

ASEAN COMMITS TO STRENGTHEN BIOSAFETY EFFORTS

Biotechnology experts and leaders in the ASEAN region, including the Philippines, gathered last November 27-29, 2017 for the *ASEAN Conference on Harmonization of Biosafety Guidelines and Research Protocols for Agricultural Products derived from Modern Biotechnology*, which was organized by the Department of Science and Technology (DOST) – Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) and the Department of Agriculture (DA) - Bureau of Plant Industry (BPI). About 100 participants from ASEAN member states (AMS) and bodies, and key government agencies/institutions in the Philippines, the academe, non-government organizations (NGOs), and the private sector attended the conference. The conference provided the opportunity for AMS to share, discuss, and assess the current regulatory framework, biosafety guidelines and research protocols, state of biotechnology development, and biotechnology policies among individual member-countries. The international conference was endorsed during the ASEAN COST 72 in Brunei Darussalam last May 22-23. Dr. Reynaldo V. Ebor, Acting Executive Director of DOST-PCAARRD, is the Philippine Focal Person of the ASEAN Committee on Science and Technology (COST) - Sub-Committee on Biotechnology (SCB).

Dr. Carol M. Yorobe, DOST Undersecretary for Scientific and Technical Services, welcomed the guests, delegates, and participants on behalf of DOST Secretary Fortunato T. de la Peña, emphasizing the promising future of biotechnology in addressing food security, among others. Aligned with the Philippines' chairmanship of ASEAN 2017 and with the celebration of 50 years of ASEAN cooperation, the DOST Secretary affirms its commitment, both in principle and in resources, in supporting collaborative activities and programs/projects on science, technology, and innovation. Dr. George Y. Culaste, Officer-in-Charge, Office of the Director of DA-BPI echoed the sentiments of the DOST Secretary in supporting the objectives of the conference. Dr. Culaste expressed his optimism that harmonizing the guidelines and protocols on biosafety in the region will contribute to fully realizing biotechnology's potential in contributing to the ASEAN vision of a stronger ASEAN Economic Community (AEC) in the next 50 years.

Mr. Pisan Pongsapitch, Deputy Secretary General of the National Bureau of Agricultural Commodity and Food Standards (ACFS), Ministry of Agriculture and Cooperative in Thailand, provided the keynote address during the conference. He set the tone of the workshop by providing a background on the field of biotechnology, including the international frameworks and agreements being followed such as the Cartagena Protocol on Biosafety, supplementary to the Convention on Biological Diversity (CBD), which took effect in 2003, signed by 132 parties. The CBD seeks to protect biological diversity from the potential risks posed by living modified organisms (LMOs) resulting from modern biotechnology. The CBD also allows developing nations to balance public health against economic benefits. He also provided an overview of several bodies which governs biosafety guidelines and protocols at the international level, such as the Codex Alimentarius Commission, the International Plant Protection Convention (IPPC), and the World Organization for Animal Health (OIE). Mr. Pongsapitch noted the next challenges for AMS in biosafety and biotechnology, including the need to be cognizant of the importance of implementing the ASEAN guidelines on risk assessment of agriculture-related GMOs and the harmonized biosafety guideline and research protocols on biosafety - the main objective of the conference. He also encouraged strengthened cooperation on research relevant to GMOs; the sharing of technology and information; and the harmonization of intra- and extra-ASEAN trade, i.e. mutual recognition, equivalency, and reference standard.

Dr. Leonardo A. Gonzales, a member of the DOST-Biosafety Committee and the Ad Hoc Technical Expert Group (AHTEG) on Socio-Economic Consideration of the Cartagena Protocol, presented the plenary paper of the conference. In introducing the objectives of the

conference, he noted the robust economic potential of ASEAN and briefly mentioned the strategies of ASEAN Economic Community (AEC) integration as embedded in its blueprints for 2015 and 2025. He shared his optimism in furthering the ASEAN potential as a vital regional economic power in 2050, provided that the AEC Blueprint 2025 is effectively implemented to attain sustained inclusive economic growth, and if performance is improved as guided by its objectives in eradicating poverty and inequality; elimination of hunger; improvement of global competitiveness; and enhanced human resource development. Dr. Gonzales briefly discussed these development targets within the context of existing trends and conditions in ASEAN. He also noted that the mixed results in the comparative performance of ASEAN with other regional grouping, relative to different indicators for a sustained inclusive economic growth, can serve as inspiration “triggers” for ASEAN to achieve more by 2030 and beyond. Dr. Gonzales then presented a background and review of past harmonization of guidelines and protocols, including four workshops/forum proceedings on ASEAN and Asia Pacific; three in eastern Africa; and two harmonization models exemplified by the European Union (EU) and the Common Economic Market for Eastern and Southern Africa (COMESA). He outlined the challenges of regional harmonization such as understanding the concept of modern biotechnology; the variability in biosafety guidelines and regulations among AMS; difference in technological readiness; under-funding in research and development (R&D); and implementing effective communication strategies. Opportunities, on the other hand, include lower regulatory cost; faster adoption of GM technologies; expanding ASEAN intra- and rest-of-the-world trade of agricultural products; enhancing the productivity of feed grain-livestock sectors; and institutional collaboration for capacity building.

Representatives from nine AMS presented their country reports, focusing on current situation of biotechnology in their countries; their existing biosafety guidelines/regulations; current biosafety-related research protocols for the regulation of GM crops; issues, gaps, and challenges relative to the existing biosafety guidelines/regulations and research protocols; strategies employed to address the issues, gaps, and challenges; and their recommendation/s to harmonize/strengthen the existing guidelines/protocols being implemented in each ASEAN country and the general frameworks implemented through ASEAN initiatives.

The workshop on the second day focused on four thematic areas: Session 1 -Biosafety protocols on contained and confined use; Session 2 - Biosafety protocols for commercial cultivation; Session 3 - Approaches to protocols on import for direct use; and Session 4 - Complementary institutional capacity building activities. It was agreed that sub-committees on biotechnology in each AMS will draft harmonized protocols/manuals for safety assessment for commercial cultivation including a harmonized protocol/guidelines for post-commercial monitoring. The proposed manual/protocols will focus on science-based assessment. It was also committed that the outputs of the workshop will be endorsed to ASEAN COST through Dr. Seng Vang, the outgoing ASEAN COST-SCB Chair who was among the conference guests. Among the several general points to consider for harmonization of protocols on import for direct use were harmonization of science-based risk assessment protocol based on international standards to enhance data transportability (e.g. Codex, and the Food and Agriculture Organization [FAO] and World Health Organization [WHO] of the United Nations [UN]); determining when to use acute or sub-chronic data; and harmonizing import protocol, specifically identifying/determining approaches to be adopted within AMS and how to handle unapproved events, and determining tolerance level/limit of detection. In terms of institutional capacity building, the need for advanced trainings on biosafety, including hands-on workshop and effective communication, was highlighted, and AMS with existing initiatives hence have committed to help. All AMS committed to share data and databases, provided it is allowed in their countries. Some of the databases which can be shared were food and feed safety data; protocols on post-release monitoring of GM; and mechanisms of GM crops. All AMS also committed to harmonize their biosafety protocols, while notably considering the values and

culture in each country. The need to strengthen the biosafety secretariat of the AMS was also discussed, and all AMS committed to enable and support such objective. Concept notes on trainings and other capability building initiatives may also be drafted and submitted to ASEAN COST for approval and to seek support. The Philippines committed to consolidate the concept notes from other AMS for endorsement to ASEAN COST.

The AMS delegates and guests visited several key agencies and institutions in Los Baños, Laguna on the last day of the conference such as DA-BPI, DOST-PCAARRD, the Institute of Plant Breeding (IPB) at the University of the Philippines in Los Baños (UPLB), and the International Rice Research Institute (IRRI).



Delegates and participants of the ASEAN Conference on Harmonization of Biosafety Guidelines and Research Protocols for Agricultural Products derived from Modern Biotechnology, held on November 27-29, 2017, in Manila, Philippines. (Photo credit: DA-BPI)



Delegates and participants during the workshop of the ASEAN Conference on Harmonization of Biosafety Guidelines and Research Protocols for Agricultural Products derived from Modern Biotechnology, held on November 28, 2017, in Manila, Philippines. (Photo credit: DOST-PCAARRD)



**ASEAN Conference on Harmonization of Biosafety Guidelines and Research
Protocols for Agricultural Products Derived from Modern Biotechnology
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Delegates of the ASEAN Conference on Harmonization of Biosafety Guidelines and Research Protocols for Agricultural Products derived from Modern Biotechnology, during their visit to the Department of Science and Technology (DOST)-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) in Los Baños, Laguna on November 29, 2017.