INTERNATIONAL TRADE-RELATED REGULATIONS OF GM FOOD
WHAT POLICIES FOR DEVELOPING COUNTRIES?

Guillaume P. Gruère, International Food Policy Research Institute

This brief summarizes a comprehensive review of national and international trade-related regulations on the food and feed products derived from transgenic or genetically modified (GM) crops, identifies the main effects of these regulations on developing countries’ decision-making, and suggests four necessary policy arrangements to achieve multiple domestic objectives under these regulatory constraints.

A heterogeneous patchwork of national importing and marketing regulations
There are large differences in import-approval and marketing policies for GM food worldwide. At a macro level, countries can be divided into three groups according to the status or type of their regulations: first, countries with a comprehensive and stringent regulatory framework for GM food, including mandatory safety approval and mandatory labeling; second, countries that have adopted a more pragmatic regulatory approach based on the notion of substantial equivalence, with voluntary labeling instead of mandatory labeling; and third, a large number of developing countries that either do not have any approval or marketing regulations for GM food, are in the process of adopting some, or have declared themselves to be GM free.

Countries in the first group fall in two main categories: those whose regulatory procedure depends on products’ differences (the presence or absence of GM ingredients) and those whose regulatory procedure depends on the production process (regulating any products derived from GM crops). The specificities of these regulations also widely differ by country (see Table 1). In particular, both Japan and the European Union (EU), two influential importers, have implemented stringent import-approval regulations and mandatory labeling requirements for GM food. In both cases, the mandatory labeling of GM food has resulted in the virtual disappearance of GM food ingredients from consumer products. But the EU’s strict labeling policy has acted as an effective import filter effectively allowing only GM animal feed to enter, whereas Japan’s policy has allowed for imports of certain processed GM food and animal feed products.

International harmonization efforts: a consensus on safety approval, not on labeling
At the international level, harmonization efforts are led by the Codex Alimentarius Commission, the Cartagena Protocol on Biosafety (CPB), and the World Trade Organization (WTO). While internationally harmonized guidelines for safety approval have been finalized at the Codex Alimentarius, there is no clear consensus on labeling regulations for GM food, some of which could be found inconsistent with the WTO, and there is an increasing risk of conflicts between the CPB and the WTO.

Targeted commodities by trade-related regulations: unprocessed food products
Food and unprocessed products are subject to more stringent regulations than animal feed and processed products. As a consequence, international regulations are likely to have a greater effect on international trade of potential GM food crops, than on current GM crops mostly used for animal feed, processed food, or nonfood uses.

1 GM food is defined as raw and processed products derived from GM crops and used for food and/or animal feed.
Table 1. Characteristics of Trade-Related Regulations in Selected Countries in 2006

<table>
<thead>
<tr>
<th>Countries</th>
<th>Food safety approval regulations</th>
<th>Labeling regulations</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>Process-based mandatory</td>
<td>Stringent mandatory, includes derived products</td>
<td>Traceability requirements, 0.9% threshold</td>
</tr>
<tr>
<td>Brazil, China, Russia</td>
<td>Process-based mandatory</td>
<td>Stringent mandatory, includes derived products</td>
<td>No traceability, low threshold</td>
</tr>
<tr>
<td>Australia, Japan, Korea, Saudi Arabia, Thailand, Taiwan</td>
<td>Process-based mandatory</td>
<td>Mandatory labeling based on product content</td>
<td>With labeling exemptions, 1 to 5% threshold levels</td>
</tr>
<tr>
<td>United States, Canada, Argentina, Hong Kong, Philippines, South Africa</td>
<td>Substantial equivalence, mandatory (U.S.: voluntary consultation)</td>
<td>Voluntary for substantial equivalence</td>
<td>5% threshold level for labeling</td>
</tr>
<tr>
<td>Chile, Ecuador, Indonesia, Vietnam</td>
<td>Mandatory (in place or pending)</td>
<td>Mandatory, introduced but not implemented</td>
<td>Product-based labeling</td>
</tr>
<tr>
<td>India, Kenya</td>
<td>Mandatory (in place or pending)</td>
<td>Intention to require labeling</td>
<td>Slow regulatory process</td>
</tr>
<tr>
<td>Bangladesh, most African countries</td>
<td>Considering mandatory</td>
<td>No clear position</td>
<td>Wait-and-see approach</td>
</tr>
<tr>
<td>A few African countries</td>
<td>No</td>
<td>No</td>
<td>GM free</td>
</tr>
</tbody>
</table>


Note: Not all countries with a labeling regulation had enforced their regulations as of 2006.

Trade-related regulations and developing countries’ policymaking: a proposition

There are three main spillover effects of national and international regulations on developing countries’ policymaking: 1) compliance with international agreements that do not necessarily correspond to domestic objectives, 2) the fear of export loss due to trade-related regulations implemented by the large importing countries, and 3) the trend toward harmonizing domestic regulations with those of the large importers. In many cases, the potential export losses tend be overestimated by developing countries. In addition, harmonization is often overrated; adopting the strict labeling policy of an importer will not simply open export markets.

In this context, the following strategies would help enable developing countries to simultaneously satisfy production, consumption, international trade, and risk-management objectives, and also comply with their international obligations (as shown in Figure 1):

1. Adopt a comprehensive but practical biosafety regulatory process for GM crop production and imported GM food for consumption based on international standards;
2. Adopt approved GM crops adapted to regional constraints and preferences that offer significant productivity increases;
3. Import and consume approved GM food without further trade-distorting or costly marketing restrictions (for example, avoid stringent mandatory labeling or information requirements, but allow voluntary labeling for consumers or exports);
4. In cases of commodities with proven risk of potential export loss, adopt strategies that help segregate GM and non-GM food for sensitive exportable markets and, potentially, for the domestic market (non-GM niche).

Adopting these proposed policies would mitigate the observed negative effects of trade-related regulations, allowing developing countries to fully benefit from the use of safe transgenic crops and their products.

About the author: Guillaume Gruère is a Research Fellow in IFPRI’s Environment and Production Technology Division.


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