



BARC

# Newsletter

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## Dr. Nazmun Nahar Karim: The New Executive Chairman of BARC

Dr. Nazmun Nahar Karim joined Bangladesh Agricultural Research Council (BARC) as Executive Chairman (Routine Charge) on 19 August 2024. Before assuming the post, she was serving as Member Director (Livestock, Grade-2) of BARC.

She started her research career as Scientific Officer at Bangladesh Institute of Nuclear Agriculture (BINA). Dr. Karim joined at BARC on 14 March 2013 as Principal Scientific Officer (Agril. Engineering Unit).



Dr. Nazmun Nahar Karim

## National Workshop on Challenges and Opportunities of Seed Sector in Bangladesh: Public and Private Partnership



Hon'ble Guests of the Inaugural Session of the National Workshop

A workshop titled *Challenges and Opportunities of the Seed Sector in Bangladesh: Public and Private Partnership* was held on December 22, 2024, at BARC. The event aimed to enhance coordination between government and private seed-producing organizations to ensure the production and supply of

high-quality seeds across the country.

The workshop was graced by Dr. Mohammad Emdad Ullah Mian, Secretary of the Ministry of Agriculture, as the chief guest. It was presided over by Dr. Nazmun Nahar Karim, EC, BARC. Special guests included Mr. Md. Ruhul

Amin Khan, Chairman, BADC; Ms. Mosammat Johra Khatun, Director General of the Seed Wing, Ministry of Agriculture; and Mr. Md. Anis Ud Dowla, President of the Bangladesh Seed Association (BSA). Members of the BSA, representatives from agricultural institutions, chiefs of several

ministries and agencies within the MoA, and stakeholders from a range of commercial businesses also attended the session. Subsequently, three papers were presented by NARS institutions, BADC, and BSA. On behalf of the NARS

institutions, Dr. Khondoker, Md. Iftekharuddaula, Chief Scientific Officer and Head of the Plant Breeding Division at BRRI, presented a paper on the current challenges and solutions in quality seed research, production, storage,

and supply in Bangladesh. The workshop provided with a platform for meaningful discussions and collaboration between public and private stakeholders, fostering strategies to strengthen the seed sector in Bangladesh.

## Orientation Workshop on Bangladesh GAP Standard and GAP Protocol

A day-long *Orientation Workshop on Bangladesh GAP Standard and GAP Protocol* was organized by the GAP Unit, Crops Division, BARC on December 3, 2024, at BARC. The event brought together 100 stakeholders from various organizations. Dr. Md. Mahmudur Rahman, Additional Secretary, PPC Wing, MoA, attended as the chief guest, while Dr. Nazmun Nahar Karim, EC, BARC, graced the occasion as the guest of honor. The workshop was further distinguished by the presence of Md. Mizanur Rahman, program coordinator, PARTNER, DAE; Dr. Md. Shahinul Islam, Director, Administration and Finance Wing, DAE; and Mr. Md. Saiful Alam, Director, Plant Protection Wing, DAE, who participated as special guests. The session was chaired by Dr. Md. Abdus Salam, Member Director (Crops) & Convener, GAP Unit, BARC.

The event commenced with a



*Pictorial view of the Inaugural Session of the Orientation Workshop on GAP Standard and Protocol*

welcome address by Dr. Md. Asrafal Alam, APD, PARTNER, APCU, BARC. This was followed by an insightful presentation by Dr. Zakiah Rahman Moni, PSO (Nutrition) and Member Secretary, GAP Unit, BARC, on Bangladesh GAP Standard and GAP Protocol. She highlighted that in the FY 2023-24, a total of eight crop-specific GAP protocols were developed and published, covering

Mango, Jackfruit, Guava, Brinjal, Yardlong Bean, Pointed Gourd, Gourd, and Green Papaya. These protocols, along with the Bangladesh GAP Standard, were formally handed over to the DAE during the workshop. The event served as a significant platform for fostering awareness and collaboration among stakeholders on the implementation and adoption of GAP standards in Bangladesh.

## Annual Review Workshop on Crop Improvement Programs of NARS Institutes: Research Progress (2023-24) and Research Programs (2024-25)

The annual review workshop on *Crop Improvement Program of NARS Institutes* was hosted by the Crops Division of BARC on September 22-23, 2024. The objectives of workshops were to assess the NARS institutes research

progress for 2023-24 and research agendas for 2024-25. In order to prevent research duplication, six NARS institutes viz., BRRI, BINA, BJRI, BSRTI, BWMRI, and CDB presented their research progress for 2023-24 and their research

programs for 2024-25 after evaluating suggested programs that aligned with different national policy documents and research priorities. Scientists and academia of the relevant fields of the research institutes and Faculty members of

different Agricultural Universities attended the workshop as expert members and provided critical remarks and suggestions for improvement that need to be incorporated while planning future research programs.

Dr. Nazmun Nahar Karim, EC, BARC, and Dr. Md. Abdus Salam, Member Director (Crops), BARC attended the workshop's inaugural session as chief guest and chairperson, respectively. Dr. Karim praised scientists for their exceptional contributions to current agricultural success, particularly in the areas of rice self-sufficiency and high crop production rates relative to past output. She also recommended establishing a research program based on the future global food need. Dr. Md. Abdus Salam, Member Director (Crops) expressed his sincere gratitude to the chair of the technical session, the expert members, and the participants from various institutes for their involvement in this significant scientific event.

Six expert members viz., Dr. Aziz



*A view of the Inaugural Session of the Annual Review Workshop on Crop Improvement*

Zilani Chowdhury, Former Member Director (Crops) BARC; Dr. Shahabuddin Ahmed, Former Director (HRC), BARI; Dr. Md. Abdur Rashid, General Manager, Lal Teer Seed Ltd. Dhaka; Dr. Md. Alamgir Hossain, Former CSO, GRSD, BRRI; Prof. Dr. Naheed Zeba, Department of GPB, SAU and Prof. Dr. Nasrin Akter Ivy, Department of GPB, BSMRAU, attended the technical sessions for overviewing and providing suggestions for further improvement. There were four

technical sessions chaired by Prof. Dr. Lutfur Rahman, Former Dean, Faculty of Agriculture, BAU; Dr. Md. Matiur Rahman, Former Director General, BARI; Dr. Mohammad Khalequzzaman, Director General, BRRI, and Dr. Md. Abdus Salam, Member Director (Crops), BARC, respectively. The event concluded with a summary of expert opinions and recommendations, which will serve as a foundation for refining future research initiatives.

## **Second Advisory Committee Meeting on the Upazila Land Suitability Assessment and Crop Zoning System Project (Phase-II)**

The second Advisory Meeting for the project titled *Development of Upazila Land Suitability Assessment and Crop Zoning System of Bangladesh* (Phase-II) was held on September 3, 2024 at BARC. The meeting was chaired by the Executive Chairman of BARC, included members of the advisory committee and personnel involved in the crop zoning project. The primary agenda focused on reviewing the project's implementation progress and planning future activities.



*Pictorial view of the Second Advisory Committee Meeting*

The major features of the crop zoning information system and the Khamari app were showcased, with particular attention to the results of demonstration trials conducted to validate the fertilizer recommendations provided by the app. The trials, supported by the National Agricultural Research System and the Department of Agricultural Extension, show substantial fertilizer savings. In 2023, 34 demonstration trials for Aman rice and 60 trials for Boro rice in 2023-24 highlighted that the Khamari app's recommendations can greatly reduce fertilizer usage. During the open discussion,

Advisory Committee members expressed satisfaction with the Khamari app's impact on sustainable agricultural production. Director General of DAE, Mr. Tajul Islam Patwari, highlighted the importance of field-level validation and the app's acceptability among farmers. He expressed hope that the Khamari app would become a valuable asset for both farmers and policymakers, contributing to a sustainable agricultural future in Bangladesh. Dr. Karim, EC, BARC, directed the project team to expedite the completion of crop zoning for remaining upazilas. She expressed

optimism about the app's potential to enhance agricultural resilience, support rural economies, and strengthen food security. The meeting underscored the successful integration of technology into agricultural practices, with the Khamari app proving its effectiveness in optimizing fertilizer use, improving crop yields, and increasing financial benefits for farmers. Its demonstrated impact positions it as a crucial tool in advancing sustainable agriculture in Bangladesh.

## Workshop on Lifestyle and Dietary Modification for Sedentary Officials

The Nutrition Unit of BARC organized a day-long workshop on *Lifestyle and Dietary Modification for Sedentary Officials* on September 29, 2024, at BARC. 100 scientists and officers from various institutes and organizations attended the event. Mr. Ajit Kumar Chakraborty, Member Director (Fisheries), graced the occasion as the special guest, while Dr. Mohammad Rafiqul Islam, Director, Nutrition Unit, BARC, presided over the inaugural session. Dr. Zakiah Rahman Moni, Principal Scientific Officer, Nutrition Unit, BARC, delivered the welcome remarks. Dr. Qamrunnahr, Principal Research Officer and Coordinator of the Clinical Nutrition and Dietetic Training Program at BIRDEM Hospital, presented the keynote paper on 'Lifestyle and Dietary Modification for Sedentary Officials.' After the inauguration, Mr. Anil Kumar Das, National Consultant (Program), FAO, presided over a technical session. Ms. Tapati Shaha, Coordinator (Dietary and Patient



*Inaugural Session of the Workshop on Lifestyle and Dietary Modification for Sedentary Officials*

Nutrition Service), Square Hospital, gave a presentation on "Nutrition on the Go: Quick and Healthy Meal Support for Health and Productivity," and Dr. Mohammad Rafiqul Islam gave a presentation on "Healthy Habits for a Strong Immune System: Everyday Strategies through Nutrition and Lifestyle." Experts addressed participants' questions, emphasizing the workshop's relevance to daily life. The session concluded with closing remarks from Dr. Mohammad Rafiqul Islam, who

expressed gratitude to all attendees. Additionally, the chief guest, Dr. Md. Mahmudur Rahman, Additional Secretary, PPC Wing, unveiled the GAP Protocols for eight crops, developed by the GAP Unit, BARC, in collaboration with the Bangladesh Agricultural Research Institute and the Department of Agricultural Extension (DAE). He handed over the protocols to the DAE and urged for their coordinated implementation while identifying challenges at the field level.

## Training Workshop on Project Development and Management (PDM)

The Planning and Evaluation Division of BARC organized the 16<sup>th</sup> batch of a five-day training program on *Project Development and Management* from December 8-12, 2024. A total of 30 scientists and officers from NARS were present as participants, covering 21 key topics, including Project Life Cycle, Annual Development Program (ADP)/Revised ADP, Log Frame, SWOT Analysis, Public Procurement Rules & Act, Result-Based Monitoring & Evaluation, and VAT & IT Regulations. Expert resource persons delivered lectures and hands-on sessions, providing in-depth insights into project management. However, participants suggested that more hands-on



*A view of the Inaugural Session of the Training Workshop on PDM*

sessions would further enhance the learning experience. Dr. Nazmun Nahar Karim, Executive Chairman of BARC, attended as the chief guest, while Dr. Mohammad Rafiqul Islam, Member Director of the

Planning and Evaluation Division, chaired the concluding session. Upon successful completion, participants were awarded certificates, marking the program as a valuable learning opportunity.

## Annual Review Workshop on Crop Production Program of NARS Institutes: Research Progress (2023-24) and Research Program (2024-25)

The Annual Review Workshop on the *Crop Production Program of NARS Institutes* was held at BARC on October 2-3, 2024. The workshop aimed to assess the research progress for 2023–24 and outline the research program for 2024–25 across eight NARS institutes: BARI, BRRI, BINA, BJRI, BSRI, BWMRI, BTRI, and CDB. Key objectives included reviewing achievements, preventing research duplication, and aligning proposed programs with national vision documents and research priorities. Scientists and academic from relevant research institutes and agricultural universities attended as expert members, offering remarks and suggestions for research planning. The inaugural session was graced by Dr. Nazmun Nahar



*Photographic view of the Annual Review Workshop on Crop Production*

Karim, Executive Chairman, BARC, as chief guest. Dr. Md. Abdus Salam, Member Director (Crops), BARC, chaired the session. Dr. Md. Jahirul Islam, Principal Scientific Officer, Crops Division, BARC, welcomed the participants

and provided an overview of the recommendations from the previous year.

Six expert members, Dr. Shahabuddin Ahmed, Former Director (HRC), BARI; Professor

Dr. Ahmed Khairul Hasan, Dept. Agronomy, BAU; Professor Dr. M. Abdul Karim, Dept. Agronomy, BSMRAU; Dr. Md. Khalequzzaman Akand Chowdhury, Former Member Director (Crops), BARC; Dr. Muhammad Nasim, Former CSO & Head, RFS, BRRI; and Dr. Md. Abdul Quayyum, Former CSO, OFRD, BARI, attended the technical sessions to

provide an overview and offer suggestions for annual research progress and future program improvements of the NARS Institutes. The workshop featured four technical sessions chaired by Dr. Md. Abdus Salam, Member Director (Crops), BARC, Professor Dr. Abdul Hamid, Dept. of Agronomy, BSMRAU, Dr. Md. Khalequzzaman Akand Chowdhury,

Former Member Director (Crops), BARC, and Dr. Md. Abdur Razzak, Former Executive Chairman, BARC. Valued experts and participants provided a good number of opinions and recommendations, which were forwarded through a proceeding to the concerned institutes for consideration.

## Annual Review Workshop on Research Progress 2023-24 and Research Program 2024-25 of BLRI

Livestock Division, BARC organized Annual Review Workshop on *Research Progress 2023-24 and Research Program 2024-25 of BLRI* on 27-28 November, 2024 with the participation of Bangladesh Livestock Research Institute.

The workshop was structured into an inaugural session, three technical sessions, and a concluding session. The inaugural session was chaired by Dr. Mohammad Rafiqul Islam, Member Director of the Planning and Evaluation Division and CSO of the Livestock Division at BARC. Dr. Shakila Faruque, Director General of BLRI, served as the chief guest, while Dr. Md. Reajul Huq, Director General of DLS; was the special guest. Dr. Ali Akbar Bhuiyan, Principal Scientific Officer of the Livestock Division at BARC, welcomed the participants and provided an overview of the recommendations from the previous year.

Dr. Ainul Huque, Former Director General, DLS; Dr. Kazi M Kamarudddin, Laboratory Capacity Specialist, Fleming Fund Country



*Inaugural Session of the Annual Review Workshop on Research Progress 2023-24 and Research Program 2024-25 of BLRI*

Grant to Bangladesh and Former CSO, Livestock Division, BARC; Dr. Md. Mosharraf Uddin Molla, Member Director, AERS Division, BARC; Dr. A.B.M Khaleduzzaman, Director (Production), DLS; Dr. M. A. Saleque, Chief Technical Advisor, ACI Animal Health and Dr. Jahangir Alam, CSO and PD, Establishment of National Gene Bank Project, Animal Biotechnology Division, NIB, were present as expert members.

The technical sessions (I, II, and III) were chaired by Dr. Nathu Ram Sarker, Executive Director of KGF and Former DG of BLRI; Dr. Md.

Bahadur Rahman, Dean of the Faculty of Veterinary Medicine at BAU; and Dr. Jahangir Alam Khan, Former Vice Chancellor of the University of Global Village and Former DG of BLRI. The closing session was chaired by Dr. Nazmun Nahar Karim, EC, BARC. At the conclusion of each session, attendees discussed the presentations from the participating institutes. Invited experts offered valuable feedback, and, based on their insights and the ideas shared by the participants, key recommendations were formulated.

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

The Soils Unit of BARC organized two batches of *Training Program on the Use of the Fertilizer Recommendation Guide-2024*, at BARC. The first training session was held from October 20–22, and the second batch took place from December 17-19, 2024 respectively. Each training session was attended by 30 participants from NARS institutes (BARC, BARI, BRRI, BINA, BSRI, BFRI, BJRI, BSRI, and BWMRI), BADC, and DAE. The training was funded by BARC. The inaugural session was chaired by Dr. Md. Baktear Hossain, Member Director (NRM), BARC and Mr. Md. Jalal Uddin, Director General of SRDI, attended as special guest. Resource speakers delivered lectures covering various aspects of the Fertilizer Recommendation Guide-2024 (FRG-2024). The main topics included fertilizer management and



*Certificate Giving Ceremony of the Training Program on Use of Fertilizer Recommendation Guide-2024*

recommendations, the rationale for fertilizer use, climate-smart soil management, and the improvement of soil health and crop production. In the closing session, certificates were given by Dr. Karim, EC, BARC as the chief guest and concluded with her insightful remarks. This training program was expected to assist agricultural

researchers, extension personnel, and farmers in adopting the judicious use of fertilizers for sustainable crop production. The program aimed to help agricultural researchers, extension personnel, and farmers in adopting the proper use of fertilizers for sustainable crop production.

## Annual Review Workshop on Biotechnology Program of NARS Institutes: Research Progress 2023-24 and Research Program 2024-25

The Annual Review Workshop on the *Biotechnological Program of NARS Institutes* was held on 14 October 2024 at BARC. The workshop aimed to review the research progress for 2023-24 and the planned programs for 2024-25 across various NARS institutes, including BARI, BRRI, BINA, BJRI, BSRI, and BWMRI, as well as universities such as BAU and BSMRAU, the National Institute of Biotechnology (NIB), and private sectors like BRAC and ACI. The goal was to align research efforts with national priorities and avoid duplication.



*Dr. Nazmun Nahar Karim, EC, BARC, Delivering Speech as Chief Guest*

Dr. Nazmun Nahar Karim, Executive Chairman of BARC, graced the inaugural session as the chief guest, while Dr. Md.

Khalequzzaman, Director General of BRRI, attended as a special guest. The session was chaired by Dr. Md. Abdus Salam, Member Director (Crops) of BARC. Dr. Shah Md. Monir Hossain, Chief Scientific Officer (Crops) at BARC, welcomed the participants and presented the recommendations from the previous year. In his remarks, Dr. Khalequzzaman emphasized the need for stakeholders to focus on developing tomato and flower varieties with enhanced shelf life using genome

editing tools.

Dr. Karim commended the significant progress made in biotechnological advancements and emphasized the importance of biofortified crops for creating sustainable and profitable farming systems, with a view toward transitioning to commercial agriculture. Three expert members participated in the workshop: Professor Dr. Md. Shamsul Haque Prodhan from the Department of Genetic Engineering & Biotechnology at Shahjalal

University of Science and Technology (SUST); Dr. Md. Aziz Zilani Chowdhury, former Member Director (Crops), BARC; and Professor Dr. Md. Ashraf Haque from the Institute of Biotechnology and Genetic Engineering (IBGE) at BSMAU. The workshop featured two technical sessions, chaired by Dr. Mohammad Khalequzzaman, DG, BRRI, and Dr. Md. Abdus Salam, MD (Crops). Both provided valuable insights and suggestions.

## Livestock Division, BARC organized an Advanced Training Program on Bioinformatics for Sustainable Development in Agriculture

A five-day advanced training program on *Bioinformatics for Sustainable Development in Agriculture* was organized by the Livestock Division of BARC from November 17-21, 2024, at the Computer Laboratory, BARC. Twenty-two participants from NARS institutes (BARC, BARI, BRRI, BLRI, BJRI, BFRI, BSRI), NIB, DLS and SAU attended the training program. The training was inaugurated by Dr. Abdus Salam, Member Director (Crops), BARC, as the chief guest. Mr. Hasan Md. Hamidur Rahman, Director of the Computer and GIS Unit, BARC, was the special guest, while Dr. Mohammad Rafiqul Islam, Member Director (Planning and Evaluation) and CSO (Livestock), BARC, presided over the session. Dr. Ali Akber Bhuiyan, PSO (Livestock), BARC, delivered the welcome address. The program, directed by



Group Photograph of Advanced Bioinformatics Training of Livestock Division

Dr. Mohammad Rafiqul Islam and coordinated by Dr. Md. Masud Rana, featured 25 lectures and hands-on training sessions. Topics included advancements in agriculture in Bangladesh, bioinformatics for sustainable agriculture, bioinformatics databases (NCBI, Ensembl, TAIR), genomic and transcriptomic

analyses, phylogenetic analysis, metabolomics, drug discovery using genomic and proteomic data, toxicogenomics, and the role of nanotechnology and next-generation sequencing (NGS) in agriculture. In the closing session, Dr. Karim, EC, BARC, was the chief guest and distributed certificates to the trainees.

## Annual Review Workshop on Insect Management Program of NARS Institutes

The annual review workshop on *Insect Management Program of NARS institutes* (BARI, BRRI, BJRI, BINA, BSRI, BWMRI, BTRI, and CDB) was held at BARC on 06 October 2024. The workshop aimed to assess the research progress for the year 2023-24 and the research program for 2024-25 of NARS institutes. Its objectives were to prevent research duplication, address research needs on climate change issues, and initiate future research programs in alignment with various vision documents and research priorities. The workshop featured the participation of scientists and academicians from relevant research institutes and agricultural universities, serving as expert members. They offered valuable insights and suggestions to guide the formulation of future research programs. The inaugural session was graced by Dr. Nazmun Nahar Karim, Executive Chairman, BARC, as chief guest. Dr. Md. Abdus Salam, Member Director (Crops), BARC, chaired the session. Dr. Md. Jamal Uddin, Principal



Photographic view of the Annual Review Workshop on Insect Management

Scientific Officer (Crops), BARC, welcomed the participants and provided an overview of the recommendations from the last year. Six expert members attended the workshop, namely Mr. Md. Yousuf Mian, Former DG, BARI; Dr. Khandakar Shariful Islam, Former Professor, Dept. of Entomology, BAU; Prof. Dr. Md. Ramiz Uddin Miah, Dept. of Entomology, BSMRAU; Prof. Dr. Masum Ahmad, Dept. of Entomology, BAU; Dr. Mainul Haq, Ex-CSO and Head, Entomology Division, BRRI;

Prof. Dr. Md. Razzab Ali, Dept. of Entomology, SAU, and followed by gave their valuable comments and suggestions. During the workshop, two technical sessions were chaired by Mr. Md. Yousuf Mian, Former DG, BARI and Dr. Md. Abdus Salam, Member Director (Crops), BARC, respectively, and followed by recommendation session was prepared based on the views, comments, and suggestions provided by the participants and experts.

## Research Review and Planning Workshop on Soil Management Program of NARS Institute 2024

The Soils Unit of the Natural Resources Management Division, BARC, organized the *Research Review and Planning Workshop on Soil Management Program of NARS Institute 2024* at BARC from October 7-9, 2024. The workshop aimed to review and enhance the research programs conducted by NARS institutes during 2023-2024 and plan for the 2024-2025 fiscal year. Participants included representatives from National

Agricultural Research System (BARI, BRRI, BINA, BSRI, BJRI, BFRI, BTRI, SRDI, CDB, BSRTI, and BWMRI), Department of Agricultural Extension (DAE), Bangladesh Agricultural Development Corporation (BADC), and various agricultural universities. The workshop was structured into an inaugural session, six technical sessions, and a recommendation and concluding session. Dr. Nazmun Nahar Karim,

EC, BARC, was the chief guest of the inaugural session, while Dr. Mohammad Khalequzzaman, DG, BRRI; and Mr. Md. Jalal Uddin, Director General of SRDI, attended as special guests.

The Technical Session-I and Technical Session-II, focused on Soil Fertility and Fertilizer Management, were held on October 7, 2024, and chaired by Dr. Md. Shahidul Islam, Former Director

General of BARI, and Dr. M. Jahiruddin, Former Professor of the Department of Soil Science, BAU, respectively. On October 8, 2024, the Technical Session III (Soil Fertility and Fertilizer Management) and Technical Session IV (Soil Micronutrients, Heavy Metals, and Environmental Problems) were chaired by Dr. M. Idris Ali, Former Director General of BINA, and Prof. Dr. G.K.M. Mustafizur Rahman, Vice-Chancellor of BSMRAU. The Technical Session V (Physical Aspects of Soil Management, including Land, Soil, and Water Characterization and Evaluation) and Technical Session VI (Soil Microbiology) were chaired by Dr. N.I. Bhuiyan, Former Director General of BRRI, and Dr. Md. Abul Hashem, Former Professor of the Department of Soil Science, BAU,



*Inaugural Session of the Research Review and Planning Workshop on Soil Management Program of NARS Institutes*

respectively on October 9, 2024. The CSO and heads of Soil Science Divisions of BARI, BRRI, BINA, BSRI, BJRI, and the senior scientists of BTRI, SRDI, CDB, BSRTI, and BWMRI presented their research progress for 2023–2024 and plans for 2024–2025 during the six technical

sessions. After each session, participants engaged in discussions on the presentations, and expert members provided feedback. The recommendations were finalized based on the discussion, reviews, comments, and suggestions of the participants and experts.

## **Training on Econometrics for Socio-Economic Research: Tools and Applications**

A five-day training program on *Econometrics for Socio-Economic Research: Tools and Applications* was held from November 10-14, 2024, at the Computer Lab, BARC. The event was organized by the Agricultural Economics and Rural Sociology (AERS) Division and featured distinguished resource speakers from Sher-e-Bangla Agricultural University, Dhaka. Twenty agricultural economists from NARS institutes and agricultural universities. Among them, sixteen participants represented BARI, BRRI, BSRI, BWMRI, BLRI, and BFRI, while four were from Sher-e-Bangla Agricultural University and Bangabandhu Sheikh Mujibur Rahman Agricultural University attended in the training program. Dr.



*Certificate Giving Ceremony of the Training on Econometrics for Socio-Economic Research: Tools and Application*

Md. Mosharraf Uddin Molla, Member Director, AERS Division, BARC was the chief guest at the concluding session and handed over the certificates to the participants of the training Program. This training

aimed to equip participants with practical econometric skills to analyze socio-economic data, model economic behaviors, and derive insights for evidence-based decision-making and policy

development. The overall objective was to enhance decision-making in agriculture, optimize resource use, and improve productivity.

Participants applied forecasting methods using a dedicated dataset and honed their proficiency in

operating advanced statistical software, including STATA, SPSS, EViews, and R software.

## Annual Review Workshop on Disease Management Program of NARS Institutes: Research Progress, 2023-24 and Research Program, 2024-25

The annual review workshop on the *Disease Management Program of NARS Institutes viz., BARI, BRRI, BINA, BJRI, BSRI, BWMRI, CDB, and BTRI* was held at BARC on October 17, 2024. The purpose of the workshop was to review the research progress for 2023-24 and the research program 2024-25 of NARS institutes to avoid duplication of research, and need-based research due to climate change issues and to take initiatives for future research programs in alliance with various vision documents and research priority. Scientists and academia of the relevant fields of research institutes and Agricultural Universities were present as expert members who provided their valuable remarks and suggestions to follow in formulating future research programs. The inaugural session was chaired by Dr. Md. Abdus Salam, Member Director (Crops), BARC. Dr. Md. Mahfuz Alam, PSO, Crops Division, BARC, welcomed the participants and provided an overview of the recommendations from the previous year. Three expert members, namely, Prof. Dr. Md.



*Pictorial view of the Annual Review Workshop on Disease Management*

Rafiqul Islam, Dept. of Plant Pathology, SAU; Dr. Mohammad Hossain, Former Director (Pulse Crop), BARI; and Dr. Mossamat Samsunnahar, Former Director (HRC), BARI were present in the day long workshop. There were two technical sessions chaired by Prof. Dr. Md. Ismail Hossain, Dept. of Plant Pathology, BAU, and Dr. Md. Abdus Salam, Member Director (Crops), BARC.

All the events of the day-long workshop were lively and highly participatory. The discussion part was well participated emphasizing

the improvement of further research programs in some areas of specific crops. The suggestions were related to quality research, need-based research, and strengthening research activities towards the demand of specific regions of the country, e.g. saline, and drought areas should be represented as priority research in the plan of action for implementation of the National Agriculture Policy-2018. However, distinguished experts and participants provided several opinions and recommendations to incorporate into future research programs for further improvement.

## Training Program on Use of Fertilizer Inspection Manual

A three-day training course on the *Use of Fertilizer Inspection Manual* was organized by the Soils Unit and held at BARC from 10-12 November 2024. The training

program was attended by 30 participants, primarily officials from the Department of Agricultural Extension (DAE) and NARS institutes, including BARI, BRRI,

BINA, BSRI, and SRDI. Renowned scientists, DAE officials, and experts from government organizations delivered 18 lectures on diverse topics, such as fertilizer

management acts, handling and storage of fertilizers, identification of adulterated fertilizers, standardization procedures for new fertilizers, specifications of organic fertilizers, preparation procedures, and quality control of biofertilizers and organic fertilizers. Mr. Md. Saiful Alam, Director General of DAE, and Mr. Md. Jalal Uddin, Director General of SRDI, attended as special guests. Dr. Md. Baktar Hossain, Member Director (NRM) of BARC, presided over the session. During the closing session, Dr. Md. Abdus Salam, Member Director (Crops) of BARC, distributed certificates to the trainees as the



*Certificate Giving Ceremony of the Training Program on Use of Fertilizer Inspection Manual*

chief guest and delivered successful completion of the concluding remarks to mark the training course.

## **Training on Household Level Agricultural Product Utilization, Quality Processing and Preservation Techniques**

The Nutrition Unit of BARC organized a three-day training program on *Household Level Agricultural Product Utilization, Quality Processing, and Preservation Techniques* from November 17-19, 2024. Thirty entrepreneurs from different agricultural institutes and organizations attended the event, providing them with valuable insights into advanced processing and preservation methods. The inaugural session was presided over by Dr. Md. Harunur Rashid, Director of the Nutrition Unit, BARC. Mr. Ajit Kumar Chakraborty, Member Director (Fisheries), attended as the special guest, while Dr. Zakiah Rahman Moni, Principal Scientific Officer of the Nutrition Unit, delivered the welcome remarks. Over the course of three days, participants benefited from fifteen expert-led lectures presented by



*Inaugural Session of the Training on Household Level Agricultural Product Utilization, Quality Processing and Preservation Techniques*

thirteen distinguished scientists and specialists in the field. The interactive nature of the training allowed attendees to engage directly with experts, who addressed their queries with valuable insights. The participants expressed their appreciation for the initiative, acknowledging its significance in enhancing their knowledge and

skills. The closing session was graced by Dr. Nazmun Nahar Karim, EC, BARC, who awarded certificates to the trainees as a chief guest. The session concluded with remarks from Dr. Md. Harunur Rashid, who extended his gratitude to all participants, speakers, and organizers for their contributions in making the program a success.

## Training of Trainers (ToT) Program on BARI Generated Vegetable Crop Technologies

The *Training of Trainers (ToT) Program on BARI Generated Vegetable Crop Technologies* took place on December 17-18, 2024, at BARC, organized by the Technology Transfer and Monitoring Unit (TTMU), BARC. The two-day program aimed to enhance the capacity of 30 DAE officers (Upazila Agriculture Officers/Agriculture Extension Officers) in modern vegetable farming technologies for improved productivity. The training program was inaugurated by Dr. Md. Abdus Salam, Member Director (Crops), as chief guest, who emphasized the role of advanced agricultural practices in enhancing vegetable production. Dr. Suraya Parvin, Director (TTMU), presided over the session and delivered the welcome address. Expert speakers from BARI and senior DAE officers



*Certificate Giving Ceremony of the Training Program on ToT*

led discussions on key topics, including hybrid vegetable cultivation, sustainable pest and disease management, soil and water conservation, and post-harvest handling. Participants recommended expanding such training through BARC in other regions to strengthen research-extension linkages. At the closing ceremony, Dr. Nazmun

Nahar Karim, EC, BARC, awarded certificates, acknowledging participants' dedication and expertise in hybrid vegetable and potato seed production. The program builds up the strong linkage for two-way communication to technology dissemination.

## Annual workshop on Research Review 2023-24 and Research Program 2024-25 on Agricultural Engineering of NARS Institutes

An annual workshop titled *Research Review 2023-24 and Research Program 2024-25 on Agricultural Engineering of NARS Institutes*, organized by the Agricultural Engineering Unit, was held on October 6-7, 2024, at BARC. The event brought together representatives from NARS institutes, BADC, DAE, Agricultural Universities, and relevant Public and Private organizations. It featured inaugural, technical, and concluding sessions. The chief guest of the inaugural session, Dr. Nazmun Nahar Karim, Executive Chairman, BARC urged the concerned scientists to work with due importance on agricultural mechanization, irrigation and water management and postharvest



*Photographic view of the Annual Research Review Workshop*

technology-related research in Bangladesh, following the government's priorities and national plan and policies. Session chair Dr. Md. Baktear Hossain, Member Director (NRM), BARC highlighted the researches that need

immediate attention for food security of the country followed by concluded the inaugural session. Three technical sessions evaluated the progress of agricultural engineering research by NARS institutes for 2023-2024 and

outlined proposed programs for 2024-2025. Expert members, scientists, engineers and academicians contributed insights and recommendations based on the presentations in each session. The technical session I focused on farm machinery, with recommendations

for solar-powered equipment, and crop-specific harvesters. The technical Session II addressed postharvest technology, highlighting cold storage, improved packaging, and product quality enhancement. The session III emphasized irrigation and water

management, advocating for solar-powered pumps, geospatial tools, and drainage solutions for waterlogged areas. The workshop concluded with actionable recommendations to enhance sustainable agricultural practices and food security.

## Visit Abroad

### Twelfth Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture

The *Twelfth Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture* (Working Group) was held in Rome, Italy from 10-12 December 2024. The Members and alternates of the Working Group, elected by the Commission on Genetic Resources for Food and Agriculture (Commission) at its 19<sup>th</sup> regular session, attended the meeting. Representing the Asia region, Dr. Md. Abdus Salam, Member Director (Crops) at BARC and National Focal Point (NFP) of ITPGRFA for Bangladesh, participated in the meeting. Ms. Imke Thormann (Germany), Chairperson of the 11<sup>th</sup> session of the Working Group, opened the session and welcomed delegates and



*Participants of the Twelfth Session of the Intergovernmental Technical Working Group on PGR for FAO*

observers. The Working Group then elected Mr. William Wigmore (Cook Islands) as its new Chair. Additionally, Mr. Alberto Fallas Barrantes (Costa Rica), Mr. Godefroid Kabala Lunga (Democratic Republic of the Congo), Mr. Behzad Sorkhilalehloo

(Islamic Republic of Iran), Mr. Arif Surahman (Indonesia), Mr. Ignazio Verde (Italy), and Ms. Gayle Volk (United States of America) were elected as Vice-Chair, representing their respective regions. Ms. Volk was also appointed as rapporteur.

### International Conference on Soil Fertility and Precision Nutrient Management Innovate, Share and Scale

Dr. Md. Baktear Hossain, MD (NRM), participated in the *International Conference on Soil Fertility and Precision Nutrient Management Innovate, Share and Scale* held in Kathmandu, Nepal, from September 30 to October 2, 2024. 140 scientists and

practitioners, including 23 from South Asia (India & Bangladesh), Africa (Zimbabwe, Malawi and Ethiopia), Latin America (Mexico), and North America (USA), attended the seminar. Dr. Hossain's presentation was on Research Priorities for Sustainable Soil

Fertility Management and Crop Production in Bangladesh.

The participants discussed various issues on sustainable soil and fertilizer management including innovations in soil fertility and nutrient management, digital soil mapping and modeling, fertilizer

distribution and policy, regenerative and conservation agriculture., etc. focusing on sustainable soil management through the presentation of 31 eminent persons associated with the domains along with the Panel Discussion on improving nutrient use efficiency and the thematic discussion and brainstorming sessions on different aspects of soil fertility management and precision nutrient management. CIMMYT South Asia Regional Office in Kathmandu covered all the costs for this trip.



*Dr. Baktear Hossain, MD, NRM, along with other Participants*

## **ACASA Climatic Risks and Adaptation Write-Shop: Strengthening Climate Resilience in South Asian Agriculture**

Increasing climatic risks makes it imperative to identify spatial and temporal risks that are likely to impact agriculture. Adaptation options are thus needed to mitigate the negative impacts. Considering this, with support from the Bill & Melinda Gates Foundation (BMGF), the Borlaug Institute for South Asia (BISA) is working with national agriculture research systems in South Asia to develop the Atlas of Climate Adaptation in South Asian Agriculture (ACASA). This comprehensive Atlas aims to provide granular-scale information for South Asian countries at the village scale by integrating various spatially explicit data sets together. Under this ACASA project, the BISA organized a program on *ACASA Climatic Risks and Adaptation Options Write-Shop*. Dr. Ali Akbar Bhuiyan, Principal Scientific Officer (Livestock), BARC participated in this ACASA



*Group photo of the ACASA Project Participants*

Climatic Risks and Adaptation Options Write-Shop at the Soaltee Hotel and Resort, Tahachal, Kathmandu, Nepal, during 10-12 September 2024. He participated in the Write-Shop on Small Ruminants in South Asia. He also participated in the Manuscript Review and Comments Plenary Sessions on “Assessment of granular risks and adaptation options in domesticated

small ruminants in South Asia”. The granular level climate risk assessment and potential adaptation options for the Atlas of Climate Adaptation in South Asian Agriculture (ACASA) cover South Asian countries. The prime focus is on Bangladesh, India, Nepal, and Sri Lanka, where the Borlaug Institute for South Asia (BISA) implemented the program.

## International Conference on Open Access to Scholarly Information

Dr. Susmita Das, Principal Documentation Officer at Bangladesh Agricultural Research Council (BARC), attended the two-day International Conference on *Open Access to Scholarly Information* as an invited speaker. The event, held on September 20-21, 2024, was organized by Dr. BMN College of Home Science in collaboration with SHPT School of Library Science and Bharat Ratna Maharshi Karve Knowledge Resource Centre, SNDT Women's University. The conference aimed to explore the pivotal role of Open Access (OA) in fostering sustainable knowledge societies, attracting 85 participants from South Asia and across India.

Dr. Susmita Das delivered a presentation titled "Responsible Publishing: Defining Our Role in the Scholarly Communication Ecosystem." She addressed ethical challenges in scholarly publishing, emphasizing the importance of peer review, the dangers of predatory journals, and the role scholars play in promoting transparency. As a Plan S Ambassador, Dr. Das also highlighted the responsibilities of peer reviewers and Open Access advocates. She discussed challenges such as infrastructure, funding, and policy shifts, but emphasized that



*Dr. Susmita Das, PDO, BARC, Presenting her Paper*

innovative models like collaborative funding and Diamond Open Access could offer solutions. Additionally, Dr. Das recommended preprint publishing to help avoid predatory journals and briefly touched on UNESCO's Open Science initiative, Diamond Open Access, and the COAR global repository network.

The conference began with a formal inaugural ceremony, during which the event was introduced by distinguished dignitaries. Dr. Mala Pandurang, Convenor and Principal of BMN College of Home Science, served as the Chief Guest, and Professor Dr. Subhash Chavan, Convenor of SNDT Women's University, along with other esteemed guests, including Dr. Sridhar Gutam, Principal Scientist at the ICAR-Indian Institute of

Horticultural Research, marked their presence. During the inaugural session, the conference proceedings were officially launched. A highlight of the conference was a panel discussion on the current landscape of Open Access, moderated by Dr. Meghana Sanjeeva. Panelists, including Dr. Gutam, Dr. Kaushal Giri, Dr. Sunita Pujar, Dr. Vrushali Dandawate, and Dr. Shantashree Sengupta, discussed various facets of OA, such as its visibility and integration with AI.

The conference concluded with insightful discussions on Open Access and Altmetric, focusing on innovative approaches to measuring research impact. The conference proceedings, which included 35 papers, documented the valuable contributions of all participants.

## 2024 AFACI Technical Workshop

Dr. Md. Mahfuz Alam, Principal Scientific Officer (Crops) at BARC and Principal Investigator of the Asia Regional FAW and BPH Diagnostics and Monitoring & Surveillance Program, Bangladesh, participated in the *2024 AFACI Technical Workshop*. The event was held from September 2-6, 2024, in Peradeniya, Kandy, Sri Lanka. The

Asian Food and Agriculture Cooperation Initiative (AFACI) organized the second leg of its 2024, Technical Workshop, focusing on enhancing molecular diagnostic capacities. This was part of the AFACI project titled "Asia and Regional FAW and BPH Diagnostics and Monitoring and Surveillance Program (PMP+)."

Participants included Principal and Co-Principal Investigators from Bangladesh, Bhutan, Indonesia, and Sri Lanka.

In 2024, the Commonwealth Scientific and Industrial Research Organization (CSIRO) led the AFACI technical workshop as both expert and facilitator. The workshop focused on fundamental molecular

diagnostics and sequencing software, including Staden and CLC Free Sequence Viewer. By uniting experts from multiple countries, AFACI aims to enhance collaboration, knowledge-sharing, and capacity-building to address agricultural threats across Asia.

In addition to enhancing participants' knowledge and technical skills, the workshop was designed to help member countries gather critical insights on pests like Fall Armyworm (FAW) and Brown Planthopper (BPH). These insights are intended to contribute to the development of more efficient, targeted management strategies,



*Participants of the 2024 AFACI Technical Workshop*

aligning with the overall goals of the PMP+ project. By improving pest diagnostics and surveillance, the workshop plays a vital role in supporting sustainable agriculture in the region.

## Training Workshop on Capacity Development and Knowledge Exchange with the National Genebanks

Five scientists from Bangladesh participated in the Training Workshop on *Capacity Development and Knowledge Exchange with the National Genebanks*, held from October 7-18, 2024, at the International Rice Research Institute (IRRI) campus in Los Baños, Philippines. The program was organized by the *Fit for Future Genetic Resources (FFGR) Unit* at IRRI, Los Baños, Laguna, Philippines, as part of a collaborative initiative funded by *Working Together to Support the Global System for PGRFA* under the CGIAR Genebank Initiative. Dr. Md. Rezwan Molla, Principal Scientific Officer (Crops) from BARC, represented the BARC component in the event. Additionally, two scientists from PGRC, BARI-Dr. Md. Mubarak Ali, Chief Scientific Officer, and Dr. Iftekhar Ahmed, Senior Scientific Officer-along with two scientists from GRSD, BRRI-Dr. Ebna Syod Md Harunur Rashid and Dr. Md.



*Dr. Yvonne Pinto Director General of IRRI and Dr. Venuprasad Ramaiah, Senior Scientist-I, Plant Genetic Resources, IRRI with Bangladeshi Participants*

AbuBakar Siddique, both Senior Scientific Officers-also participated in the event.

A total of 31 participants from 12 countries attended the workshop, which focused on strengthening the capacity of national partners-an essential aspect of CGIAR Genebank operations. Key topics covered included the automation of genebank management, the

introduction of barcoding systems, software-based Genebank Management Systems (GMS), the management and acquisition of wild germplasm, data management, and fostering collaborative international research for mutual benefit. In the closing session, Dr. Yvonne Pinto Director General of IRRI was grace as chief guest and gave her insightful remarks.

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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