

International Lessons from Genetically Modified (GM) Crop Adoption & Regulation: An Asian Perspective

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ABSTRACT

Genetically Modified (GM) crops have been planted in Asia since the early 2000s when India and the Philippines started adopting Bt cotton and Bt corn crops, respectively. Uptake of GM crops in other Asian countries followed soon after and, as of 2014, about 19 million hectares of crop area have been planted to GM crops in the continent.

With this steady increase in utilization of GM crops in Asia, increased concerns about the risks from using these crops (i.e., environmental and health) have risen as well. As such, regulatory frameworks (i.e., specifically, bio-safety regulations) that govern the use of GM crops in each Asian country have also evolved over the years. Although the underlying risk assessment approaches and standards that most Asian countries use to determine regulations are broadly similar, the eventual regulatory outcomes across countries differ depending on a number of factors. In general, the varying regulations framed across Asian countries depended on: (1) their perceptions of the risks posed by the use and release these GM crops, (2) their trade policies/relationships, and (3) the state of political and economic affairs.

Given the long history of GM crop adoption and regulation in Asia, it is important to look back and carefully determine the lessons that can be learned from this experience – especially in terms of the multi-dimensional impacts of GM crop adoption and the development of regulatory systems that govern these GM crops over time. The lessons learned from this GM crop adoption and regulation experience in Asia can then serve as a platform for further discussing how it can relate to developing governance frameworks for genetic pest management (GPM) (i.e., release and use of GM pests). This paper aims to document some of the Asian experience with regards to GM crop impacts and regulatory evolution, and then draw lessons that can be utilized for developing regulatory systems for use/release of genetically engineered pests in the region.