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Low-Level Presence of Genetically Modified Crops in Imports: Proposed Domestic Policy

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LOW-LEVEL PRESENCE OF GENETICALLY MODIFIED CROPS IN IMPORTS: PROPOSED DOMESTIC POLICY

Since genetically modified (GM) crops were first commercialized in the 1990s, their number has steadily increased. However, adoption of these crops and the policies applied to them can vary from one country to another, which could disrupt international trade.

This paper summarizes this situation and then briefly describes a proposed domestic policy to manage low-level presence (LLP) of GM crops in imports.

1 GENETICALLY MODIFIED CROPS

Since the first GM variety was commercialized in 1996, the adoption of GM crops has spread rapidly around the globe. In 2012, the world's total area devoted to GM crops reached a new record for the 17th consecutive year – between 1996 and 2012, it increased from 1.7 million hectares to 170 million hectares. In 2012, developing countries outpaced industrial countries in terms of the total area given over to GM crops (52% compared with 48%, respectively).

The five largest producers of biotechnology-derived plants are:

- the United States (69.5 million hectares);
- Brazil (36.6 million hectares);
- Argentina (23.9 million hectares);
- Canada (11.6 million hectares); and
- India (10.8 million hectares).

The main GM crops are maize, soybean, cotton and canola.¹

According to a report published by the European Commission's Joint Research Centre in 2009, the number of commercial GM crops worldwide is predicted to increase to over 120 in 2015 – compared to only around 30 in 2009.²

2 LOW-LEVEL PRESENCE OF GENETICALLY MODIFIED CROPS AND TRADE

Despite the rapid expansion of GM crops, their adoption and regulation often differs from one country to another, which can lead to asynchronous approval among trade partners, meaning that a GM variety could be approved in one country but not yet in another.³ And, while many GM products approved in one or another country are intended for domestic use and not for export, it is nevertheless possible, despite infinite precautions all along the supply chain, for these products to end up in shipments bound for countries in which they are not approved.

This situation can disrupt international trade, since an importing country that detects even a trace amount of a GM product that it has not approved can, based on its policies, deny the exporting country access to its markets for products it deems contaminated.

2.1 NATIONAL POLICIES ON GENETICALLY MODIFIED CROPS

Currently, most countries enforce some form of zero-tolerance policy for unapproved GM ingredients. These are some examples:

- In Canada, the smallest presence of an unapproved GM product on the market constitutes non-compliance. Should one of these products be detected, the competent authorities would immediately take action to resolve the situation.⁴
- The European Union does not tolerate any unapproved GM product. When a trace amount of such a product is detected on inspection, the imported shipments are rejected and any GM products that have already crossed European borders are pulled off the market. However, in 2011, the European Union relaxed its measures by accepting a maximum concentration of unapproved GM products of 0.1% for feed.
- In Switzerland, traces of unapproved GM material of up to 0.5% are tolerated in food if the GM crop in question is already authorized in another country where comparable procedures are followed.
- In the United States, regulatory agencies do a case-by-case risk assessment of the GM material and take proportionate measures.⁵

2.2 ECONOMIC IMPACT

Where there is zero tolerance for unapproved GM crops, incidents involving LLP of these products can have a significant economic impact, as confirmed through numerous studies. Here are some examples:

- According to a study commissioned by the Confederation of the Food and Drink Industries of the European Union, an LLP incident involving transgenic soybeans sourced from the United States and not approved in the European Union could entail costs of between 5 and 46 million euros.⁶
- In 2009, the European Union detected the presence of Triffid, a GM flax variety that was deregistered in 2001, imported from Canada. Following this discovery, the EU closed its borders to Canadian flax for a few months. The ban had a significant impact on Canadian farmers, resulting in a loss of approximately \$30 million.⁷

2.3 INTERNATIONAL COLLABORATION

Because of the diverse policies on GM crops and the economic impact of an accidental presence in imports – loss of rejected products, market closures and risk management costs – many stakeholders believe that efforts should be made to find ways to adapt current tolerance rules to the realities of international trade. In fact, some organizations advocate the establishment of standards or agreements on LLP of unapproved GM material.

That is why some countries, critical of a lack of international coordination, launched a global collaborative initiative in March 2012, the Global Low Level Presence Initiative. Representatives of 15 countries attended the first meeting in Vancouver, which Canada co-chaired with Paraguay.⁸

The purpose of the meeting was to consider the LLP issue and find ways to manage it. Participants drafted an international work plan on the presence of LLP in GM products, which outlines key areas for international collaboration, and a document in which the group outlined its strategic directions, objectives and intentions.⁹

These discussions, which focus on finding international solutions (policies, standards, etc.), continued at subsequent meetings in Rosario, Argentina, in September 2012 and in Durban, South Africa, in September 2013.

3 THE PROPOSED DOMESTIC POLICY AND ITS IMPLEMENTATION FRAMEWORK

Aware, like many other Canadian stakeholders, of the problems caused by the current zero-tolerance policy, the Government of Canada recently drafted a proposed domestic policy on the management of LLP of GM crops in imports. It released the proposed policy in September 2012 and subsequently held consultations, which were complemented by hearings of the House of Commons Standing Committee on Agriculture and Agri-Food.

3.1 THE POLICY

In its current version, the proposed policy is based on the following statement:

Upon detection of unauthorized GM crops in grain, food or feed products imported into Canada, it is the policy of the Government of Canada (GoC) to take action commensurate with the risk posed by the LLP, without unduly disrupting trade.¹⁰

The policy has three objectives:

- minimize disruptions to trade while protecting the health and safety of humans, animals and the environment;
- facilitate an effective and efficient risk-based approach to managing LLP; and,
- provide transparency and predictability for importers and exporters.¹¹

The policy applies to all imported grain and food – destined for humans or animals – that contain LLP where:

- the GM crop has been approved for use as food in at least one country; and,
- Canada has recognized that the safety assessment conducted by that country is consistent with Codex Food Safety Assessment Guidelines.¹²

The policy does not apply to seed, GM fruits and vegetables or GM animals and microorganisms, among other things.¹³

Lastly, the proposed policy provides for two action levels respecting GM crops in shipments:

- a) an action level of 0.1% or 0.2% above which regulatory bodies would consider taking action; and
- b) threshold levels (varying by crop) that would set the maximum concentration of GM ingredients considered to be LLP.¹⁴

3.2 CONSULTATIONS

From 6 November 2012 to 19 January 2013, the government held public consultations on this policy and its implementation framework. Then, from 26 February 2013 to 7 March 2013, the House of Commons Standing Committee on Agriculture and Agri-Food held hearings on the subject, during which various stakeholders from Canada's grain industry testified.

Numerous stakeholders expressed their support for an LLP policy.

Some among those opposed to the policy expressed concern that the policy threatens the safety of the food system. Others were concerned that it will have a negative impact on the organic production system, in addition to threatening Canada's organic heritage. Organic farmers argue that contamination of their products by GM material would cause them to lose certification, which could, among other things, result in substantial financial loss.¹⁵

In light of the comments from Canadians and stakeholders in the agriculture and agri-food industry, Agriculture and Agri-Food Canada is now revising its proposed domestic policy.

4 CONCLUSION

The number of GM crops is expected to increase in the coming years, leading to a significant increase in LLP of unapproved GM material in international trade.

By establishing a national policy on LLP of GM products, Canada could become one of the first countries to authorize LLP of unapproved GM crops in its imports, which would minimize trade disruptions and maintain and increase access to international markets.

It is even possible that, once adopted, Canada's policy could serve as an international model.

NOTES

1. Clive James, [*Global Status of Commercialized Biotech/GM Crops: 2012*](#), International Service for the Acquisition of Agri-biotech Applications, Brief 44, 2012.

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2. Alexander J. Stein and Emilio Rodríguez-Cerezo, [*The global pipeline of new GM crops: implications of asynchronous approval for international trade*](#), European Commission, Joint Research Centre, 2009.
3. Ibid.
4. Agriculture and Agri-Food Canada, [*Frequently Asked Questions – Proposed Domestic Policy on the Management of Low-Level Presence of Genetically Modified Crops in Imports*](#), 2012.
5. Alexander J. Stein and Emilio Rodríguez-Cerezo, “[Low-Level Presence of New GM Crops: An Issue on the Rise for Countries Where They Lack Approval](#),” *AgBioForum*, Vol. 13, No. 2, 2010.
6. Landmark Public Policy Advisors Europe, [*The cost of low level presence of GMOs in food products in Europe: An impact assessment based on the recent RASFF 2009.1037 & 2009.1165*](#), Report commissioned by the Confederation of the Food and Drink Industries of the European Union, 2009.
7. Camille D. Ryan and Stuart J. Smyth, “[Economic Implications of Low-level Presence in a Zero-Tolerance European Import Market: The Case of Canadian Trifid Flax](#),” *AgBioForum*, Vol. 15, No. 1, 2012.
8. Agriculture and Agri-Food Canada, [*2011–2012 Agriculture and Agri-Food Market Access Report*](#). Aside from Canada and Paraguay, the other countries that participated in the meeting were Argentina, Australia, Brazil, Chile, Costa Rica, United States, Indonesia, Mexico, New Zealand, the Philippines, Russia, Uruguay and Vietnam.
9. Ibid.
10. Government of Canada, [*Proposed Domestic Policy on the Management of Low-Level Presence of Genetically Modified Crops in Imports and its Associated Implementation Framework*](#), September 2012, p. 4.
11. Ibid., p. 5.
12. Ibid.
13. For the complete list, see *ibid.*, p. 6.
14. House of Commons, Standing Committee on Agriculture and Agri-Food, [*Toward a Common Goal: Canada’s Food Supply Chain – Part 1*](#), 1st Session, 41st Parliament, June 2013, p. 33. This quotation summarizes section 6.1 of Government of Canada (2012), p. 7.
15. House of Commons, Standing Committee on Agriculture and Agri-Food (2013).