable greens. Nurjahan Begum further added, after collection of sweet potato from the field, the herbs can be preserved for consumption as leaf and sprout greens during the rainy season and the preserved leaves can also be sown the next year.
High profits with reduced insecticides application: Success of Abdul Malek Kha

In order to reduce production costs and to protect farmers’ health from the application of toxic insecticides, CSISA-CIMMYT arranged a training event for farmers to educate them on Integrated Pest Management (IPM). Farmers were pleased to know about the idea of using sex pheromones to disrupt fruit fly mating patterns. After the training, farmers were highly motivated and agreed to implement this IPM strategy. Below is a case example of Abdul Malek Kha.

“Using the pheromone traps, only 5% of the fruits were infested in my field this year, and I produced 228 kg ridge gourd (BDT 6,840). I obtained more profit, and pheromone traps with poison bait which is the best technique to control fruit flies” said Md. Abdul Malek Kha. Abdul Malek Kha lives in Bokshir, the char village of Babugonj Upazilla, Barisal district. He is 37 years old and cultivates just over half a hectare of land—from which about 15% is used to grow ridge gourd, a profitable crop. Despite, a hard worker, Malek Kha earned only US$ 30 dollars from his ridge gourd production last year although he had relatively good yields and good market access. CSISA-BD staff analyzed the inputs he used in his farm and realized that his production cost was high due to the use of very expensive and unsafe insecticide applications which damaged 35% to 40% of the ridge gourds that he produced. Malek Kha also added that he had sprayed ‘Malathion’ 15 times to control the fruit flies at a cost of BDT 1,400 after receiving training.

The total production cost was BDT 2,100; against the cost he produced only 150 kg (BDT 3,750) of fruits. After using the pheromone traps following the training, only 5% of the fruits were infested in his field this year, and he produced 228 kg ridge gourd (BDT 6,840).

Many farmers in the surrounding communities came to see his field and now they are keen to replicate the successful crop production of Malek Kha and the other 14 farmers who are using pheromone traps with poison bait are benefiting similarly.

Conservation agriculture gaining momentum in Bangladesh

Capacity building and improved technical knowledge of conservation agriculture (CA) are crucial elements of the Cereal Systems Initiative in South Asia expansion in Bangladesh (CSISA-BD).

As part of CSISA-BD, CIMMYT recently organized an intensive course on CA-Based Crop Management, during 1-2 and 13 October 2011. The course was developed in collaboration with Farm Machineries and Post-Harvest Processing Engineering Division of BARI, and conducted in Gazipur, Bangladesh. Twenty-three participants, including CSISA Agricultural Development Officers from CIMMYT and IRRI, and BARI Engineers, undertook the course.

Course topics included the rationale and principles behind CA-based crop management, the justification for the CA-based hub structure and adaptive research, and key issues associated with CA machinery. The majority of the course consisted of practical, hands-on exercises to calibrate and prepare two-wheeled tractors (2WT) for the direct seeding of maize, wheat, lentil, and rice under strip and zero till conditions. Further discussion and exercises centered on the potential of raised bed planting and crop residue management to conserve soil moisture, ameliorate salinity problems, and decrease production costs in Bangladesh. The session was facilitated by Ken Sayre and Timothy Krupnik of CIMMYT.

In collaboration with BARI, similar intensive hands-on workshops on CA-based crop and machinery management will be conducted with Bangladeshi Farm Service Providers throughout the country.
A field day was organized in Andulbaria village under Moharajpur union of Jhenaidah Sadar upazila to create awareness and to familiarize short duration T aman followed by short duration high yielding mustard variety replacing the long duration rice varieties to increase cropping intensity among the farmers on 25 January 2012. Generally after Taman cultivation maximum rice field of these areas are kept fallow due to lack of enough space to cultivate another short duration crop before boro. To increase the land efficiency by producing oil crops in between T aman and boro would create a pathway of additional livelihood option to the farmers.

Total 150 farmers (100 male and 50 female) participated in the field day. Representatives from DAE and the UP members Moharajpur Union were the guest participants.

Farmers are inspired by visiting and observing the performance of BARI Sarisa14 and BARI Sarisa 15. A total of 12kg Mustard seeds were delivered to the farmers and cultivated by 15 farmers covering about 300 decimal land under CSISA-BD in this union. Maximum farmers have chosen the BARI sarisa14 due to short duration compared to BARI Sarisa 15 due to its medium plant height and attractive pod size. Enthusiastic neighboring farmers have booked their seed requirement for BARI Sarisa14 and BARI Sarisa15 to mustard producing farmers.

It is expected that mustard production should be increased significantly in this areas during the following mustard season. According to the mustard producers and community farmers if short duration aman rice is cultivated 15-20 days earlier, mustard can get easy space to grow before boro and can be harvested more mustard yield.
CSISA-BD trains women on Post Harvest Chain

CSISA-BD recently held a training course on post harvest training for women from six villages in the country’s rice post harvest chain. Women in Bangladesh are involved in more than half of all post harvest processing activities. At the house hold level, they are almost entirely responsible for tasks such as drying and responsible for drying and storing grain for household use or later sale. The objective of the course was to introduce improved options for reducing postharvest losses in rice due to pests and sub-optimal handling in drying and storage, identified by the women as two critical areas

where help is seriously needed. During the training course, videos were shown depicting various postharvest technology options for harvesting, threshing, drying, and storage. The course also sought to introduce women farmers to hermetic storage using IRRI Super Bags. “Hermetic Super Bags create a sealed environment where bio-respiration of paddy and insects deplete oxygen in the bags” explains Debashish Chanda senior postharvest and business model specialist of CSISA-BD. This, in turn, kills the insects in stored paddy that lead to both physical losses and quality deterioration, hence loss of family income”.

One hundred and fifty women attended the course, held over 2 days (22-23 January 2012), which was organized jointly with local NGOs (Sushilan and Uttaran) and the Department of Agricultural Extension, (DAE) Service Center in Kaligonj, Satkhira, and the local DAE office in Baratia Village, Dumuria Upazila.

| Events: held |
| Training programs were held on Urea saving by using LCC in rice cultivation, water saving by AWD, Nitrogen use efficiency (NUE), Labor saving by guti ures/UDP applicators, Quality seed production and Production technology of boro rice cultivation 2011-12 and implementation approach by IRRI-CSISA-BD, Dinajpur-Greater Rangpur Hub. In the training programs attendees included people from public and private sectors, collaborators and the farmers in the CSISA-BD hub areas. An orientation course on “Boro 2012 to FT/FF/LSP” was organized on 23 November 2011 in Dinajpur. The orientation program was attended by the CSISA-BD partners. Two field days were also organized in Dinajpur on “Crop Cut Ceremony of dry DSR (BRRI dhan 33 and BINA dhan 7)” held on 2 November 2011 and 19 January 2012 and attended by CSISA BD hub staff, representatives from DAE, CIMMYT and World Fish Center. Training programs have been arranged by CSISA-CIMMYT in each CSISA-BD hub areas. Training of trainers (ToT) on Maize Production for Partner NGO Staff, Farmers Training on Maize Production Technology | Wheat Cultivation under CA from October 2011- January 2012. Other training programs have also been held on- Farmer's (LSP) training on Vegetables seedling production in the dyke of Gher with the integration of IRRI & WF, Training on data analysis using CROPSTAT and report writing were also held by this time. CSISA- World Fish Center signed a memorandum of understanding (MoU) with Spectra Hexa Feeds Ltd (also known as Mega Feed) on 3rd October 2011 as part of the USAID funded expansion of the ‘Cereal Systems Initiative for South Asia in Bangladesh (CSISA-BD)’ A MOA Signing Ceremony was held on Monday, 12 December 2011 at BRAC Learning Centre, Gulshan between BRAC and The World Fish Center to implement fish-related activities. Two training of trainers (TOT) for CSISA-World Fish partner extension staff were held in the Mymensingh and Jessore hubs where 45 such staff were trained from 8 to 13 January 2012 and 21 to 26 January 2012, respectively. A seminar on “A Rapid Assessment of Gender in Agriculture in Bangladesh” for sharing the findings from a CSISA-BD study was held on 14 December 2011 at icddr,b. Series of workshops held from Oct –Dec 2011 in each of the 6 hubs on Fish Seed Quality. CSISA-BD participated actively in America Week 2012. |
Contributors:

Editor:
Ambareen Khan

Field Visit
Dr. Achim Dobermann, Deputy Director General (DDG) for Research, IRRI and Dr. Bruno Gerard, Director, CIMMYT visited Bangladesh from 13-16 February 2012 to observe CSISA-BD field activities. Dr. M. Zainul Abedin, IRRI Representative for Bangladesh, Dr. Andrew McDonald, CIMMYT Regional Agronomist, Mr. Christian Portal, Chief of Party CSISA-BD, Dr. Tim Krupnik, CIMMYT Agronomist, CSISA and Dr. M. A. Saleque, Project Coordinator, CSISA-BD accompanied DDG and CIMMYT Director in the field.

Dr. M. Zainul Abedin, IRRI Representative for Bangladesh visited Mymensingh Hub on November 24, 2011. During his visit he discussed about CSISA-BD project and its activities with the beneficiaries at Gouripur Upazila under Mymensingh district.

Staff changes:
Mr. Christian Portal joined CSISA-BD as Chief of Party (COP)
Ambareen Khan joined CSISA-BD as Sr. Specialist-Partnerships and Communication
Md. Ershadul Islam joined CSISA-World Fish Center as Faridpur Hub Manager
Ms. Israt Zahura joined CSISA–World Fish Center Dhaka as Training and Documentation Manager
Afrina Chowdhury joined CSISA-World Fish Center Dhaka as Gender Specialist/Portfolio Support Coordinator
Md. Aowsafur Rahman, Md. Aslam Ali, Rupon Kumar Basak and Md. Shafiqul Islam joined CSISA-World Fish Center Faridpur and Khulna hubs respectively as Aquaculture Development Officer
Mr. Dhon Raj Lama joined CSISA-CIMMYT Dhaka as Admin Assistant.

What is coming up
February: Staff Training on Data Management by CSISA-CIMMYT
March: International Women’s Day Celebration in Jessore, Barisal and Mymensingh Hubs by CSISA-BD
March: National level Seed quality workshop by CSISA-World Fish
April: Training for CSISA-CIMMYT partner staff by CSISA-CIMMYT
Nov ’11 to Apr 12: Farmer Field Days.
The Embassy of the United States in Bangladesh brings a glimpse of its activities by continuing a tradition of outreach programs across Bangladesh, by hosting “America Week” in Chittagong. US Ambassador to Bangladesh Dan Mozena and Chittagong City Corporation (CCC) mayor M Manjur Alam inaugurated the week at Chittagong Zilla Crira Sanstha on January 30, 2012. The event was organized during January 30 - February 1.

For 2012, the theme of America Week was “Moving Forward Together,” with a special focus of the 50 years anniversary of USAID. On invitation from USAID, CSISA-BD participated actively at “America Week” in Chittagong this year with the purpose to inform the stakeholders of the various activities, innovative technologies and progress CSISA-BD has made in the past year. These were showcased through booth setup, take-away materials and presentation made by CSISA- BD. Having a theme for CSISA-BD booth design helped us reinforce our identity. Majority of the activities of CSISA- BD involves working with farmers. Therefore, CSISA-BD booth design was inspired by the farmers. CSISA-BD booth was setup in such a way that attracted attention and made people come to the booth. The booth displayed: videos and a picture slideshow, samples of rice, wheat and maize, aquarium, model of integrated farming and cage culture and various types of plants (tomato, rice and maize).

The booth also distributed take-away brochures, booklets and different types of posters. A 30 min presentation was presented by Dr. Elahi Baksh CSISA-BD on January 30 as requested by USAID. The presentation included videos, pictures and information about the work CSISA-BD has done thus far and also discussed the project’s future plans.

The U.S Ambassador visited CSISA-BD booth twice and highly appreciated it as he thought it was impressive. Other visitors included numerous school, college and university students, teachers and professors, Country Director of Care, Save the Children USA and members from several other national and international organizations. Mr. Christian Portal (COP), Dr. Khairul Bashar, Dr. US Singh, Mr. Bidyuth Kumar Mahalder, Dr. M.A Saleque of CSISA-BD also visited the booth. Approximately 2500 visitors came to CSISA-BD booth and were highly impressed.
Photo feature:

(left to right): tuberization of orange fleshy sweet potato (OFSP)
(bottom left): farmer collecting leaves from OFSP 70 days plant
(bottom center and right): vegetative growth of OFSP plants in 70 days

(left to right): Christian Portal (COP) of CSISA-BD and Mokarrom Hossain of CSISA-WFC in front of CSISA-BD booth in American Week.

(left to right): Mustard in rice-rice pattern in Tangail

BARI mustard 14 block established after harvest of short duration Taman in rice-rice pattern at Tangail