

South Asia Biosafety Program

NEWSLETTER FOR PRIVATE CIRCULATION ONLY – NOT FOR SALE



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OBITUARY

In Memory of Prof. Dr. Md. Imdadul Hoque



Professor Md. Imdadul Hoque, the Vice-Chancellor of Jagannath University, Dhaka passed away on 11 November 2023 in a Dhaka private hospital. Prior to his appointment as the Vice Chancellor of Jagannath University in June 2021, he was a Professor at the Department of Botany, University of Dhaka. Additionally, he was an elected Dean at the Biological Sciences Faculty of Dhaka University from 2012 to 2021. He is survived by his wife, daughter, and several family members.

The South Asia Biosafety Program (SABP) wishes to express its deep gratitude to Professor Md. Imdadul Hoque for his outstanding contribution towards the development of various aspects of biosafety regulatory systems in Bangladesh. He will be dearly missed as a colleague and a friend.

Professor Hoque joined SABP as the Country Manager for Bangladesh in 2005, when the program was just getting started. Since then, he has worked with the Bangladeshi government to build and execute the country's biosafety regulatory framework. This entailed creating standard operating procedures, formulating policies for food safety, evaluating the environmental risk assessment of genetically engineered plants, and organizing many workshops and conferences.

Professor Imdadul Hoque was one of the pioneers in initiating biosafety programs in Bangladesh. He has played a leading role in developing and strengthening various aspects of biosafety in Bangladesh. His efforts will continue to have a long-term effect on biosafety in Bangladesh.



Prof. Dr. Md. Imdadul Hoque speaking during the inaugural ceremony at the 6th Annual South Asia Biosafety Conference in Dhaka, Bangladesh (15 September 2018).

Workshop on Environmental Safety Concepts and the Bangladesh Guidelines for Environmental Risk Assessment of Genetically Engineered Plants

Farhana Mustari, Deputy Director (Natural Resources Management) and Kazi Nazmul Mahmud, Assistant Director (Natural Resources Management), Department of Environment.



Group photo of participants, speakers, and organizers at the workshop on Environmental Safety Concepts and the Bangladesh Guidelines for Environmental Risk Assessment of Genetically Engineered Plants (13 October 2023).

To enhance the capacity in biosafety and biotechnology risk assessment of Biosafety Core Committee (BCC) members and Department of Environment (DoE) participants, four workshops were planned under the series “Origins of biosafety internationally, the relevant policies and regulations in Bangladesh, and the necessary regulatory process during each phase of biotechnology research, development, and release.”

The third workshop on “Environmental Safety Concepts and the Bangladesh Guidelines for Environmental Risk Assessment of Genetically Engineered Plants” was held on 13-14 October 2023 at Brac CDM, Gazipur. It was facilitated by the South Asia Biosafety Program (SABP) of the Agriculture & Food Systems Institute (AFSI) and graced by the presence of the Director General of the Department of Environment and the Director General of the National Institute of Biotechnology (NIB). Along with BCC members, nine participants from the DoE attended this workshop.

The Chief Guest, the honorable Director General of the Department of Environment, Dr. Abdul Hamid [...] addressed the issues faced by the Biosafety Core Committee (BCC) and asked for comments or feedback from the participants to demarcate the BCC’s future activities.

During the second workshop on “Food Safety Concepts and the Bangladesh Guidelines for Safety Assessment of Food Derived from Genetically Engineered Plants,” the participants learned about safety assessments from both perspectives—environment and food.

The workshop was graced with a speech by the Chief Guest, the honorable Director General of the Department of Environment, Dr. Abdul Hamid. In his speech, he addressed the issues faced by the Biosafety Core Committee (BCC) and asked for comments or feedback from the participants to demarcate the BCC’s future activities. To strengthen the capacity of the participants, he asked all DoE participants to emphasize dossier analysis and suggested reviewing available dossiers and regulatory documents periodically. The Director General of the National Institute of Biotechnology discussed the ongoing activities at NIB related to genetically modified organisms and their role in objectifying the decisions from the BCC.



Dr. Andrew F. Roberts, Dr. Bhavneet Bajaj, Dr. Florida Carino, and Dr. Vibha Ahuja at the workshop (13 October 2023).

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Workshop attendees participating in one of the exercises (13 October 2023).

The third workshop began with a recap of the lessons learned from the previous two workshops on “Introduction to Concepts of Biosafety and Regulator’s Responsibilities During Biotechnology Research and Development” and “Food Safety Concepts and the Bangladesh Guidelines for Safety Assessment of Food Derived from Genetically Engineered Plants” by Prof. Dr. Rakha Hari Sarker, Professor, Dhaka University and Country Coordinator, SABP. During this talk, the participants availed themselves of the opportunity to recollect knowledge gained previously.

The lectures at the third workshop were initiated with a very informative presentation by Dr. Andrew F. Roberts, Chief Executive Of cer, AFSI. He delivered a talk on the “Environmental Safety Assessment and International Considerations in the Context of Genetically Engineered (GE) Plants.” He discussed environmental safety concerns from an international perspective and pointed out the major considerations for the risk assessment of GE Plants.

Dr. Aparna Islam, Professor, Brac University and AFSI Fellow, discussed the Bangladesh Guidelines on Environmental Risk Assessment (ERA) of GE Plants. Then, Dr. Florida Carino provided an “Introduction to Concepts in ERA and Assessment of Risk Posed by GE Plants.” She has several years of practical experience with regulations around GE plants in the Philippines and shared it with the participants.

Dr. Andrew F. Roberts then presented the “Structured Approach to ERA of GE Plants: Problem Formulation and Pathways to Harm.” In his presentation, the concept of problem formulation was discussed, and

then the steps or the scoping process for conducting an ERA were detailed. The first day ended with this presentation, along with exercises and a Q&A session.

After recapping the learnings from the first day, Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited, started off the second day of the workshop. She informed the participants about gathering quality data and the transportability of data. Data is integrated into scientific studies, and if it is related to human safety, then it is of utmost importance. In her presentation, Dr. Ahuja outlined data quality and concepts in data transportability in general and in biosafety studies.

Dr. Bhavneet Bajaj, Manager–Scientific Programs, AFSI, provided a technical session on the available useful resources for ERA, followed by an exercise that familiarized the participants with tools such as risk assessment reports developed by regulators from other countries.

Exercises on biosafety concepts and risk assessment tools were a very significant part of the workshop. Participants were able to complete five exercises related to ERA of GE plants in this two-day workshop, and all the exercises were goal-oriented. The participants got to think and delve deeper into the related concepts. As a whole, the workshop on “Environmental Safety Concepts and the Bangladesh Guidelines for Environmental Risk Assessment of Genetically Engineered Plants” was very effective from the perspective of knowledge sharing and overall capacity development.

Exercises on biosafety concepts and risk assessment tools were a very significant part of the workshop. Participants were able to complete five exercises related to ERA for GE plants.



Workshop attendees participating in one of the exercises (13 October 2023).

Enabling Genetic Technologies for Food Security: A Policy Briefing by The Royal Society

Dr. Arlene Asthana Ali, Biotech Consortium India Limited

The Royal Society issued a policy briefing on *Enabling Genetic Technologies for Food Security* in October 2023 that highlights the need for an evidence-led and proportionate regulatory approach for genetically modified (GM) crops to realize its benefits for human health, the environment, and international food security.

Given the UK has already chosen to diverge from the EU in regulating gene editing, the new policy briefing recommends that the UK government re-evaluate the content and implementation of the legacy EU regulations that govern GM crops in a way that enables the use of the technology to help address the many challenges of sustainable food production and consumption. It takes the view that proportionately implemented regulations should be based on hypothesis-driven risk assessment of the specific properties conferred by each introduced trait, the intended use, and the receiving environment. It urges the UK to capitalize on its commercial plant breeding expertise, the experience of 30 years of commercial use of GM crops, and the regulatory experience of countries that have made greater use of the technology to ensure regulatory processes are proportionate to the potential for risks of specific traits in individual organisms, rather than the technology that delivers those traits.

It proposes an approach for the UK that aligns with the high-level strategy for regulation set out in the Government's Science and Technology Framework. Under the proposed approach, regulators would focus on risks for which there is a plausible causal mechanism and would confine requirements for extensive data provision to species, traits, or biological mechanisms for which there is little prior regulatory experience. Potential societal benefits of extensive deployment of crops improved with GM traits, as well as guidance on the USDA Regulatory Status Review process, are provided as annexures to the policy briefing.

The policy brief may be accessed at:

<https://royalsociety.org/topics-policy/projects/genetic-technologies/uk-work/>



ANNOUNCEMENT

Vision 2047 for the Indian Poultry Sector Report Released by the Confederation of Indian Industry

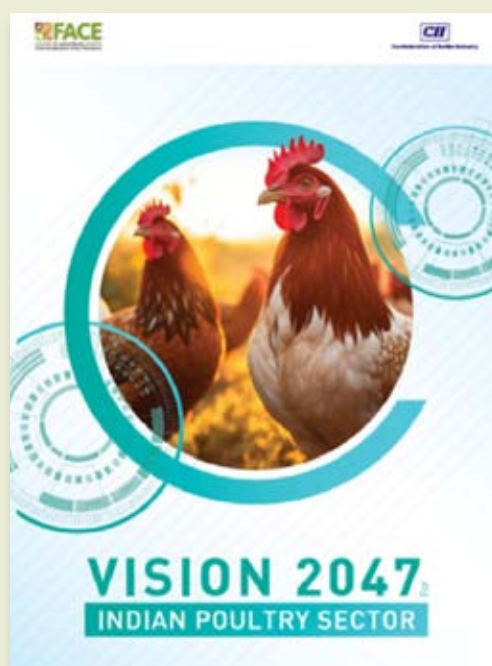
Dr. Arlene Asthana Ali, Biotech Consortium India Limited

The Confederation of Indian Industry (CII) released a report on *Vision 2047 for the Indian Poultry Sector* during the National Conference on Poultry and Poultry Products on October 31, 2023. Significant growth in the Indian poultry sector has been reported, with an annual growth rate of 7-8% in the last 15 years. The vision for 2047 is to establish a globally recognized and sustainable poultry industry that meets domestic demand, expands exports, and leads in technological innovation.

Availability of key feed ingredients, viz., maize and soybean, has been reported as a major impediment to the growth of the poultry sector in India. The divergence of maize to ethanol production has further resulted in an unprecedented increase in the prices of maize. Hence, the report recommends urgent measures to increase the production of maize and soybeans. The report has cited that both the USA and China, the largest producers of chicken meat and eggs, respectively, use genetically modified (GM) maize and soybean for their poultry feed requirements, with the USA using homegrown produce and China dependent on imports. The report called for allowing free imports of GM maize and soybean on an urgent basis to help stabilize prices. The import may be allowed while protecting the interests of the domestic producers. Alternative sources of feed may also be explored.

The CII press release may be accessed at:

<https://www.cii.in/PressreleasesDetail.aspx?enc=OuDYjLpnRZoJ6ySJ9nvodOmkEc8tYE51WaQ7KRKIUW2PovFjS6MiBh9pfC4LMBoesG19cVHxH1jAzuy9kCGB7L5MB9f/tY7G7dul+CafuxkKNf81i+c5z+YidF3BTIZiSkxypwxc1e1gWfRw1NAj3o1P5nc58Xf+M5pYtWZn8l=>



CALENDAR OF EVENTS

EVENT	ORGANIZED BY	DATE	WEBSITE
INDIA			
Workshop on Progress in Agricultural Biotechnology: Policies and Practices	Mahatma Phule Krishi Vidyapeeth (MPKV), Biotech Consortium India Limited (BCIL), and the Federation of Seed Industry of India (FSII)	1 December 2023 Rahuri	https://mpkv.ac.in
International Conference on Feeding the Future through Sustainable Eco-friendly Innovations in Rangeland, Forages, and Animal Sciences	Range Management Society of India and ICAR-Indian Grassland and Fodder Research Institute	2-4 December 2023 Bengaluru	https://uasbangalore.edu.in/index.php/kannada-uas
12 th National Seed Congress: Innovations and Challenges in Quality Seed Availability under Changing Climate	Vasantrao Naik Marathwada Krishi Vidyapeeth and Indian Society of Seed Technology, in collaboration with the National Seed Research and Training Centre	11-13 December 2023 Aurangabad	https://www.vnmkv.ac.in/
International Conference on Impact of Climate Change on Global Food, Livestock, Livelihood, and Environment Security: Advanced Approaches and Mitigation Strategies	Navsari Agricultural University	28-30 December 2023 Navsari	https://nau.in/index
International Conference on Emerging Post Harvest Technologies for Shelf Life Enhancement and Valorization of Horticultural Crops	Tamil Nadu Agricultural University and the Society for Promotion of Horticultural Science & Technology	4-5 January 2024 Coimbatore	https://tnau.ac.in/site/icphtv24/
INTERNATIONAL			
9 th Plant Genomics & Gene Editing Congress: Asia and 4 th Microbiome for Agriculture Congress: Asia	Global Engage	29-30 November 2023 Bangkok, Thailand	www.global-engage.com/event/plant-genomics-asia
High-Level Policy Dialogue: Gene Editing for Sustainable Agriculture and Food Security in Asia Pacific Region	Asia-Pacific Association of Agricultural Research Institutions (APAARI) and Biotech Consortium India Limited (BCIL)	11-12 December 2023 Bangkok, Thailand	https://www.apaari.org
4 th Joint Aarhus Convention and Convention on Biological Diversity Round Table on Public Awareness, Education, Access to Information, Public Participation, and Access To Justice Regarding Living Modified Organisms/ Genetically Modified Organisms	CBD Secretariat	11-12 December 2023 Geneva, Switzerland	https://bch.cbd.int/protocol#tab=2



SOUTH ASIA
BIOSAFETY PROGRAM

The South Asia Biosafety Program (SABP) is an international development program implemented in India and Bangladesh with support from the United States Agency for International Development (USAID). SABP aims to work with national governmental agencies and other public sector partners to facilitate the implementation of transparent, efficient, and responsive regulatory frameworks for products of modern biotechnology that meet national goals as regards the safety of novel foods and feeds, and environmental protection.



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