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BIOSAFETY AND PERCEIVED COMMERCIAL RISKS

THE ROLE OF GM-FREE PRIVATE STANDARDS

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This brief summarizes a study on commercial risks and the role of GM-free private standards in biosafety decisionmaking in developing countries. The findings are used to suggest a straightforward decisionmaking framework to help separate real commercial risks from other perceived risks.

GM-free private standards

Policy specialists have identified the fear of export loss associated with the use of genetically modified (GM) products as an important factor influencing biosafety decisionmaking in a number of developing countries. For instance, the fear of export loss to Europe was reported as a significant factor in the political decisions to reject the commercialization of a GM potato in Egypt or to reject the use of food aid potentially containing GM grains in Zambia. However, applied research conducted in the area of biotechnology and international trade has consistently shown that allegations of commercial risk associated with the use of GM products are most often largely exaggerated. This suggests a distortion between the perceived and real commercial risks, supporting a bias toward a precautionary stand that favors export consideration over production interests.

A closer look at the global market for agricultural products over the last decade suggests that GM-free private standards, defined as the policy that companies establish to avoid GM ingredients in the products they sell, have played a determining role in explaining this discrepancy. In the mid-1990s, GM-free private standards evolved from an increasing wariness among European consumers toward the increasing production and consumption of transgenic crops. Supermarket chains in Europe, Japan, and South Korea seized on this fear, choosing to avoid GM ingredients in food items and then marketing these items as higher in quality. The demand for GM-free food items resulted in GM-free requirements for their suppliers in exporting countries. Traders and producers had to adapt by taking measures against the presence of any GM product in their country.

From importers to biosafety decisionmaking: Reviewing the evidence

The study examined the effects of GM-free private standards, as established by food companies in European and other food-importing countries, on biosafety policy decisions in exporting developing countries. Evidence was collected from field visits to South Africa, Namibia, and Kenya in June 2007, and from available publications. The study found 31 cases where GM-free private standards influenced biosafety or biotechnology policy decisions, either directly or indirectly, in 21 countries. Among these, three types of relevant commercial risks can be distinguished: unproven risks, potential risks, and real risks (Table 1). Unproven risks are either easily manageable, or based on irrational perception of or nonexistent risk; potential risks present a possibility of export loss (present or future), and are more generally associated with uncertainty regarding the presence or scope of the risk and/or its manageability; and real risk includes cases where a particular industry has a GM-sensitive market and would actually stand to lose its market if it used GM products.

Disentangling irrational fears from real commercial risks

Despite the variability in country and product, all the cases from Table 1 share a number of common features. First, amid the possible presence of commercial risk, they are subject to similar efforts to influence policy decisions in the exporting countries. Supermarkets in importing countries, traders, organic producers, nongovernmental organizations (NGOs), and local supermarkets all had partial influence on decisionmaking in these cases. Although importing companies in Europe do not often interact directly with policymakers, local trader groups play prominent roles. Also, organic groups and NGOs often have overlapping interests and roles in opposing GM products based on export considerations.

Table 1. Categorization of selected international cases of interaction between commercial risk and biosafety

Risk Category	Country and product concerned
Unproven risks	Australia (GM canola), Egypt (GM potato), Malawi (GM maize/cotton), Indonesia (GM cocoa), Kenya (GM maize/cotton), Kenya (GM tea), Namibia (GM maize), Qatar & UAE (GM rice), Russia (GM food), Tanzania (GM tobacco), Zambia (GM maize), Zimbabwe (GM maize).
Potential risks	Australia (GM wheat), Brazil (GM soybeans), Canada & USA (GM wheat), India (GM rice), Uganda (GM cotton), South Africa (GM potato), Thailand (GM papaya), USA (GM sugarbeet).
Real risks	New Zealand (GM yeast), Thailand & Vietnam (GM rice), USA (GM rice).

Source: Gruère and Sengupta (2008)

Second, decisions to go non-GM are generally based on two misleading assumptions. The first is that *segregation between GM and non-GM is infeasible*. This assumption prompts fear that the option for non-GM products will be eliminated if a GM variety gets approved (or even tested). In fact, segregation is not always feasible or easy, but segregation of non-GM products that are already subject to multiple quality and safety checks for export can be a distinct possibility (as seen for instance in Brazil or South Africa). The second assumption is that *current markets in Europe and Japan are the only potential markets for exports,* therefore adopting GM will result in a complete loss of all export opportunities. On the contrary, a number of countries do not discriminate between GM and non-GM products, or do not have as high marketing standards as those in Europe.

Third, two particular factors play a role among policymakers and traders in many of these cases: *information asymmetries* and *risk aversion*. Information asymmetries- here defined as the difference in the degree of knowledge among actors on the commercial risk associated with the use of GM products- can be found between the informed importer and uninformed trader, and between informed traders/ local stakeholders and uninformed policymakers. The study also provides evidence that certain traders, particularly in developing countries, tend to be *risk averse* in their relationship with buyers, complying with any requirement of the buyers without question, despite the costs those standards may imply. Risk aversion behaviors can also be found among policymakers fearing to take a stance on the testing and deployment of GM products.

A simple decisionmaking framework

Even if risk aversion is difficult to reverse, more and better information on real commercial risks would help policymakers make more rational decisions. When facing a discrete biosafety decision with potential commercial implications, five key questions should be answered (Box 1). Using these five questions (starting with Q1), the figure below suggests a procedure to follow to determine whether a possible commercial risk associated with a biosafety decision is serious or not. If the unambiguous response to all questions is YES, then the commercial risk is serious and could justify a rejection of the decision. If, however, the answer to one of the five questions is a clear NO, the risk is not serious enough to reject a decision without further consideration. If one or more answers to these questions is ambiguous, policymakers should obtain more information about the situation.

Box 1. Five necessary questions to assess an alleged commercial risk:

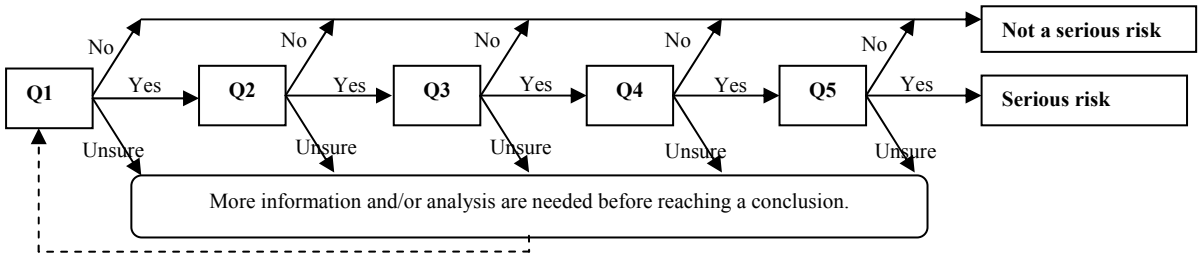
Q1. Is the alleged risk substantiated?

Q2. Are export losses likely with the decision?

Q3. Are presumed export losses non-negligible for the country?

Q4. Is the risk unavoidable?

Q5. Is the risk greater than the benefits?



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