



BARC

# Newsletter

Towards Building Advance Intelligent System for Agriculture

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## Khamari Mobile App : A Milestone in Smart Farming Technology



*Hon'ble Chief Guests Lt. Gen. Md. Jahangir Alam Chowdhury (Retd.) Inaugurated the Khamari Mobile App*

The Khamari Mobile App, developed by the Bangladesh Agricultural Research Council (BARC) under Crop Zoning Project, was officially launched at the Department of Agricultural Extension (DAE) Horticulture Centre in Rajalakh, Savar, Dhaka, on 26 February 2025. This innovative app utilizes geospatial technology to provide farmers with location-specific, crop-wise fertilizer recommendations based on soil type, nutrient status, and crop requirements, promoting balanced fertilizer use and enhancing crop yields. Lt. Gen. Md. Jahangir Alam Chowdhury (Retd.), Hon'ble Adviser for Agriculture and Home Affairs, inaugurated the app, emphasizing its potential in transforming precision agriculture and instructing the DAE to promote its adoption among farmers. Dr. Mohammad Emdad Ullah Mian,

Secretary of the Ministry of Agriculture, highlighted the app as an essential tool for the farming community and advocated for its development into a comprehensive digital platform for all farming needs. Dr. Nazmun Nahar Karim, Executive Chairman, BARC, expressed optimism that the app would contribute to the resilience of agricultural systems, foster rural economic development, and enhance food security. Field trials conducted during 2022-23 and 2023-24 cropping seasons demonstrated significant financial benefits from fertilizer savings and increased yields, with farmers reporting up to 33.99% savings in fertilizer costs and yield increases of up to 10.43% in various crops. The app, developed in Bengali to ensure accessibility for farmers of all digital literacy levels, is currently available in version 7.0

and can be downloaded from the Google Play Store and the Mac App Store. With strong support from policymakers, extension personnel, researchers, and farmers, the Khamari app is poised to revolutionize Bangladesh's agricultural landscape, driving the nation toward a more productive, sustainable, and digitally empowered future. Dr. Md. Abdus Salam, Member Director (Crops), BARC and Coordinator of the Crop Zoning Project, presented field trial results from the 2022-23 and 2023-24 cropping seasons, highlighting significant fertilizer savings and yield increases achieved through the Khamari App's recommendations. He emphasized the need for immediate field-level adoption to enhance productivity. Hasan Md. Hamidur Rahman, Director (Computer & GIS) at

BARC and Principal Investigator of the Crop Zoning Project, demonstrated the app's features and backend technologies. Farmers involved in trials for boro rice, potato, mustard, onion, and

broccoli reported that following the app's guidance led to better yields and cost savings, expressing their intent to use it for all future crops. The Khamari App exemplifies the integration of Fourth Industrial

Revolution (4IR) technologies in agriculture, positioning itself as a transformative tool for smart farming in Bangladesh.

## Training on Use of Biotechnological Tools for Varietal Development

Crops Division of the Bangladesh Agricultural Research Council organized a five-day advanced training program titled *Use of Biotechnological Tools for Varietal Development*. The training was held on 12-16 January 2025 at BARC and at Genome Research Centre, Bangladesh Jute Research Institute (BJRI), Dhaka.

Twenty-two participants from various NARS institutes (BARC, BARI, BRRI, BINA, BJRI, BSRI, CDB), as well as from BAU, GAU, and SAU, took part in the program. The inaugural session was graced by Dr. Abdus Salam, Member Director (Crops), BARC, as chief guest. Dr. Shah Md. Monir Hossain, CSO (Crops), BARC attended as special guest, while Dr. Md. Mahfuz



*Training on Use of Biotechnological Tools for Varietal Development*

Alam, PSO (Crops), BARC presided over the inaugural session and delivered the welcome address. The program was directed by Dr. Abdus Salam and coordinated by Dr. Md. Mahfuz Alam. Over the course of the training, twenty-five lectures and hands-on sessions were conducted by esteemed resource

persons, covering topics such as agricultural transformation in Bangladesh and bioinformatics for sustainable development. In the closing session, Dr. Nazmun Nahar Karim, Executive Chairman, BARC was present as chief guest and distributed training certificates among the trainees.

## Training on Production and Market Trends Forecasting Using Statistical Modeling

A five-day training program on *Production and Market Trends Forecasting Using Statistical Modeling* was held on 05-09 January 2025 at BARC, organized by AERS Division. The distinguished resource speakers were from Bangladesh Agricultural University, Mymensingh. The training aimed to build participants' capacity in agricultural data forecasting, covering fundamentals of forecasting, scenario and pattern analysis, and selection of appropriate time series methods. The hands-on sessions included application of statistical techniques using real datasets and training in STATA, SPSS, and R. The ultimate



*Training on Production and Market Trends Forecasting Using Statistical Modeling*

goal was to enhance decision-making, optimize resource use, and boost agricultural productivity. Twenty agricultural economists from NARS institutes including BARC, BARI, BRRI, BSRI, BINA,

BWMRI, BLRI, and BFRI and from SAU and GAU participated. Dr. Nazmun Nahar Karim, EC, BARC, attended the closing session as chief guest and handed over the certificates to the participants.

## Workshop on Impact of LDC Graduation in Agricultural Exports: Challenges and Way Forward

A workshop titled *Impact of LDC Graduation in Agricultural Exports: Challenges and Way Forward* was held on 8 January 2025 at BARC. Dr. Md. Mahmudur Rahman, Additional Secretary, PPC Wing, Ministry of Agriculture, attended as the chief guest. Dr. Md. Mosharraf Uddin Molla, Member Director (AERS), BARC, presented the keynote paper. Distinguished discussants included Mr. Md. Hafizur Rahman, Administrator, FBCCI and former Additional Secretary, Ministry of Commerce, and Dr. Md. Wakilur Rahman, Professor, Department of Rural Sociology, Bangladesh Agricultural University. The workshop was chaired by Dr. Nazmun Nahar Karim, Executive



*Workshop on Impact of LDC Graduation in Agricultural Exports: Challenges and Way Forward*

Chairman, BARC. Dr. Md. Abdus Salam, PSO (AERS) and DPD, Partner Project, BARC, delivered the welcome speech, outlining the workshop's context and objectives.

Representatives from the Ministry of Agriculture, Ministry of Fisheries and Livestock, Agricultural Universities, and other key stakeholders.

## Hands-on Training on International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) Data Management

Crops Division, Bangladesh Agricultural Research Council (BARC), organized three-day *Hands-on Training on ITPGRFA Data Management* on 10-12 February 2025 at BARC. The main objective of the training program was to develop the necessary skills of participants to enhance data management and accessibility of Plant Genetic Resources (PGRs) within the framework of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Twenty three participants from 18 institutions, including 10 research institutes of the National Agricultural Research System (NARS), different public universities and private organizations attended the training.



*Training on ITPGRFA Data Management*

The inaugural ceremony of the training program was graced by the chief guest Dr. Md. Abdus Salam, Member Director (Crops), BARC. Mr. Hasan Md. Hamidur Rahman, Director (Computer & GIS) and Mr. Md. Abeed Hossain Chowdhury, Former Director (Computer and GIS) BARC attended as special guest. Dr. Md. Rezwan Molla,

Principal Scientific Officer (Crops), BARC gave the welcome address and highlighted the objectives of the training program as the course coordinator. In the closing session, Dr. Md. Abdus Salam, Member Director (Crops), BARC distributed the certificates among the participants.

## Training on Water Efficient and Climate Smart Irrigation Management

A five-day training program (2<sup>nd</sup> Batch) on *Water-Efficient and Climate-Smart Irrigation Management*, organized by the Agricultural Engineering Unit, Natural Resources Management Division, was held during 5-9 January 2025 at BARC. The program aimed to equip participants with essential skills and knowledge in climate-smart irrigation practices, sustainable water use, and climate resilience. It featured a dynamic blend of expert-led presentations, interactive brainstorming sessions, and two days of field and lab visits. Twenty-five participants from 15 institutions including BARC, BARI, BRRI, BINA, BWMRI, WARPO, DAE, BADC, BMDA, SAU, and GAU attended. Renowned scientists, professors, and experts from government



*Training on Water Efficient and Climate Smart Irrigation Management*

bodies, private organizations, and universities delivered lectures on a wide range of topics, such as surface and groundwater management, automated and water-saving technologies, irrigation scheduling, and adaptive strategies tailored to Bangladesh's agro-climatic conditions. Field visits on Day 3 and 4 included the Irrigation and Water Management Research fields of

BARI and BRRI and solar irrigation pumps of BADC in Gazipur. In the closing session, Dr. Nazmun Nahar Karim, Executive Chairman of BARC provided the certificates to the trainees and delivered insightful remarks as chief guest. Dr. Md. Baktear Hossain, Member Director (NRM), BARC presided over and officially closed the training program.

## Training on Awareness Building on Act and Policies of Bangladesh Agriculture

Crops Division of Bangladesh Agricultural Research Council (BARC), organized three-day Training program on *Awareness Building on Act and Policies of Bangladesh Agriculture* on 25-27 February 2025 at BARC. A total of 40 participants from 10 NARS institutes, DAE, BADC, SCA, NATA, BARTAN, NIB, Lal Teer Seed Ltd., ACI Seed, BRAC Seed, Supreme Seed Ltd. and BELA were present as participants. The objective of the training course was to enhance participant's understanding on act and policies of Bangladesh agriculture. Dr. Md. Abdus Salam, Member Director,



*Training on Awareness Building on Act and Policies of Bangladesh Agriculture*

Crops Division inaugurated the training program on 25 February, 2025 as chief guest while Dr. Shah Md. Monir Hossain, Chief Scientific Officer (Crops), BARC chaired the program. In the closing

session, Dr. Mohammad Rafiqul Islam, Member Director (Planning and Evaluation), BARC distributed the certificates among the participants.

## Training on Postharvest Processing Technology for Food and Nutritional Security

A five-day training program (2<sup>nd</sup> Batch) on *Postharvest Processing Technology for Food and*

*Nutritional Security*, organized by the Agricultural Engineering Unit, Natural Resources Management

Division, was held on 26-30 January 2025 at BARC. The program aimed to enhance participants' knowledge

of advanced postharvest techniques to improve food quality, safety, and nutrition while minimizing losses. Twenty-five participants from 15 institutions (BARC, BARI, BRRI, BINA, BWMRI, BADC, DAE, BCSIR, BSFA, RDA, BSFIC, SAU, GAU, DU, and Pran Foods Ltd.) took part in a dynamic mix of expert-led lectures, lab visits, and brainstorming sessions. Renowned scientists and professors delivered sessions on food science, nutrition, postharvest technologies, and circular economy practices. Participants visited key facilities at BARI, BRRI, and Pran Industrial



*Training on Postharvest Processing Technology*

Park in Narsingdi. The training was inaugurated by Dr. Md. Baktear Hossain, Member Director (NRM), BARC. The closing ceremony was graced by Dr. Nazmun Nahar

Karim, Executive Chairman, BARC, provided the certificates and delivered insightful remarks. Dr. Md. Baktear Hossain, Member Director (NRM), presided over the event's conclusion.

### **Meeting on National Agricultural Policy Decision**

National Agricultural Policy Decision meeting was held on 23 March 2025 at BARC, chaired by EC, BARC Dr. Nazmun Nahar, to review departmental agendas in line with Decision 10.8 of *The National Agricultural Policy Working Committee*. Representatives from NARS institutions and BADC were present. The meeting was focused on forming a technical committee to assess regional rice variety demands, developing high-quality, region-specific crop varieties with dual naming (official and popular), and establishing dedicated cooling chambers for various vegetables. The Meeting addressed promoting safe pesticide use among Sundarbans fishing communities, reducing air freight costs for agricultural exports, and launching



*Meeting on National Agricultural Policy Decision*

a startup fund to engage educated unemployed youth in agro-processing, marketing, cold storage, and transportation. A review committee was proposed, comprising nominated representatives from BARI, BRRI, BINA, BJRI, BSRI, BWMRI, CDB, BMDA, DAM, and BADC.

Nomination was proposed to be submitted within seven working days. The committee will be led by the Member Director (Crops), BARC, with a representative from the DAE Field Service Wing as Member Secretary. The meeting concluded with a vote of thanks from the Chair.

### **Training Program on Use of Fertilizer Recommendation Guide-2024**

The Soils Unit of BARC conducted two batches of training program on *Use of Fertilizer Recommendation Guide-2024* held at BARC during 5-9 January (1<sup>st</sup> batch) and 9-13 February (2<sup>nd</sup> batch) 2025, funded under BARC's PARTNER program, each session trained 25 participants

from NARS institutes (BARC, BARI, BRRI, BINA, BSRI, BFRI, BJRI, BWMRI), BADC, and DAE. The inaugural session was chaired by Dr. Md. Baktear Hossain Member Director, NRM, BARC. Dr. Md. Rafiqul Islam, Director Research, BRRI attended as special

guest. Through expert-led presentations, the training covered fertilizer management, rationale for use, climate-smart soil practices, and strategies to boost soil health and crop productivity. This initiative aims to empower agricultural professionals with knowledge to

promote sustainable and efficient fertilizer use across Bangladesh. At the closing session, certificates were awarded among the participants. Mr. Md Roushon Alam, Additional Director (Inputs), DAE was present as special guest and Dr. Md. Baktear Hossain, Member Director, NRM, BARC, chaired the closing session.



*Training on Use of Fertilizer Recommendation Guide-2024*

## Training on Climate Smart Agriculture for Adaptation and Mitigation

Three-day training on *Climate Smart Agriculture for Adaptation and Mitigation* was organized by Forestry unit, NRM Division from 18-20 February 2025, at SAARC Agriculture Centre, BARC. Thirty participants from NARS organizations including BARI, BFRI, and BARC and the NGO sector attended, with six female participants reflecting inclusive representation.

Attendees got benefited from eighteen thematic lectures delivered by renowned scientists and subject matter experts, covering a wide range of topics relevant to climate-smart agriculture, including adaptive strategies, mitigation techniques, and sustainable resource management.

The training concluded with a certificate distribution ceremony, where Dr. Md. Baktear Hossain,



*Training Program on Climate Smart Agriculture for Adaptation and Mitigation*

Course Director and Member Director, Natural Resources Management Division, BARC, along with Dr. Md. Saifullah, Course Coordinator and Member Director (A&F) and CSO (Forestry) (AC), BARC, distributed certificates among the participants, offering words of encouragement and appreciation for their active

engagement. The well-received training is expected to support the integration of climate-smart practices into research, extension, and field-level efforts in Bangladesh. The training is expected to support the integration of climate-smart practices into research, extension, and field-level efforts in Bangladesh.

## Training on Seed Quality Management

A three-day training program on Seed Quality Management was held on 22-24 February 2025. The event was organized by Crops Division, BARC with the financial assistance from PARTNER Program, APCU-BARC. Inaugural session featured a welcome address by Dr. Md. Jamal Uddin, PSO(Crops), BARC. The session was chaired by Dr. Md. Abdus Salam, Member



*Certificate Giving Ceremony of the Training on Seed Quality Management*

Director (Crops), BARC. The training program was attended by 25 participants from various NARS Institutions (BARC, BARI, BRRI, BINA, BJRI, BSRI, BFRI, BWMRI, CDB, SCA, BADC and BMDA) and Agricultural Universities (BAU, Mymensingh; SAU, Dhaka; GAU, Gazipur and

SAU, Sylhet). Participants engaged in 15 technical sessions, featuring lectures delivered by renowned resource persons, including scientists, university teachers, and officers from public and private sectors. These sessions provided in-depth knowledge on key topics related to seed quality and its

management. During the closing session, Dr. Md. Abdus Salam, Member Director (Crops), BARC, gave certificates to the participants and delivered concluding remarks, marking the successful completion of the program.

## Training on Application of Gene Editing Tools for Sustainable Development in Agriculture

A 5-day long training program on *Application of Gene Editing Tools for Sustainable Development in Agriculture* was held on 23-27 February 2025 at the SAARC Agriculture Centre, organized by Livestock Division, BARC. The aim of the training was to enhance knowledge on genome editing tools to improve productivity and sustainability in agriculture and the livestock sector. The program was inaugurated by Dr. Md. Harunur Rashid, Director of SAARC Agriculture Centre. Dr. Mohammad Rafiqul Islam, Member Director (Planning and Evaluation) and CSO (Livestock), BARC Presided over the program. The program was directed and coordinated by Dr. Mohammad Rafiqul Islam, MD (Planning and Evaluation) and CSO (Livestock), BARC and Dr. Md.



*Training Events of Gene Editing Tools for Sustainable Development in Agriculture*

Masud Rana, PSO (Livestock) BARC, respectively. Twenty-five participants, including researchers, officers, and academicians from NARS institutes (BARI, BRRI, BLRI, BJRI, BINA, BFRI), NIB, DLS, DoF, SAU, GAU, BAU, and Gono Bishwabidyalay, took part in the program. Expert resource persons delivered lectures on a wide range of topics, including

advancements in agriculture, CRISPR-Cas technology, base and prime editing, RNA interference, epigenome editing, optogenetics, transposon- and protein-enabled genome editing, TALENs, ZFNs, and homologous recombination. The program concluded successfully with the distribution of certificates among the participants.

## Advanced Training on Production and Quality Control of Biopesticides

An advanced training on *Production and Quality Control of Biopesticides* was organized by the Crops Division of BARC from 18-20 February 2025.

Participants included representatives from various NARS institutes, including BARC, BARI, BRRI, BINA, BJRI, BSRI, and CDB, along with faculty from BAU, GAU, and SAU. The inaugural session of the training program was graced by the chief guest Dr. Md. Abdus Salam, Member Director (Crops). Dr. Shah Md. Monir



*Participants on Training on Production and Quality Control of Biopesticides*

Hossain, CSO (Crops), BARC, was present as the special guest, while Dr. Md. Mahfuz Alam, PSO

(Crops), BARC gave welcome address and highlighted the objectives of the training program

as the course coordinator. Topics covered included commercial production, formulation, and quality management of biopesticides, as well as the opportunities and

challenges of using microbial biopesticides in agriculture. Hands-on training focused on mass rearing techniques for biocontrol of major insect pests, culturing of

*Trichoderma* species, and the commercialization of biopesticides for pest and disease control.

## Training on Farming Systems Research and Development

Planning and Evaluation Division, Bangladesh Agricultural Research Council (BARC) organized a five-day training program on *Farming Systems Research and Development* on 16–20 February 2025 at BARC. A total of 25 scientists including officers from NARS and other agricultural organizations were present as participants. The training program was funded by the Program on Agricultural and Rural Transformation for Nutrition, PARTNER, APCU-BARC. Dr. Mohammad Rafiqul Islam, Member Director (Planning and Evaluation), BARC was present as a chief guest while Dr. A B M Khaldun, Principal



*Certificates Distribution in the Farming System Research and Development Training Program*

Scientific Officer, Planning and Evaluation Division, BARC chaired the inaugural session. A total of 23 different topics on Farming Systems Research and Development were presented and discussed. Resource

persons conducted lectures and practical sessions on the specific fields. The program concluded successfully with the distribution of certificates among the participants.

## Training Program on Antimicrobial Resistance in Bangladesh

Livestock Division, Bangladesh Agricultural Research Council (BARC) organized a five-day training program on *Antimicrobial Resistance in Bangladesh* held on 26-30 January 2025 at Central Disease Investigation Laboratory (CDIL), Gulistan, Dhaka. The main objective of the training program was to strengthen knowledge on antimicrobial resistance through surveillance and research in livestock and poultry sector of Bangladesh among the NARS scientists, departmental officers and faculty members. The inaugural ceremony of the training program was graced by the chief guest Dr. Md. Abu Sufiun, Director General, Department of Livestock Services (DLS); Dr. Abdul Aziz Al Mamun, Director, Central Veterinary



*Training Program on Antimicrobial Resistance in Bangladesh*

Hospital, DLS was present as a special guest and Dr. Mohammad Rafiqul Islam, Member Director (Planning and Evaluation) and CSO (Livestock), BARC chaired the inaugural event. Dr. Md. Golam Azam Chowdhury, Principal Scientific Officer (PSO), CDIL, DLS gave the welcome address with highlighted training objectives and

Dr. Md. Masud Rana, PSO, Livestock Division, BARC coordinated the training program. Twenty five researchers, departmental officers and faculty members from BLRI, BFRI, NIB, DLS (LRI, CVH, CDIL, QC Lab), DoF and SAU, PSTU, GAU, Gono Bishwabidyalay participated in the training program. Twenty five

technical session and practical classes were successfully conducted by respective resource persons on AMR/AMU situation in Bangladesh, global threat, nationally AMR surveillance initiative, irrational use of antimicrobials and its hazards, rational basis of antibiotic therapy according to AMU guidelines,

biosafety and biosecurity for AMR laboratory, choice of antibiotics for treatment of livestock and poultry, alternative of antibiotic uses, molecular mechanism and molecular detection of AMR, virulence genes in bacterial, AWaRe categorization and therapeutic application in farm practices, hands on collection, transportation,

preservation and processing of bacteriological samples for AMR surveillance, antimicrobial sensitive testing and interpretation, bacterial species identification using MALDI-TOF etc. After successful completion of the training, certificates were awarded to the participants.

## Training on Advanced Forecasting Methods for Agricultural Data Analysis

A five-day training program on *Advanced Forecasting Methods for Agricultural Data Analysis* was held on 23-27 February 2025 at BARC, organized by the AERS Division. The sessions were led by distinguished professors from Bangladesh Agricultural University, Mymensingh.

In the training program a total of 21 agricultural economists participated, including 17 from NARS institutes (BARI, BRRI, CDB, BWMRI, BLRI, BFRI) and 4 from Sher-e-Bangla and Gazipur Agricultural Universities. The training aimed to enhance participants' ability to go beyond basic forecasting and apply advanced analytical methods to



*Training on Advanced Forecasting Methods for Agricultural Data Analysis*

agricultural data for improved decision-making and sustainability. Participants gained expertise in selecting suitable forecasting techniques, applying models with relevant tools, evaluating performance, integrating external

variables, and effectively communicating insights. Dr. Md. Mosharraf Uddin Molla, Member Director (AERS), BARC, graced the concluding session as chief guest and handed over the certificates to the participants.

## Awareness Campaign on Nutrition for the Adolescent and Establishment of Nutrition Corner at School

The Nutrition Unit of BARC, in collaboration with the Ministry of Agriculture and the Ministry of Education, organized two Awareness Campaigns on *Food and Nutrition for adolescents* at the University of Rajshahi on 26 January 2025 and Chattogram Veterinary and Animal Sciences University on 20 February 2025. The initiatives reached 200 adolescents and 100 teachers from 20 schools in Rajshahi and Chattogram, alongside various officials. The campaigns aimed to raise awareness among school-level



*Awareness Campaign on Nutrition*

adolescents about malnutrition, the importance of locally available nutritious foods, and healthy dietary habits. As adolescents are among

the most vulnerable groups in terms of nutrition, these programs served as a crucial step toward ensuring nutritional security.

In Rajshahi, the event featured Prof. Dr. Saleh Hasan Naqib, Vice-Chancellor of Rajshahi University, as the chief guest, with Pro-Vice Chancellor (Administration) Prof. Dr. Mohammad Main Uddin and Pro-VC (Education) Prof. Dr. Farid Uddin Khan as special guests. Dr. Harunur Rashid, Director (Nutrition), BARC, chaired both the inaugural and closing sessions. At

the Chattogram event, Prof. Dr. A.K.M. Saifuddin, Director (External Affairs), at CVASU, was the chief guest. Dr. Mohammad Mahbubur Rahman (Proctor), CVASU and Dr. Mohammad Rashedul Alam (Director of Student Welfare), CVASU were present as special guests. Four key note papers were presented covering nutrition, safety and hygiene, adolescent behavior, and the responsibilities of

families, schools, society, and the nation. The sessions were interactive, with enthusiastic participation from both students and teachers. Attendees were encouraged to establish "Nutrition Corners" at their schools to spread the messages further and requested additional fact sheets and materials to support the initiative.

## Training on IoT Based Precision Agriculture for Sustainable Production

A five-day training program on *IoT-Based Precision Agriculture for Sustainable Production*, organized by the Agricultural Engineering Unit, NRM Division, was held on 23-27 February 2025 at BARC. The training aimed to equip participants with IoT-based precision agriculture techniques to optimize resources, boost productivity, and promote sustainable, data-driven practices. Through presentations, a two-day lab visit, and interactive brainstorming sessions, participants explored innovative solutions to enhance efficiency and minimize environmental impact in agriculture. Twenty-five participants from twenty institutes (BARC, BARI, BRRI, BINA, BJRI, BWMRI, BLRI, BFRI, BADC, BMDA, DAE, BCSIR, RDA, SRDI, BTRI, CDB, BAU, SAU, GAU, and BUET) attended the training.



*Training on IoT Based Precision Agriculture for Sustainable Production*

Renowned scientists and professors with experience in IoT-based precision agriculture delivered lectures on various topics, focusing on infrastructure design, adoption, profitability, opportunities, challenges, and the plans and policies of IoT-based precision agriculture. Participants visited IoT-enabled labs and research sites at Nodes Digital Ltd. in Dhaka and

the ASICT Division of BARI in Gazipur on the third and fourth days. The program was inaugurated on 26 January 2025 by Dr. Md. Baktar Hossain, Member Director (NRM), BARC. He also presided over the closing ceremony and distributed certificates among the participants.

## National Technical Committee Meeting and Activities on GAP Implementation in Bangladesh- 2025

The fifth National Technical Committee Meeting on *The Implementation of the Good Agricultural Practices (GAP) Policy 2020* was held on 20 March 2025 at BARC, chaired by Dr. Nazmun Nahar Karim, Executive Chairman, BARC. Dr. Abdus Salam, Member Director (Crop) and

Convener, GAP Unit, presented the unit's progress, while Dr. Zakiah Rahman Moni, Principal Scientific Officer (Nutrition) and Member Secretary of the GAP Unit, presented a technical report along with seven new GAP protocols. It was recommended that a section on "Postharvest Handling and

Transportation" be incorporated into all protocols prior to submission to the Steering Committee. The GAP checklist was also presented and approved, pending final edits. Progress reports were shared by the Department of Agricultural Extension (DAE), Department of Agricultural

Marketing (DAM), and the Hortex Foundation. As part of protocol development under the PARTNER project, three validation meetings were held in early January to review draft protocols for seven crops, which were presented by BARI-nominated scientists and revised after detailed discussions. A stakeholder orientation on 23 January at BARC brought together 100 participants from 32 organizations, leading to the formation of two sub-committees for finalizing fruit and vegetable protocols. Capacity-building efforts included a 5-day training for 25 BADC officers from 12–16 January at Beej Bhavan, Gabtoli, and two Training of Trainers (ToT) batches from 16–20 February at BARC involving 50 officers and scientists from various public and private institutions. Additionally, three



National Technical Committee Meeting and Related GAP Implementation Activities in Bangladesh- 2025

farmer training sessions were held in Chapainawabganj, Rajshahi, and Moulvibazar, training 75 farmers on GAP practices for mango, guava, and bitter gourd. Two staff training batches for 50 Sub-Assistant Agricultural Officers and Scientific Assistants were conducted from 4–6 February at the Mushroom

Development Institute, Savar. A farmer sensitization field program was also held in Mithapukur Upazila, Rangpur, where 120 farmers and officials attended a demonstration of GAP-validated potato cultivation, chaired by Dr. Abdus Salam.

## Visit Abroad

### Twentieth Regular Session of CGRFA

Dr. Md. Abdus Salam, Member Director (Crops) at the Bangladesh Agricultural Research Council (BARC) and National Focal Point (NFP) of ITPGRFA, attended the *Twentieth Regular Session of the Commission on Genetic Resources for Food and Agriculture (CGRFA)* in Rome, Italy, during 23-28 March 2025. Total 275 contracting parties were attended the meeting. The session was preceded by one day of regional and inter-regional consultations.



Twentieth Regular Session of Commission on Genetic Resources for FAO

Key discussions during the session included the role of genetic resources for food and agriculture in mitigating and adapting to climate change, reports from various sessions of technical and legal expert teams, and the implementation of access and

benefit-sharing measures. The session also addressed issues such as digital sequence information, biodiversity for food and agriculture, aquatic genetic resources, and animal genetic resources, with particular attention to their conservation, sustainable use, and development. Furthermore, the session focused on the

preparation of several state reports, including those on plant, aquatic, and animal genetic resources. Other discussions covered the role of microorganisms and invertebrates in food processing, edible fungi, seed policies, forest genetic resources, and cooperation with international organizations and instruments.

The BARC Newsletter is published quarterly by Bangladesh Agricultural Research Council (BARC) to provide news and information on agricultural research and development of the NARS and other concerned organizations in Bangladesh.

Any query concerning the Newsletter or its contents, comments and suggestions for our endeavour would highly be appreciated.

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