Available online at www.sciencedirect.com
SCIENCE DIRECT®
Food Policy 30 (2005) 385–398
FOOD POLICY
www.elsevier.com/locate/foodpol

Impact of genetic modification on country image of imported food products in European markets: Perceptions of channel members

John G. Knight *, Damien W. Mather, David K. Holdsworth

Marketing Department, Otago School of Business, University of Otago, PO Box 56, Dunedin, New Zealand

Abstract

Risk to the image of food exporting countries in foreign markets for food products has been advanced as a reason for them to ban commercial release of genetically modified (GM) crops. The aim of this paper is to explore the reality and intensity of such a risk. In-depth interviews have been conducted with key distributors in the European food sector to ascertain factors that they consider important in determining reputation of exporting countries, and to ascertain whether GM impacts on such reputations. Highly negative consumer sentiment towards GM in Europe seems likely to continue to influence food industry buyers against importing GM food. However, no evidence was found that presence of GM crops in a country causes negative perception of non-GM food imported from that country. Provided adequate steps are taken to avoid accidental contamination of conventional crops, producer countries do not appear at great risk of damaging their overall country image for food products if GM technology is introduced.

Keywords: Genetic modification; Gatekeeper; Country image; GM crops

* Corresponding author. Tel.: +64 3 479 8156; fax: +64 3 479 8172.
E-mail address: jknight@business.otago.ac.nz (J.G. Knight).

0306-9192/$ - see front matter © 2005 Elsevier Ltd. All rights reserved.
doi:10.1016/j.foodpol.2005.05.001

Introduction

In 2003, seven million farmers in 18 countries planted genetically modified (GM) crops (ISAAA, 2004), with the USA, Argentina, Canada, China, Brazil and South Africa accounting for 99% of the global biotech crop area (Table 1). Despite this indication that farmers throughout much of the developed world are adopting this technology, activist groups in many countries – particularly in Europe – have continued to fight the introduction of GM foods. In most poor countries, governments have still not given farmers permission to plant GM food or feed crops. The main reason is fear that the EU and Japan will shun imports from countries that grow GM crops (Paarlberg, 2002).

The United Kingdom GM Science Review Panel Report (King, 2003) states: "To date world-wide there have been no verifiable untoward toxic or nutritionally deleterious effects resulting from the cultivation and consumption of GM crops. However, absence of readily observable adverse effects does not mean that these can be completely ruled out… Some reason that the absence of evidence of harm should not be treated as evidence of the absence of harm". As has been pointed out (Scully, 2003): "Beliefs rather than information appear to be at the heart of the non-acceptance of genetic engineering". Grave concerns have been expressed by some authors: e.g., "The bio-revolution does not just tamper with the fabric of life, but also aspires to restructure fundamental perceptions and values. Environment, human values and relationships, and intellectual property rights are all drastically reconfigured under the spell of biotechnology" (Pottier, 1999).

Table 1
Plantings of genetically modified crops in 2003, by Country (ISAAA, 2004)

Country	Area	%World Total	Main GM crop types
USA	105.7 million acres	63% (up 10% from 2002)	Corn, soybeans
Argentina	34.3 million acres	21% (up 3%)	Maize, soybean
Canada	10.9 million acres	6% (up 26%)	Canola, maize, soybeans
Brazil	7.4 million acres	4% (first year)	Soybeans
China	6.9 million acres	4% (up 33%)	Cotton
South Africa	988,000 acres	1% (up 33%)	Maize, cotton, soybeans
Australia	247,000 acres		Cotton, carnations
India	247,000 acres	(up 100%)	Cotton
Romania	172,900 acres		Soybeans
Mexico	160,000 acres		Cotton, soybeans
Uruguay	148,200 acres		Soybeans, maize
Spain	79,000 acres	(up 33%)	Maize
Philippines	50,000 acres		Maize
Columbia	12,000 acres		Cotton
Honduras	5000 acres		Maize
Bulgaria	"a few thousand acres"		Maize
Indonesia	"a small area"		Cotton
Germany	"a small area"		Maize

1 acre = 0.404 ha.