Innovation Diffusion: The Case of Biotech Crops

By

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Abstract:

It is widely accepted that the rate of innovation diffusion varies across countries. While some countries are early to adopt innovations, others are rather slow and reluctant to adopt. Moreover, the diffusion of innovations in a regulated industry largely depends on government organizations’ decision. This study draws on organization theories to develop a framework for understanding government organizations’ adoption of innovations. It focuses on biotech crops as innovations that governments consider for adoption. There are now 27 countries planting biotech crops in 2013. Drawing upon organization theories, this study argues that government organizations make decisions under the condition of bounded rationality and uncertainty, form aspirations, and receive influence from other governments. Hence, governments’ decision to adopt biotech crops will be determined by the gap between their aspiration and performance, and interdependence with other governments. These arguments are tested using data on biotech crops between 1992 and 2011. The findings of the study will provide insights on innovation diffusion across countries.