

Department of Agriculture Administrative Order No. 8 Series of 2002: Importation and Commercialization of Modern Biotechnology-Derived Products ¹

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INTRODUCTION

The Philippines is the first country in Asia to approve the cultivation of genetically modified (GM) crops for food and feeds. A new corn variety was added to the menu of agricultural technologies in 2002 to enable the corn plant to resist one of the most destructive corn pests in the country, the Asiatic corn borer. A report from the United States Department of Agriculture (USDA) Foreign Agricultural Service- Global Agricultural Information Network (GAIN) in 2010 shows that 31 transformation events³ (TEs) and 22 stacked-trait products have been approved for direct use in the country. The approval opened up importation of commodities such as corn, soybean, canola, potato and cotton. Moreover, a pest resistant *Bacillus thuringiensis* (Bt) eggplant was developed locally and has started conducting field tests since 2010.

However, the production and sale of agricultural biotechnology products have also sparked debate on health, environmental, and social/ethical issues (PIDS, 2000). Thus as a signatory to the global Cartagena Protocol on Biosafety in 2000, as pronounced in the Policy Statement on Modern Biotechnology issued on July 16, 2001 by Former President Gloria Macapagal-Arroyo, and as stipulated in the Consumer Act of the Philippines and Section 19, Chapter 4, Title IV, Book IV of Executive Order No. 292, Series of 1987, the government guarantees agricultural development is spurred in safe and responsible manner through the issuance of the Department of Agriculture's Administrative Order No. 8 (DA-AO 8) on April 3, 2002. The DA-AO 8 provides for the rules and regulations on importation and release into the environment of plants and plant products derived from the use of modern biotechnology. This regulatory system continues to evolve to maximize the potentials of modern biotechnology without risks to human health and the environment while minimizing cost and increasing agricultural production.

DA Administrative Order No.8 Series of 2002

Coverage

The DA-AO 8 covers the importation and release into the environment of: (1) any plant which has been altered or produced through the use of modern biotechnology if the donor organism, host organism or vector or vector agent belongs to any of the genera or taxa classified by the Bureau of Plant

¹ A short policy paper submitted to the Food and Fertilizer Technology Center (FFTC) for the project titled "Asia-Pacific Information Platform in Agricultural Policy". Short policy papers, as corollary outputs of the project, describe pertinent Philippine laws and regulations on agriculture, aquatic and natural resources.

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³ Transformation event as defined in the Order means the introduction into a plant of genetic material that has been manipulated *in vitro*.

Industry (BPI) as meeting the definition of plant pest⁴ or is a medium for the introduction of noxious weeds; or (2) any plant or plant product altered or produced through the use of modern biotechnology which may pose significant risks to human health and the environment based on available scientific and technical information.

Further, DA-AO 8 stipulated that any regulated article as defined and identified in the coverage may be delisted if found to have no significant risks to human health and the environment. Any person may file a petition with BPI to exempt a regulated article from the coverage accompanying factual grounds. The petition shall be published in at least two (2) newspapers to solicit comments from the public for a period of sixty (60) days from the date of publication. A Scientific and Technical Review Panel (STRP) composed of at least three (3) reputable and independent scientists with relevant professional background necessary shall then evaluate the petition based on available scientific and technical information.

Importation and Release to the Environment of Biotechnology Materials

In accordance with this Order, no regulated article shall be allowed to be imported or released into the environment without the conduct of risk assessment. It supplements the existing Philippine Biosafety Guidelines (PBG) implemented by the National Committee on Biosafety of the Philippines (NCBP) to set policies for processing applications for commercial propagation and importation of products of modern biotechnology. It provides for the approval process and requirements for importation for contained use, field testing, commercial propagation, and importation for direct use as food or feeds or for processing.

The policy on importation for contained use provides that no regulated article intended for contained use shall be allowed for importation or be removed from the port of entry unless duly authorized by BPI upon the endorsement of NCBP. Since NCBP continues to supervise work under containment, BPI will not issue any permit to import regulated articles or genetically modified plant and plant products if there is no endorsement from the NCBP.

A *Permit to Field Test* has to be secured from BPI prior to release of regulated article into the environment for field testing. Moreover, the regulated article should have been tested under contained conditions in the Philippines. In the same way, release for propagation requires a *Permit for Propagation* inclusive of substantiation that based on field testing, the regulated article will not pose any significant risks to the environment and human health. If the regulated article is a pest-protected plant, its transformation event has to be duly registered with the Food and Fertilizer Authority (FPA).

The regulated article may be allowed for importation for direct use as food or feed or for processing provided importation and commercial propagation as food or feed have been duly authorized by BPI and the regulated article poses no significant threat to human and animal health regardless of the intended use.

For stricter implementation of this mandate, four agencies are involved in ensuring safety assessment and compliance. Together with BPI are the Bureau of Animal Industry (BAI), the Bureau of Agriculture and Fisheries Product Standards (BAFPS) as well as the Fertilizer and Pesticide Authority (FPA). The BPI is the single entry point for the applications and issuance of permits and in-charge in looking at the overall environmental impacts. On the other hand, the BAI evaluates the safety of biotechnology in feeds while the BAFPS deals with the safety of biotechnology materials as food products. The FPA, as mentioned earlier, assesses impacts of biotechnology with pest-protected plants.

⁴ Plant pest as defined in the Order means any form of plant or animal life, or any pathogenic agent, injurious or potentially injurious to plants or plant products.

CONCLUSION

The Philippine government recognizes responsible use of modern biotechnology through the issuance of the Department of Agriculture-Administrative Order No. 8 series of 2002. The DA-AO 8 was created to define the rules and regulations in importation and release to the environment of these GMs. The biosafety guidelines established through this Order puts the country in the position to safeguard humans and environmental welfare from any risks and hazards of modern biotechnology materials/products while maximizing its potentials.

REFERENCES

- Cabanilla, L. 2007. Socio-Economic and Political Concerns for GM Foods and Biotechnology Adoption in the Philippines. *AgBioForum*, 10(3): 178-183. Accessed in March 2014 at <http://www.agbioforum.org/v10n3/v10n3a07-cabanilla.pdf>.
- Department of Agriculture Administrative Order No. 8 Series of 2002. Accessed in March 2014 at http://www.bic.searca.org/info_kits/policies/daao8.html.
- Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau (DENR-PAWB). 2004. The National Biosafety Framework for the Philippines. Quezon City, Philippines. Accessed in March 2014 at <http://hqweb.unep.org/chinese/biosafety/files/PHNBFrep.pdf>.
- National Academy on Science and Technology (NAST), Department of Science and Technology (DOST), National Committee on Biosafety of the Philippines (NCBP), and the Program for Biosafety Systems (PBS). 2009. BIOSAFETY REGULATIONS IN THE PHILIPPINES: A Review of the First Fifteen Years, Preparing for the Next Fifteen. A Report for the National Committee on Biosafety of the Philippines (NCBP). Accessed in March 2014 at <http://ncbp.dost.gov.ph/guidelines/Biosafety%20Regulation%20in%20the%20Philippines.pdf>.
- Halos, S. 2000. Defining the Agricultural Biotechnology Policy of the Philippines. Policy Note No. 2000-06. Philippine Institute for Development Studies (PIDS). Accessed in October 2014. <http://dirp4.pids.gov.ph/ris/pn/pidspn0006.pdf>
- United States Department of Agriculture (USDA) Foreign Agricultural Service. 2011. Agricultural Biotechnology Annual: Philippine Biotechnology Situation and Outlook. Accessed in October 2014. <http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Agricultural%20Biotechnology%20Annual%20Manila%20Philippines%207-24-2012.pdf>

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