



BARC

# Newsletter

Towards Building Advance Intelligent Systems for Agriculture

■ Volume 20. No. 3

■ July-September 2022

■ www.barc.gov.bd



15th August  
National

**Mourning Day**

He always thought, if agriculture is not managed effectively,  
no development of the country can go properly.

With due solemnity, Bangladesh Agricultural Research Council observed the National Mourning Day on 15<sup>th</sup> August 2022 marking the 47<sup>th</sup> death anniversary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. Mr. Md. Sayedul Islam, Secretary, Ministry of Agriculture (MoA) with the high officials of MoA paid homage to Sheikh Mujibur Rahman by placing floral wreaths at his statue.

Dr. Shaikh Mohammad Bokhtiar, Executive Chairman, BARC accompanied by the high officials and staff paid homage to the Father of the Nation by placing wreaths at the statue of Bangabandhu Sheikh Mujibur



Secretary, MoA with his staff placing floral wreaths on 15 August

Rahman in BARC campus.

Later, a discussion meeting to commemorate the life and activities of Bangabandhu Sheikh

Mujibur Rahman and a Doa Mahfil were held in the BARC auditorium.



Photographs of observing death anniversary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman

## National Workshop on Projections of Supply and Demand for Selected Food Crops in Bangladesh by 2030 and 2050



*Dr. Muhammad Abdur Razzaque, MP, Hon'ble Minister, MoA delivering speech as Chief Guest*

The National workshop on Projections of Supply and Demand for Selected Food Crops in Bangladesh by 2030 and 2050 was held at BARC on 23 August 2022 organized by Agricultural Economics & Rural Sociology (AERS) Division, BARC. In this workshop, Dr. Muhammad Abdur Razzaque, MP, Hon'ble Minister, Ministry of Agriculture (MoA) was the Chief Guest. Mr. Md. Sayedul Islam, Hon'ble Secretary, MoA was Special Guest. The workshop was presided over by Dr. S M Bokhtiar, EC, BARC. At first, chairperson welcomed all and started the

workshop with a briefing about the study result, which would be important for policy support. The Inaugural and welcome speech was given by Dr. Md. Mosharruf Uddin Molla, Member Director (AERS), BARC and coordinator of the research team. The keynote paper was presented by Dr. S M Fakhru Islam, Professor (Retired), BSMRAU, Gazipur and Leader, Research Team. More than hundred participants including team members and member of advisory committee, additional secretaries of Ministry of

Agriculture, renowned university professors, agriculture experts and delegates from different research organizations and private sector attended the workshop. Print and electronic media persons were also present at the workshop for news coverage. Finally chief guest and special guest appreciated the presentation of the research report and they also narrated the importance of this research report in the support of national policy implementation.

## Final Review of the Nutrient Management for Diversified Cropping in Bangladesh (NUMAN) Project



*Mr. Md. Sayedul Islam, Secretary, MoA gracing the occasion as Chief Guest*

Inaugural session of the final review of the *Nutrient Management for Diversified Cropping in Bangladesh (NUMAN)* Project was held on 4 September 2022 at BARC. Mr. Md. Sayedul Islam, Secretary, MoA graced the occasion as Chief Guest. Vice Chancellor of PSTU Prof. Dr. Swadesh Chandra Samanta was present as Guest of honor, Prof. Dr.

Lutful Hassan, Hon'ble Vice Chancellor of BAU joined the workshop virtually as guest of honor Dr. Debasish Sarker, DG, BARI; Mr. Md. Kamaruzzaman, DG, SRDI; Dr. Nathu Ram Sarker, ED, KGF and Mr. Duncan Mc Cullough, 2nd Secretary Australian high commission were the special guests. Prof. R.W Bell of Murdoch

University, and Prof. Dr. M Jahiruddin of BAU shared the highlights of the project. Dr. Mian Sayeed Hassan, EC (Routine Charge), BARC chaired the session.

## Annual Review Workshop on Crop Improvement Program of NARS Institutes: Research Progress 2021-22 & Research Program 2022-23



*Dr. S M Bokhtiar, EC, BARC delivering speech in the annual review workshop*

A Review Workshop on *Crop Improvement Program* of NARS Institutes was held at BARC on 21-22 August 2022. The objectives of the workshop were to review the research progress, 2021-22 and research programs, 2022-23 of NARS institutes viz., BARI, BRRI, BINA, BJRI, BSRI, BSTRI, BWMRI, and CDB to avoid duplication of research through appraisal of proposed programs in alignment with different national vision documents and research priorities. Scientists and academicians from the relevant fields of research institutes and universities attended the workshop as expert members and offered a good number of recommendations/suggestions for incorporation while planning

future research programs. Dr. S M Bokhtiar, EC, BARC graced the inaugural session as Chief Guest, while the session was chaired by Dr. Mian Sayeed Hassan, Member Director (Crops), BARC. Dr. Shah Md. Monir Hossain, CSO (Crops), BARC briefed last year's recommendations provided to the NARS institutes.

Six expert members namely Dr. Shah-e-Alam, former Vice Chancellor, Sher-e-Bangla Agricultural University (SAU); Prof. Dr. Rakha Hari Sarkar, University of Dhaka; Dr. Md. Amjad Hossain, former Director General, BINA; Prof. Dr. Md. Sarowar Hossain, SAU; Prof. Dr. A.K.M. Aminul Islam; Director (Research), Bangabandhu Sheikh

Mujibur Rahman Agricultural University (BSMRAU); Prof. Dr. Gazi Md. Mohsin, Noakhali Science and Technology University attended the technical sessions for overviewing and providing appropriate suggestions for further improvement of the program. Four technical sessions were chaired by Dr. Shah-e-Alam, former Vice Chancellor, SAU; Dr. Aziz Zilani Chowdhury, Member Director (PRL), Crops Division, BARC; Dr. Bhagya Rani Banik, former EC, BARC; Dr. Mian Sayeed Hassan, Member Director (Crops), BARC respectively. In the session, valued expert members and participants provided a number of opinions and recommendations.

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

Research Review and Planning Workshop on *Soil Management Program of NARS Institutes* was held on 27 September 2022 at BARC. Dr. S M Bokhtiar, EC, BARC inaugurated the program as Chief Guest while Mr. Md. Kamaruzzaman, DG, SRDI was the Special Guest. Dr. Z. Karim, former Secretary, Government of Bangladesh, Dr. M Idris Ali, former DG, BINA, Dr. Md. Shahidul Islam, former DG, BARI, Dr. Nurul Islam Bhuiayan, former DG, BRRI, Prof. Dr. M Jahiruddin, former Dean, Faculty of Agriculture, BAU and other veteran soil scientists of NARS and university professors participated in the program. The Inaugural session was presided over by Member Director (NRM) Dr. Mian



*Dr. S M Bokhtiar, EC, BARC, inaugurating the program as Chief Guest*

Sayed Hassan. A total of 90 soil scientists and other high officials from NARS and DAE participated in Review Workshop.

## Annual Review Workshop on Disease Management Program of NARS Institutes: Research Progress 2021-22 & Research Program 2022-23

Annual Review Workshop on *Disease Management Program of NARS institutes* viz., BARI, BRRI, BINA, BJRI, BSRI, BSRTI, BWMRI, CDB and BTRI was held at BARC on 23 August 2022. The objectives of the workshop were to review the research progress 2021-22 and the research program 2022-23 of NARS institutes to avoid duplication of research, need-based research due to climate change issues and to take initiatives for future research programs undertaken in alignment with various vision documents and research priority. Scientists and academicians of relevant fields of research institutes and Agricultural universities were present as expert members in the workshop. They



*Dr. Mian Sayeed Hassan, MD, Crops (R.C.) expressing his opinion in the workshop*

provided their valuable remarks and guideline for formulating future research programs. Dr. Mian Sayeed Hassan, Member Director, Crops (R.C.), BARC welcomed the participants and requested their

active participation in the improvement of disease management program.

Three expert members, namely, Dr. Biresh Kumar Ghoswami, former DG, BINA, Dr. Tapan Kumer Dey, former Director, BARI and Prof. Dr.

Abu Ashraf Khan, Dept. of Plant Pathology, BSMRAU were present in the day long workshop. There were two technical sessions chaired by Dr. Md. Aziz Zilani Chowdhury, Member Director (PRL), Crops, BARC and Dr. Mian Sayeed Hassan,

Member Director (RC), Crops, BARC. However, distinguished experts and participants provided a number of opinions and recommendations to incorporate into future research programs for further improvement.

### **Open-Source Scientific Computing in AgroGeospatial Big Data Analysis at ITC, Netherlands**



*Participants with EC, BARC at Bangladesh Stall in Floriade Expo 2022*

BARC took part in Phase IV of the Tailor-Made Training (TMT+) course on *Open-Source Scientific Computing in AgroGeospatial Big Data Analysis* was organized by The Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente, The Netherlands funded by Nuffic. BARI initiated this activity under the leadership of Dr. Md. Golam Mahboob back in 2020. The training comprised five consecutive phases: first to third phases of it were held online during Feb 2021 to May 2022. A team of 22 participants including 17 from BARI, 3 from BARC and 2

from CIMMYT-Bangladesh visited ITC based in the Enschede city of the Netherlands from 26 June to 7 July 2022. Participants of this phase were divided into five groups and carried out group projects related to their own research domain in agriculture under the supervision of ITC faculty members. All of them were acquainted with the latest technologies of AgroGeoinformatics Big data analysis and developed their skills accordingly throughout different phases of this training. Beside the training courses, hands-on demonstration on ground data

collection were carried out using outdoor scientific instruments and sensors including UAVs. Alongside, a visit to Dutch National Research Institute for Mathematics and Computer Science (CWI) and SURF Data Center in Amsterdam eScience center was organized. In addition, an excursion trip to Almere City was organized to witness the Bangladesh Day at 'Floriade Expo 2022' on 3 July 2022 when Hon'ble Minister, Ministry of Agriculture, Dr. Muhammad Abdur Razzaque, MP. Dr. S M Bokhtiar EC, BARC and other distinguished delegates from MoA visited ITC.

## Annual Review Workshop on Crop Production Program of NARS Institutes: Research Progress 2021-22 & Research Program 2022-23

Annual Review Workshop on *Crop Production Program of NARS Institutes* was held at BARC during 24-25 August 2022. The objectives of the workshop were to review the research progress, 2021-22 and research program, 2022-23 of nine NARS institutes viz. BARI, BRRI, BINA, BJRI, BSRI, BWMRI, BTRI, BSRTI and CDB to discuss the achievement and to avoid duplication of research after appraising proposed programs in alignment with various national vision documents and research priority. Scientists and academicians of the relevant fields of research institutes and agricultural universities attended the workshop as expert members and they provided guideline for incorporation while planning future research programs. Dr. Mian Sayeed Hassan, Member Director (RC), Crops, BARC welcomed the participants and urged them to participate actively for the improvement of the crop production program.



*Expert members of the review workshop*

Six expert members viz. Dr. Rafiqul Islam Mondal, former DG, BARI; Dr. Md. Abdul Quayyum, former CSO, OFRD, BARI; Prof. Dr. Parimal Kanti Biswas, Department of Agronomy, SAU; Prof. Dr. Md. Moynul Hoque, Department of Agronomy, BSMRAU; Dr. Md. Hazrat Ali, former CSO, RFSD, BRRI; Prof. Dr. A.F.M. Jamal Uddin and Prof. Dr. Md. Nazrul Islam, Department of Horticulture, SAU attended the technical sessions for overviewing and providing appropriate suggestions/comments for the

annual research progress and further improvement of the future programs of the NARS Institute. Four technical sessions were chaired by Dr. Rafiqul Islam Mondal, former DG, BARI; Dr. Mian Sayeed Hassan, Member Director, Crops (R.C.), BARC and Dr. Md. Aziz Zilani Chowdhury, Member Director (PRL), Crops, BARC respectively. However, valued experts and participants provided a number of opinions and recommendations.

## Annual Review Workshop on Insect Pest Management Program of NARS Institutes: Research Progress 2021-22 & Research Program 2022-23

An Annual Review Workshop on *Insect Pest Management Program of NARS institutes* viz., BARI, BRRI, BINA, BJRI, BSRI, BSRTI, BWMRI, CDB, BTRI and BSRTI was held at BARC on 28 August 2022. The objectives of the workshop were to review the research progress 2021-22 and the research program 2022-23 of NARS institutes to avoid duplication of research, to develop needs-based research due to issues arising from climate and to take



*Inauguration ceremony of the workshop*

initiatives for future research programs in alignment with various vision documents and research priority. Scientists and academicians of the relevant fields of research institutes and Agricultural Universities were present as expert members in the workshop who provided their valuable remarks and suggestions regarding the formulation of future research programs. The inaugural session was graced by Dr. S M Bokhtiar, EC, BARC as Chief Guest while, Dr. Mian Sayeed Hassan, Member Director, Crops, BARC

chaired the session. Dr. Md. Mahfuz Alam, Principal Scientific Officer, Crops Division, BARC welcomed the participants and briefed last year's recommendation.

Six expert members namely Prof. Dr. Md. Mahbubur Rahman, former Vice Chancellor, BSMRAU; Prof. Dr. Sirazul Islam, Department of Entomology, SAU; Prof. Dr. Khandaker Shariful Islam, Department of Entomology, BAU; Dr. Syed Nurul Alam, former Director, BARI; Prof. Dr. Mohammad Ali, Department of Entomology,

SAU and Prof. Dr. Md. Ruhul Amin, Department of Entomology, BSMRAU were present in the workshop. Two technical sessions were chaired by Prof. Dr. Md. Mahbubur Rahman, former Vice Chancellor, BSMRAU and Dr. Mian Sayeed Hassan, Member Director, Crops, BARC respectively, while the recommendation session was chaired by Dr. S M Bokhtiar, EC, BARC. During the session, valued experts and participants provided a number of opinions and recommendations.

### **Annual Review Workshop on Biotechnological Program of NARS Institutes: Research Progress 2021-22 & Research Program 2022-23**

Annual Review Workshop on *Biotechnological Program of NARS Institutes* was held at BARC auditorium on 29 August, 2022. The objectives of the workshop were to review the research progress 2021-22 and research programs 2022-23 of NARS institutes viz., BARI, BIRRI, BINA, BJRI, BSRI, BWMRI, CDB & Agricultural Universities viz., BAU, BSMRAU and SAU; National Institute of Biotechnology (NIB) and private sectors viz., BRAC & ACI to avoid duplication of research through appraisal of proposed programs in alignment with various national vision documents and research priority. The inaugural session was graced by Dr. S M Bokhtiar, EC, BARC as chief guest while, Dr. Mian Sayeed Hassan, Member Director, Crops (R.C.), BARC chaired the session. Scientists and academicians of the relevant fields of research institutes and agri-universities attended the



*Expert members of the review workshop*

workshop as expert members. Dr. Md. Amzad Hossain, Director General, BSRI; Prof. Dr. Rakha Hari Sarker, Department of Botany, Dhaka University; Dr. Md. Aziz Zilani Chowdhury, Member Director (PRL), Crops, BARC; Dr. Md. Shamsheer Ali, former DG, BINA and Prof. Dr. Shahidul Haque, Dept. of Biotechnology, BAU attended the workshop as expert members. Dr. Shah Md. Monir Hossain, CSO, Crops Division, BARC welcomed

the participants and briefed last year's recommendation.

There were two technical sessions which were chaired by Dr. Mirza Mofazzal Islam, Director General, BINA and Dr. Mian Sayeed Hassan, Member Director (RC), Crops, BARC, respectively. In the session, valued experts and participants provided their opinions and a number of recommendations.

## Parliamentary Standing Committee Meeting on Crop Zoning and Field Level Training on 'Khamari' Mobile App



*Training on 'Khamari' Mobile App at WazirpurUpazila, Barishal*

The GIS based crop zoning system has been developed by BARC to facilitate more efficient and sustainable agricultural production systems in the context of food and nutritional security. It is of much interest to the Government of Bangladesh as the country is facing many challenges like population growth, loss of arable land, yield gaps and adapting to climate change.

In the meanwhile, crop zoning has been accomplished in 312 out of 495 Upazilas. In view of crop zoning information dissemination to the farmers, extension personnel and other stakeholders in agriculture the 'Khamari' mobile app has been developed and integrated into the crop zoning information system (CZIS). In view of the importance of crop zoning for planning and utilization of agricultural land resources, a discussion on the progress of crop

zoning was held in the 25<sup>th</sup> meeting of the Parliamentary Standing Committee for the Ministry of Agriculture on 22 September 2022. In the meeting Dr. S M Bokhtiar, EC of BARC provided a brief overview on the crop zoning activity of BARC.

Afterward, Mr. Hasan Md. Hamidur Rahman, Director (Computer & GIS), BARC presented a PowerPoint presentation on the progress of crop zoning activity and later demonstrated the 'Khamari' mobile app to the audience. The Hon'ble Agriculture Minister and the Parliamentary Standing Committee for the Ministry of Agriculture underscored the need of crop zoning toward sustainable agriculture development in the country. They thanked BARC for taking this initiative and highly praised and acknowledged the 'Khamari' mobile app as an

effective vehicle for information dissemination in agriculture. Also, they have advised BARC to provide training on 'Khamari' mobile app to the Sub-Assistant Agriculture Officer (SAAO), farmers and other stakeholders.

During the period from July to September 2022, hands-on training program on 'Khamari' mobile app was conducted in 25 Upazilas. The total number of training participants were 993 of which 68 were BCS officers, 558 SAAOs, 257 farmers and 110 input providers. Among the participants 866 were male and 127 were female. The field level response on 'Khamari' app is highly satisfactory and many important feedback and suggestions were received which are being addressed.

## Annual Workshop on Research Review 2021-22 & Research Program 2022-23 on Agricultural Engineering of NARS Institutes

The Agricultural Engineering Unit (AEU), Natural Resource Management Division, BARC organized *Research Review 2021-22 and Research Program 2022-23 on Agricultural Engineering of NARS Institutes* in BARC on 14-15 September 2022 with the participation of the National Agricultural Research System (BARI, BRRI, BINA, BSRI and BWMRI), DAE, BADC, RDA, Agricultural Universities, Alim Industries, ACI Motors, Pran Food Products, Square Food Ltd., etc. The workshop was divided into three technical sessions and a concluding one.

On 14 September at the beginning of the workshop, Dr. Nazmun Nahar Karim, MD (Livestock) and CSO, AEU, BARC briefed about the purpose of the workshop. She emphasized the importance of undertaking research considering National Agriculture Policy 2018, National Agricultural Mechanization Policy 2020, Bangladesh Delta Plan 2100, 8<sup>th</sup> Five Year Plan, Perspective Plan of



*Research Review 2021-22 & Research Program 2022-23 on Agricultural Engineering of NARS Institutes*

Bangladesh 2041 etc. in her speech. Farm Machinery and Post Harvest Technology sessions were chaired by Engr. M. Harun Ur Rashid, former Director General, BARI & former EC, BARC and Professor Dr. Md. Shams-Ud-Din, VC, German University Bangladesh, respectively.

Technical Session-III (Irrigation and water Management) held on 15 September was chaired by Dr. Wais Kabir, former EC, BARC and former ED, KGF. Invited heads of different division/sections of Agricultural Engineering Division

of BARI, BRRI, BINA, BSRI and BWMRI presented their research progress 2021-22 and programs 2022-23. At the end of each session, participants took part in the discussion on the presentations made by participating institutes.

Finally, invited expert members provided their opinions on the presentations. Views, comments and suggestions provided by the participants and experts were recorded and sent to head of the Divisions for their valuable comments on it.

## Training on Food Utilization, Quality Processing and Preservation Techniques of Agro-products at Household Level



Participants and Resource Speaker of the Training Program

A two-day long training entitled *Food Utilization, Quality Processing and Preservation Techniques of Agro-Products at Household Level* was held on 12-13 September 2022 at Islamic University (IU) Kushtia. Nutrition Unit, Bangladesh Agricultural Research Council organized the training program at the virtual classroom of ICT cell of IU. Professor Md. Mahbubur Rahman, Pro-vice-chancellor, IU addressed as the chief guest of the inaugural session of the training program. Professor Sheikh Abdur

Rauf, Chairman, Applied Nutrition and Food technology Department (ANFTD), IU was present as special guest while Dr. Mohammad Rafiqul Islam, Director, Nutrition Unit, BARC was in the chair in the inaugural session.

A training session was also held where Professor Sheikh Abdur Rauf, Chairman, ANFTD Professors Dr. ATM Mijanur Rahman, Dr. Asad-Ud-Daula, Dr. Selim Reza of ANFTD as well as BARC Nutrition Unit Director & PSO Dr. Mohammad

Rafiqul Islam, Dr. Zakiah Rahman Moni, PSO, Nutrition Unit trained twenty teachers of different schools and ten Sub Assistant Agriculture Officers of Kushtia district respectively. The speakers shed light on the use of agricultural products and quality processing at the household level and gave emphasis on conservation strategies to prevent wastage of agricultural products.

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.

Compiled and Edited by : **Dr. Kabir Uddin Ahmed**, Director  
**Dr. Susmita Das**, Principal Documentation Officer  
**Md. Sazzadur Rahman Sarker**, Senior Reprographic Officer  
**Dr. Mst. Sufara Akhter Banu**, Senior Scientific Editor  
**Md. Saimum Hasan**, Information Officer

Design : **Mohammad Nazmul Islam**, Graphics Designer  
Photo Credit : **Md. Wasiuzzaman**, Junior Bibliographic Officer

Published by: Agricultural Information Centre (AIC)  
Bangladesh Agricultural Research Council (BARC)  
New Airport Road, Farmgate, Dhaka-1215, Bangladesh  
Phone: +880-2-41025257  
E-mail: [dir.aic@barc.gov.bd](mailto:dir.aic@barc.gov.bd)  
Website: [www.barc.gov.bd](http://www.barc.gov.bd)

Illustration & Print : Generation PPA, Dhaka, Cell: 01819 230291



**BANGLADESH AGRICULTURAL RESEARCH COUNCIL**

New Airport Road, Farmgate, Dhaka-1215