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APART: RICE WEEKLY

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Mat-type Nursery Bed Preparation under APART, KVK Dhubri

Mat-type nursery bed is a pre-requisite for machine transplanting. In Mat-type nursery, seedlings are established in a layer of soil-FYM mix, arranged on a firm surface (Polythene sheet) and seedlings become ready for transplanting within 15-20 days of sowing. A mat-type nursery bed was prepared for *Sali* paddy demonstration under APART under the guidance of Pradyumana Kumar Mohapatra (Research Technician, IRRI), Akhoy Jyoti Bharadwaj (Junior Researcher, IRRI), Ms. Rimjim S. Bora (APS, APART), Mr Asraful Ahmed and Mr Chandan Bora (RTs, APART) on June 19, 2022 at Khutapara villageof Dhubri district. Such kind of nursery bed was prepared for the first time in that locality when the farmers got a chance to gain an understanding of the procedure involved.







Training on Quality Seed Production under APART, KVK Dhubri

A day-long training on Quality Seed Production (QSP) was organized under objective 1 of APART, by KVK Dhubri for enhancing the knowledge of the farmers of Hatipota village of Dhubri district on June 23, 2022. A total of 30 participants attended the training programme. The programme started with introduction of participants by Ms. Rimjim S. Bora (APS, APART), wherein she briefed about the objectives and importance of using quality seed for cultivation of any crop. Thereafter, the technical session was carried out by Mr. Akhoy J. Bharadwaj (Junior Researcher, IRRI) where he explained the meaning of quality seed and their importance in increasing agricultural output. He further elaborated about the types of seeds, seed cleaning, seed treatment and the method of producing quality seeds. The practical session included seed cleaning by salt solution and seed treatment by using the Carboxin.





Bikash Jyoti Gharphalia, SMS (Agrometeorology), KVK, Dhubri

Contributors



Ashok kamal Gogoi, PA, APART, KVK, Dhubri



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Three-day Training on DSR, IWM , Nursery Management & MTR under APART at KVK, Kokrajhar

On June 13-15, 2022, a three-day training programme on direct seeding of rice, integrated weed management, nursery management & mechanical transplanting of rice was organized by Krishi Vigyan Kendra, Kokrajhar under APART in collaboration with International Rice Research Institute (IRRI). Dr. S.K. Paul (Chief Scientist RARS, Gossaigaon), Dr. Suryakanta Khandai (Associate Scientist, Postharvest & RiceValue Chain), Mr. Akhoy Jyoti Bharadwaj (Junior Researcher, IRRI), Shilpi Devi Borah (Project Associate, APART), Ms NarzinaParbin (APS,APART), Mr. P.K. Mahapatra (RT, IRRI), Mr. Gopal Ch. Roy (RT, APART) were present in the programme. A total of 20 FPC members were present in the training programme. The programme started with the welcome of participants by Miss Shilpi Devi Borah, PA, KVK, Kokrajhar. Dr. S.K. Paul (Chief Scientist RARS, Gossaigaon), gave a brief introduction of the programme to be organised. Dr. Suryakant Khandai (Associate Scientist, Postharvest & RiceValue Chain) started the training programme with a pre-training evaluation to know the present level of knowledge of the participants. After completion of the test,Dr.SuryakantKhandaidisscussed about mat-type nursery, mechanical transplanter,DSR and its advantages using seed drill and drum seeder, and different types of weeds and their management. On the second day, practical session was conducted by the company technician onmechanical transplanter by explaining its operation, repair and maintenance. After that, mat-type nursery was prepared by the participants underthe guidance of Dr Suryakanta Khandai. Onthird day, Dr. Suryakant Khaidai conducted the practical class on power weeder, drumseeder and seed drill machineby explaining each and every parts of the machines. At last, post-training evaluation was conducted to know how much knowledge the participants have gained from the three-day training programme. All the participants were very much satisfied and showed their interest in the machineries for further use in their cultivation. Training was closed with a vote of thanks by Shilpi Devi Borah, PA, APART.



Fig: Three-day training programme on DSR, IWM, Nursery Management & MTR under APART Contributors:



Shilpi Devi Borah, PA, APART, KVK, Kokrajhar



NarzinaParbin APS,APART, KVK, Kokrajhar



Akhoy Jyoti Bharadwaj Junior Researcher, IRRI

Scaling-up Mechanization by Raising Mat-type Nursery: Initiation by RARS, Nagaon

Assam, largely being the agricultural dependent state, has maximum area under paddy cultivation which is grown all year round in three major growing seasons. But in recent times, the paddy farmers are lacking enthusiasm towards its cultivation due to its labor-intensive nature and high cost of production. Among different farm operations, transplanting is very difficult, for which mechanical transplanter is one of the better options for resource-poor farmers of Nagaon district of Assam. In this season, i.e. *Sali* 2022, RARS Nagaon with the technical help of IRRI, has planned about 75 bighas (10 ha) under mechanically transplanted rice. First batch of nursery was prepared at farmer's field on June 19-20, 2022 at Jengoni under Juria Development Block. The farmers were selected from Langia Agro Farmer Producer Company and around 17 farmers were involved in this program.

The nursery was prepared with seeds of variety Bahadur-Sub 1, Ranjit-Sub 1 and Swarna-Sub 1. With the introduction of Stress-Tolerant Rice Varieties (STRVs), RARS Nagaon intends to create a visible impact to encourage mechanization. Dr. Sharmee Gogoi PA, Parthapritam Bora, Research Technician, RARS Nagaon, and Mr Janmejay Biswal, Research Technician, IRRI supported the farmers technically. The farmers were advised to prepare the field properly (ploughing, puddling and levelling). The raised beds were prepared for mat-type nursery one day before, so that the beds settled properly.

During the day of nursery raising, one perforated polythene sheet was spread over the raised bed, and soil & FYM mixture was placed over it in 0.5-inch thick layer by using an iron frame. The soil inside the frame was levelled with the help of an aluminum bar for maintaining uniform thickness. After that, germinated seeds were spread uniformly over the beds followed by covering the beds with local mulching materials. The farmers were advised to use the covering material for 2-3 days and to irrigate the nursery beds at least once every day during the initial five days of nursery preparation followed by flood irrigation between the furrows after 5-6 days of establishing the seedlings.

The members of the group are enthusiastic to learn about this new technology and are hopeful that this will cut their cost of cultivation to a great extent.





Contributor : Janmejay Biswal, Research Technician, IRRI, Nagaon



One-day Training Held under DoA, Bongaigaon

A one-day training under objective II of IRRI supported activities of APART was held at DoA office Bongaigaon on June 22, 2022. The training was graced by the presence of Mr. Amrit Lal Narzary (DAO, Bongaigaon), Mr. Opal Das (SDAO and Nodal Officer, APART), Mr. Debasish Nath (Sr. ADO), Mr Makibur Rahman (DHC), Dr. Anjan Chakravarty (DAMC) and Mr. Akhoy Jyoti Bharadwaj (Junior Researcher, IRRI).

The programme started with the introduction of participants by Mr. Makibur Rahman. It was followed by a lecture of Mr. A. Narzary about the importance of improved cultivation practices. Mr. A. J. Bharadwaj explained about the main objective of the training and laid emphasis on seed cleaning and seed treatment process, best management practices of *Sali* rice cultivation and postharvest practices. It was followed by an interactive session between the farmers and resource persons. The programme ended with a vote of thanks by Dr.Anjan Chakravarty who also spoke about the importance of FPC formation. A total of 30 farmers attended the training programme.

Contributor: Akhoy Jyoti Bharadwaj Junior Researcher (IRRI)





Preparation of Mat-type Nursery for Sali Paddy under KVK, Karbi Anglong

Mate-type nursery was prepared on June 18, 2022 at Hawraghat village under APART, by KVK, Karbi Anglong. The nursery preparationwas carried out with the support of Ms Prakshipta Boruah (SMS, Agronomy), Ms Krishnali Gogoi (PA, APART), Ms Renuwara Parbin (APS, APART), Mr Satya Bora (RT, APART) and Mr Ankur Bora (RT, APART), KVK, Karbi Anglong. The nursery was prepared with seeds of variety Bahadur-Sub 1 to cover 22 bighas of land. APART team and SMS, Agronomy, KVK, Karbi Anglong supported the farmers technically. For preparation of nursery,land was ploughed, puddled, and levelled properly. Raised bed were prepared for raising mat-type nursery followed by covering the bed with perforated polythene sheet of required size. An iron frame was put over the polythene sheet and wet soil free from weeds, stones and clods was applied over the frame. The soil inside the frame was levelled with the help of an aluminium shaft for maintaining uniform thickness. After that, germinated seeds were spread uniformly over the beds followed by covering the beds with local mulching materials for next 2-3 days. The farmers were advised to irrigate the nursery beds at least once every day during initial 5-6 days of establishing of the seedlings. The seedlings in the nursery beds will be ready for transplanting in the main field after 16-20 days.





Training & Demonstration on Rice Value Chain under APART at KVK, Karbi Anglong

On June 22, 2022, a training as well as demonstration programme on Rice Value Chain was organized under APART at Sarihajan village with 35 participants. The training programme started with the welcome address by Ms.Krishnali Gogoi, Project Associate, KVK, Karbi Anglong where she enlightened about APART and briefly described the objectives of the training programme. After that, the training and demonstration programme was led by Mr.Vivek Kumar,IRRI Specialist. He began his lecture by explaining the concept of rice value chain to the farmers. He described the practical use and importance of IRRI super bag for storing the grains after treshing and cleaning, and also demonstrated use of rice grinding machine. The day-long training and demonstration programme concluded with vote of thanks from Ms. Renuwara Parbin, APS, APART, KVK, Karbi Anglong.





One-day Training on Best Management Practices of Rice under APART, KVK, Karbi Anglong

On June23, 2022, one training on Best Management Practices of Rice was organized under APART, KVK, Karbi Anglong with 30 participants. The training programme started with welcome address by Ms. Krishnali Gogoi, Project Associate, KVK, Karbi Anglog where she enlightened about APART and briefly described the objective of organising the training programme. Dr. Abhilasha Modui delivered a lecture on best management practices of rice. She discussed about site selection, field preparation, planting methods, nutrient management, pesticide application and harvesting of rice. The training programme concluded with vote of thanks from Ms. Renuwara Parbin, APS, APART, KVK, Karbi Anglong.





Demonstration on Rice Value Chain under APART, KVK, Karbi Anglong

On June 22, 2022, a training as well as demonstration programme on Rice Value Chain was organized under APART at rongplimplam village with 30 participants. The training programme started with welcome address by Ms. Krishnali Gogoi, Project Associate, KVK, Karbi Anglog where she enlightened about APART and briefly described the objectives of the training programme. After that, the training and demonstration programme was led by Mr. Saurajyoti Baishya, IRRI Specialist, Postharvest and RVC. He explained the concept of rice value chain, and the practical use and impotance of IRRI super bag for storing the grains after treshing and cleaning. Moreover, he demonstrated how to use Rice Grinding Machine as well as Digital Grain Moisture Meter for estimating moisture contentin the grains followed by discussionon the percentage of moisture present that should be present in the grains while harvesting (22-25%), threshing(20-25% for mechanical threshing and <20% for hand threshing), storing(<12% and upto 9% for long term storage) and milling purpose(13-14%). By demonstrating the uses of Digital MoistureMeter he explained to the farmers about the losses that can be minimized during the transit of rice grains from field to the grain storage house. Later, he summarised the training

programme; also the questions and doubts of the farmers were solved and cleared. The training programme concluded with vote of thanks from Ms. Renuwara Parbin, APS, APART, KVK, Karbi Anglong. The farmers were highly motivated by the practical demonstration of Grain Moisture Meter and the use of IRRI super bag.







KrishnaliGogoi (PA, APART) KVK,Karbi Anglong



RenuwaraParbin (APS,APART)

KVK, Karbi Anglong

Preparation of Mat-type Nursery under RARS, Gossaigaon

On June 20, 2022, a mat-type nursery was laid out and prepared in Rupshivillage of Kokrajhar district. Thefarmer named Mr.Jayanta Barman of Rupshi village received Bahadur-Sub1 variety under APART from RARS, Gossaigaon along with technical support from IRRI. He showed interest to adopt mechanical transplanting of rice by laying mat-type nursery as he wanted to harness the benefits of the new technology. Hence, he decided to prepare wet mat-type nursery which would cover an area of 1 ha, under APART demonstration. The farmer was technically supported by Mr. Monjit Das (RT, RARS, Gossaigaon) and Mr. P. Mahapatra (RT, IRRI) on the day of raising the nursery. The farmer was quite blissed to adopt the new technology which will lower the cost of rice production.



Contributor: Anjela Deka PA, APART,RARS,Gossaigaon






