

Genetically Modified Crops in Developing Countries: A Meta-Analysis of Mass Media Coverage, Public Knowledge and Attitudes

Eric A. Abbott

Professor, Greenlee School of Journalism and Communication
204B Hamilton Hall
Iowa State University
Ames IA 50011
PH: 515-294-0492
FAX: 515-294-5108
eabbott@iastate.edu

Lulu Rodriguez

Associate Professor, Greenlee School of Journalism and Communication and the Biosafety
Institute for Genetically Modified Agricultural Products (BIGMAP)
214 Hamilton Hall
Iowa State University
Ames IA 50011
PH: 515-294-0484
FAX: 515-294-5108
lulurod@iastate.edu

Abstract: This meta-analysis synthesizes the results of existing empirical studies from the developing world to develop generalizations about mass media coverage, public knowledge and attitudes toward biotechnology and GM crops in particular. Seven electronic databases were searched for relevant journal articles, book chapters, conference papers, research reports, policy papers, master's theses and doctoral dissertations. A total of 43 empirical studies were used as a base. Results reveal that developing countries see GM crops through a different lens than the developed world. While emphasis in the developed world is often on possible risks associated with GM crops, the developing world sees them as a possible solution to food scarcity. While relatively few studies have focused on the developing world in comparison to studies in Europe and the United States, the 43 studies used here document low levels of knowledge about biotechnology and specifically about GM crops designed for use in developing countries. Findings also reveal a general pro-science, pro-biotechnology stance, at least at the initial stage of mass media coverage. Based upon the meta-analysis, recommendations are offered to communicators who will be preparing materials to educate those in developing countries about GM foods. The recommendations include focusing on specific country situations and needs rather than trying to prepare general materials for all developing countries, being cautious about hypothetical study results in which consumers who know little about GM foods are asked about possible buying behaviors, and trying to include local scientists and other experts in mass media dialogues.