APART RICE WEEKLY

November 8-13, 2021

Postharvest Demonstration held atSivasagar

A Postharvest Demonstration was organized by KVK Sivasagar on Nov 11, 2021 at Disangmukh, Sivasgar. During the training, IRRI's Research Technician P. Srichandan explained the approach of postharvest machinery usage in Assam and referred it as the most successful method for making farmers aware of the fact that usage of reaper and other postharvest machineries can help them a lot in the upcoming harvesting season. This method not only assists farmers, but takes a system view with support of all along a chain of interested actors who work together to improve their marketing prospects. During the programme, IRRI-RT demonstrated the operational procedure while handling the reaper, and also discussed its benefits. Various safety operations, and repair and maintenance procedures were also clearly stated to the participants. The participants were interested to use the reaper and actively took part while the demonstration of reaper was going on. A total of around 5 bighas were reaped during the demonstration programme. The programme concluded with vote of thanks by APS, KVK Sivasagar.

Contributor: Saurajyoti Baishya, Specialist-PH&RVC, IRRI

Successfully Completed Crop Cutting -cum- Field Day Programme at Bongaon, Nakerbari and Pokhura Village under APART KVK, Nalbari

On **Nov 3, 2021** APART KVK, Nalbari, in collaboration with IRRI, successfully conducted the first field day -cum-crop cutting programme at **Bongaon** village of Pachim Nalbari block under APART, KVK, Nalbari with 20 farmers of the area. The programme was organised on **Learning Centre Demonstration** (LCD). The Programme started with introductory remarks by Mr. Dipankar Kalita, PA, APART KVK Nalbari. Mr. Homeswar Mazumdar, I/c APART, KVK, Nalbari was also present on the occasion. In the beginning of the programme, Mr. Dipankar Kalita briefly discussed about the objective of the APART as well as the purpose of the field day programme.

After that, Mr. Homeswar Mazumdar, I/c APART, KVK Nalbari discussed about various modern technologies and machineries related to paddy cultivation. At the end of the programme, the APART staff of KVK, Nalbari conducted the crop cutting programme and recorded various plant parameters of the crop in the field. Similarly, on **Nov 9, 2021** (LCD Demonstration) and **Nov 11, 2021** (CFLD Demonstration) the APART, KVK, Nalbari team successfully conducted another two Crop Cutting and Field Day programmes at Nakerbari and Pokhura village, respectively under the guidance of Mr. Pranjit Bharali, APS, APART, KVK, Nalbari with the support of 2 Research Technicians Mr. Rupam Deka and Mr. Biswajit Gogoi.

Contributors:

Mr. Dipankar Kalita
Project Associate, APART, KVK, Nalbari

Mr. Pranjit Bharali
Asst. Project Scientist, APART, KVK, Nalbari

Participatory Field Day on Rice Variety Cafeteria under APART

A Participatory field day on Rice Variety Cafeteria was conducted on November 11, 2021 at Krishi Vigyan Kendra, Morigaon under APART with the technical guidance of IRRI. A total of 30 participants including farmers, extension functionaries and scientists were present in the programme. The Rice Variety Cafeteria is a concept introduced by IRRI in Assam, where exhibition of different rice varieties including local varieties, stress-tolerant rice varieties and Premium Quality Rice (PQR) Varieties is made so as to enable the different stakeholders to evaluate a suitable rice variety for a particular region based on desired traits. At the beginning of the programme, Dr. Rijusmita Sarma Deka, Senior Scientist and Head, KVK, Morigaon welcomed all the participants and briefed on the objective of the programme. Mrs. Binita Barman, SDAO, Morigaon, while addressing the participants suggested to select best variety suitable for their location. Agricultural Development Officers, Ms. Supriya Bora and Ms. Kasturi Shivam, of Jagiroad and Jagibhakat Gaon ADO Circles respectively highlighted the importance of the programme.

Thereafter, Dr. KasturiGoswami, Junior Researcher, IRRI described the methods and procedures for evaluating the different rice varieties. During the evaluation, the participants observed and voted for ten (10) different rice varieties based on their desired morphological traits such as plant height, grains per panicle, grain colour, grain size, length of the panicle, etc. The evaluation process resulted in selection of three best varieties i.e. Ranjit-Sub 1, Kola Joha and CR Dhan 309. Mr. S. Baruah, SMS, Soil Science, Mr. Jiaul Hoque, Farm Manager, Dr. Pinky Pathak, Project Associate, APART and Mr. Sanju Borgohain, Assistant Project Scientist, APART were also present in the programme and evaluated the varieties. Towards the end of the programme, a crop cutting was conducted for five varieties based on maturity.
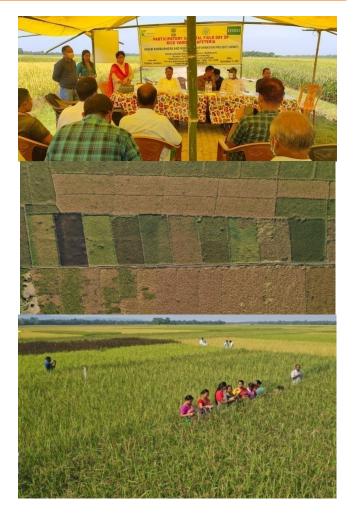
Contributor:

Dr. Pinky Pathak, PA, APART, KVK, Morigaon

Mr. Sanju Borgohain, APS, APART, KVK, Morigaon

Participatory Field Day of Rice Variety Cafeteria conducted at Krishnai, Goalpara under HRS, Kahikuchi

Under the Assam Agribusiness and Rural Transformation Project (APART), a Participatory Field Day of the Rice Variety Cafeteria was organized by the Horticultural Research Station, Kahikuchi in collaboration with International Rice Research Institute (IRRI) at village Amguripara, Krishnai (Goalpara) on November 11, 2021. All total of 30 participants including both male and female from the locality and nearby villages attended the one-day Variety Evaluation Workshop. Experts from Horticultural Research Station (Dr. Akhil Kr Deka and Mrs. Ranjita Bezbaruah), IRRI (Mr. Vipin Kr Ahlawat, Mr. Jyoti Bikas Nath, Mr. Mridupaban Mudoi and Ms. Suranjana Borah) and dignitaries from DAO Office, Goalpara (including Mr. Abdul Wahid, APART Nodal Officer & Assistant Director of Agriculture) participated in the programme as resource persons. The programme started with the introductory remarks by the Asst. Director of Agriculture, Goalpara (Mr. Abdul Wahid). He briefly described about the different components and objectives undertaken by APART in different districts of Assam including Goalpara. Thereafter, Mrs Ranjita Bezbaruah (Jr. Scientist, HRS) addressed the participantson the crop cafeteria concept given by IRRI and explained the basic objective behind organizing the Crop Expo i.e., to evaluate and select the best suited variety/varieties in that locality or in that particular agro-climatic zone. She discussed about the significance of the three diverse group of varieties (STRVs, LPVs and PQR varieties) incorporated in the Rice Variety Cafeteria. Later, Experts from IRRI (Mr. Vipin Kr Ahlawat and Mr. Mridupaban Mudoi) explained in detail about the evaluation and scoring procedure to be carried

out by the participants both in Assamese and Hindi languages.

Mr. Mudoi explained that the participants need to evaluate the varieties on the basis of morpho-physiological and visible traits like plant height, no. of effective tillers/hill, panicle length, no. of grains/panicle, grain colour, grain type, disease and pest incidence, and expected yield. He further added that tags of 4 different colours would be used for scoring the varieties. Males will be offered tags of two different colours; yellow colour would denote positive vote whereas white would denote negative vote. Simultaneously, women were given pink and blue tags which would signify positive and negative votes, respectively. Mr. Mudoi instructed each participant to score three best varieties and three non-suitable varieties based on the traits mentioned earlier with the help of the coloured tags provided. APART staff (Ms Priyanka Das, Mr Dibakar Mohodi, Mr Bhaskar Boruah, Mr Anurag Khound and Mr Ashraful Ahmed) helped to solve the queries raised by different participants throughout the field evaluation process. Glimpses of the scoring and evaluation procedure were captured beautifully by Ms. Suranjana Borah (GIS Expert, IRRI) with the help of drone. The process of evaluation came to an end with ranking the best three varieties based on the average positive and negative votes. Among the ten varieties, both Kalavati and Upendra Black Rice 1 scored the highest votes followed by Ranjit-Sub 1 whereas Manipuri Black Rice scored the lowest. Thereafter, Mr. Jyoti Bikas Nath (IRRI Expert) interacted with the farmers and suggested them to provide feedback for both the highest scored and least scored varieties. The programme finally concluded with the vote of thanks from Mrs. R. Bezbaruah.

Contributor:

Miss Priyanka Das (PA, APART, AAU-HRS, Kahikuchi)

Mr. Dibakar Mohodi (APS, APART, AAU-HRS, Kahikuchi)

Field day and Crop cutting of STRV Ranjit-Sub1 on Learning Centre Demonstration and Wet Direct Seeded Rice Demonstration under APART organized by RARS Shillongani, Nagaon

A field day -cum- crop cutting program was organized on November 11 and 12, 2021 at farmer's field of Bordua, Dagaon, Kakomari and Chamuagaon villages in Nagaon District. The performance and benefits of Learning Centre Demonstration and Wet Direct Seeded Rice Demonstration were explained and practically demonstrated to the farmers.

Dr. A.C. Sarmah, Chief Scientist and Dr. D. Hazarika, Principal Scientist were also present in the program. The program started with a welcome speech by Dr. A.C. Sarmah who explained about the performance of stress-tolerant rice varieties and the other local varieties. Dr. D. Hazarika described about the importance of right selection of variety, timely water and weed management, disease and pest management, and benefits of line transplanting v/s normal transplanting. The beneficiary farmers shared their experiences on the performance of STRV Ranjit-Sub1 and also suggested the other farmers to adopt the STRVs for better productivity and profitability. A crop cutting demonstration was organized and various growth and yield attributing characters viz. plant height, effective tillers per sq. metre, grains per panicle, straw weight etc. were observed from an area of 5 sq. metre.

Contributor: Dr. Sharmme Gogoi, Project Associate, RARS, Shillongani, Nagaon

Participatory Evaluation of Rice Variety Cafeteria at RARS, Titabar

A participatory evaluation of rice variety cafeteria was organized at Regional Agricultural Research Station (RARS), Assam Agricultural University, Titabar with the technical support of IRRI under APART on November 9, 2021. The programme was attended by scientists from Assam Agricultural University (IRRI), International Rice Research Institute (IRRI), members of ASOCA, BTM, ATM and employees working under APART. A total of 30 farmers including male and female participated in the event. Dr. Kanwar Singh (Resident Consultant, IRRI) described about the rice variety cafeteria - a replicated trial of different (traditional, prevalent or newly introduced) rice varieties to enable the stakeholders/ farmers to select a suitable rice variety of their preference in a particular region/agro-climatic zone. He further explained that the synchronous flowering maturity is achieved by staggered nursery sowing in which each variety is raised in 3 replications with uniform management.

Dr Rahul Priyadarshi (Seed Specialist, IRRI) highlighted the importance of the evaluation of the varieties by different stakeholders which will result in multiple benefits like uptake and sustainable adoption of the STRVs or PQR varieties at selected locations, to create mass awareness and sensitization about different STRVs and PQR varieties, to promote the seed and varietal replacement for improving productivity of rice in the region and to help in generating seed demand for multiple varieties etc. For the evaluation of the rice varieties Mr Devamitra Tarafdar (Project Associate, APART, RARS, Titabar), Miss Ankita Sahu (Junior Researcher, IRRI) and Miss Jutika Das (Project Scientist, APART) guided the farmers for selecting the preferred and non-preferred varieties on the basis of various visual plant characteristics with the help of coloured tags. The scientists and the other stakeholders were provided with pre-prepared score sheets for the evaluation of the varieties. At the end of the evaluation, Prafulla among the long duration varieties, CR Dhan 909 among Premium Quality Rice (PQR) varieties, and MTU 1156 among the short duration rice varieties received the highest number of votes.

The programme concluded with a positive feedback from the participants.

Contributor: Mr. Devamitra Tarafdar, Project Associate, APART, RARS, Titabar.

Management and Maintenance and Field Testing of Rice Knowledge Bank conducted under KVK Sonitpur

A training on management, maintenance and field testing of Rice Knowledge Bank (RKB) was conducted under APART at KVK Sonitpur. A total of thirty progressive farmers from Sonitpur and Biswanath districts attended the training programme. The programme started with the welcome address by Ms Rupsikha Goswami, Assistant Project Scientist (APS) under APART where she highlighted the basic objectives of the programme. Dr. Debahash Buragohain, Project Scientist (APART) discussed about the Rice Knowledge Bank (RKB) website and its benefits for the farming community. He also discussed how to access all the required information in the website step by step. A field testing of the website was also conducted where a questionnaire was provided to the participants and they were asked to access the given information on the website within a specific time period. The training programme was well coordinated by the APART staff of KVK Sonitpur and attended by Mrs. Sanjukta Saikia (Subject Matter Specialist, Plant Protection) and Dr. Namita Dutta (Subject Matter Specialist, Soil Science) of KVK Sonitpur. At the end of the programme, the farmers expressed their satisfaction over such beneficial training programme.

Contributor: Rupsikha Goswami, APS (APART), KVK Sonitpur

Field day on Rice Variety Cafeteria, Barpeta

A field day on rice variety cafeteria was organized by DAO Barpeta, on November 12, 2021 under Patshala development block with the technical support of IRRI. The program was organised with an objective to evaluate the performance of 10 different paddy varieties grown under same situation, area and management practice with an aim to select the three most suitable varieties for Patshala block. The program was attended by SDAO, Patshala, Mr. Vipin Kumar, Specialist, IRRI, Dr. Kasturi Goswami, Junior Researcher, IRRI. Mr. Vipin Kumar while addressing the farmers explained on the main objective of the program.

Dr. Kasturi Goswami explained the steps of evaluation process. Mr. Abhijit Handique, RT helped in smooth running of the program. The varieties selected in the cafeteria included local as well as high yielding varieties such as Barpeta Aijung, Sanghatik, Swarna-Sub1, Bangabandhu, Ranjit-Sub1, Balam, Subansiri Joha, Tangaguri, Niranjan and Kola Joha. All these varieties were evaluated on the basis of plant height, tillering ability, disease and pest resistance, grain colour, grain type, anticipated yield etc. The farmers were given 3 sheets each of 2 different colours to vote for three best performing varieties and three least performing varieties after evaluating the above-mentioned characters. After keen observation, Ranjit-Sub1, Bangabandhu and Niranjan were selected as three most preferred varieties, and Balam, Swarna-Sub1 and Tangaguri were selected as least preferred.

Training to Women FPC of Morigaon district

In the on-going Sali season, a rice variety cafeteria was laid out in the seed farm of DAO Morigaon. A field day was organized on November 13, 2021. The program was organised with an objective to evaluate the performance of 10 different paddy varieties grown under same management practice, soils, climatic conditions and to select the most suitable varieties for Morigaon district. Mr Ringkhong Musahari, ADC, Morigaon, Mr. Arup Bora, DAO, Morigaon, Miss BinitaBez, Senior ADO and Dr. Kasturi Goswami, Junior Researcher, IRRI attended the program. The participants in the program included both male and female farmers, KVK scientists and extension agents of Department of Agriculture. The varieties selected in the cafeteria included local as well as high yielding varieties such as Ranjit-Sub1, Bahadur-Sub1, Swarna-Sub1, Aijung, Lal Ganga, Kola Joha, Ranjit, Swarna Mashuri, Green Rice and Tripura Chikan. All these varieties were evaluated on the basis of plant height, tillering ability, disease and pest resistance, grain colour, grain type, anticipated yield etc. The farmers were given 3 sheets each of 2 different colours to vote for three best performing varieties and three least performing varieties after evaluating the above-mentioned characters. After keen observation, Ranjit-Sub1, Ranjit and Bahadur-Sub1 were selected as three most preferred varieties and Aijung, Tripura Chikan and Kola Joha were selected as least preferred.

Contributor: Dr. Kasturi Goswami
Junior Researcher, IRRI, APART

Participatory Rice Variety Evaluation at Regional Agricultural Research Station (RARS), North Lakhimpur

A two-day participatory rice variety evaluation programme was organized by Regional Agricultural Research Station (RARS), North Lakhimpur under Assam Agribusiness and Rural Transformation Project (APART) on Nov 12 and 13, 2021 with the technical support of IRRI.

The programme started with a welcome address by Dr. Prabal Saikia, Chief Scientist, RARS, North Lakhimpur. Dr. D. Chowdhury, Pr. Scientist, RARS, NL discussed the main objective of the programme which was followed by a brief discussion on selection and evaluation of rice varieties by Dr. R. Priyadarshi, IRRI Specialist. Principal Scientist, Dr. T. C. Mahanta, Junior Scientist, Dr. Y. Das, Dr. N.K. Gogoi, Bibha Ozah, Junior Researcher, IRRI, Mr Dibyarishi Bhattacharya, Project Scientist, AAU, APART Ms Jutika Das, Ms Abhilisha Mudoi, Project Associate APART, Ms Porismita Dutta and Research Technician Champak Saikia were present in the meeting. Dr. Vikas Kumar Singh, Rice Breeding Expert, IRRI along with Dr. Mahendra Annumala and Dr. Venkateshwarlu Challa from Hyderabad also participated in the evaluation program.

The rice varieties are raised in such a manner that all the varieties have synchronous flowering / mature at the same time / period. The synchronous flowering / maturity is achieved by staggered nursery sowing. Each variety was raised in multiple replications and put to uniform agronomic practices. Twenty-four varieties including Semi Deep Water Rice (SDWR), Deep Water Rice (DWR), Stress Tolerant Rice Varieties (STRVs), Local Popular Varieties (LPVs) and Premium Quality Rice (PQR) varieties with three replications of each variety making it to a total of seventy-two plots were established in the cafeteria field.

The main focus was on-spot varietal evaluation by different stakeholders such as private seed growers, extension functionaries, farmers, Farmer Producer Companies (FPCs), rice millers, scientists, DoA-ATMA and other govt. officials etc. The varietal selection by the stakeholders was based on important yield parameters such as grain type /quality and other crop characteristics, and it also focused on creating awareness about different STRVs and PQR varieties among different stakeholders for its faster adoption. The drone photography on the 2nd day of evaluation was done by Dr Suranjana Borah, GIS & Remote Sensing Expert, IRRI.

Contributor: Ms. Porismita Dutta, Project Associate, APART, RARS, North Lakhimpur