

Consumer perspectives remain biggest hurdle to GM foods

Panel: Addressing Concerns Over GMOs - Striking the Right Balance Organized by Agriculture and Agri-food Canada (AAFC) CSPC 2015 - November 26, 2015

Panelists: Moderator: Sylvain Charlebois, College of Business and Economics, University of Guelph; *Panelists:* Andrew Goldstein, Director General of Policy, Planning, and Integration, Agriculture and Agri-food Canada; Muffy Koch, Biotech Regulatory Affairs Manager, Simplot Plant Sciences; Elizabeth Nielsen, Board of the Consumers Council of Canada and the Consumer Policy Committee of ISO; Mike Peterson, Global Traits Lead, Forage Genetics International; Lucy Sharratt, Coordinator, Canadian Biotechnology Action Network

Takeaways and recommendations

- ✓ Greater collaboration needed between industry, government and consumers
- Review viable options for public information, including labelling
- ✓ Make the risk assessment process more transparent
- ✓ Reduce regulatory scrutiny for low-risk varieties
- ✓ Ensure regulators have the necessary skills to evaluate the safety of new GM products
- Ensure separation in CFIA's dual mandate of protecting health and safety and promoting industry

The policy issue: Genetically modified (GM) foods are playing a growing role globally in tackling food security and undernutrition. Yet they remain a contentious issue some 20 years after they were first commercialized. Canada's approach to GM foods centres on a regulatory system that focuses on strict, science-based safety criteria, without addressing a range of socioeconomic impacts.

"Canada exports a tremendous amount of our agricultural production, so we rely on scientific- and rules-based trade. If we move away from scientific regulatory approvals, that will undermine our ability to advocate for science-based rules around the world, and this can lead to market access issues for our own products," said Goldstein.

Panelists agreed the issue is complex, with public education being one of the biggest challenges. "I don't think anyone from governments to industry has done as good a job as they should in transparency and explaining things," added Goldstein.

Sharrat explained that consumer resistance to GM foods is made worse by a lack of labelling and traceability. The Consumers Council of Canada has found that Canadians are concerned about the food they eat and want to know what's in it and where and how it's produced. The Council has called on the agri-food industry to respond with better, more complete and more accurate product information.

"The Canadian government does not actually track where genetically modified crops are grown, and there's no listing or tracking of what traits are on the market," said Sharrat.

CSPC c/o Ryerson University 350 Victoria St. Faculty of Science, Dean's Office- VIC 705 Toronto, Ontario M5B 2K3 Tel: 416-979 5000 x3276 Cell: 416-803 2932 The uncertainty around public acceptance puts a strain on the predictability of the process, from GMO development to market. "Corporations developing GMOs have as much to lose by not addressing the perceived risks raised by consumers," said Nielsen.

Koch, who has spent 20 years studying consumer acceptance in developing countries, says misinformation is to blame. "I feel very strongly that if consumers are given good information they will be able to make informed decisions," said Koch. "Choice is critical for consumers."

The solution, panelists agreed, rests on a more holistic and inclusive approach to biotechnology that includes collaboration between industry, government and consumers.

As the pace of technology increases, Goldstein said "it will be a challenge for regulators to keep up with the level of new products coming forward, and a challenge for industry in how you sell into this environment." He added that regulators will need the skills to evaluate the safety of these new products.

Concern was also expressed that the CFIA may face pressure when assessing GM foods. Although the agency is impartial and regulates products based on strict, science-based criteria, some of its operations are overseen by the Minister of Agriculture, who is also responsible for the well-being of the sector. "The auditor general a couple of years ago pointed out that this is an obvious conflict of interest which places the health and safety and the environment at risk," said Neilsen.

The options: "Innovation is really one of the foundations of our policy directions," said Goldstein. "The innovation is critical first and foremost for the profitability and economic sustainability of the sector, but it can also help the sector adapt to an evolving range of opportunities and challenges."

Goldstein noted that the regulatory process managed by Health Canada and CFIA offers "a framework and system that provides predictability to facilitate innovation in the sector while ensuring safety".

Canada's approach differs from the U.S. where regulators look at deregulating traits, said Peterson. "The Canadian regulatory system has a much better design to handle some of those newer types of technologies because they evaluate plant novel traits whereas the U.S. looks at the pest potential of a new trait."

Goldstein agreed, saying "the novelty-trigger creates a more flexible system for Canada, while still looking at safety."

Canada's flexibility in addressing a wider range of products is useful as it ensures new biotechnologies are covered under the umbrella of the regulations, said Koch. However, she pointed out that Canadian regulators are more stringent, which can burden business and innovation if "every single clonal variety we transform we have to put through a full regulatory system, even if that transformation is identical in each variety."

If regulators see an identical transformation in five varieties, then Koch suggests they only look at regulating new risks in later varieties.

One course of action, said Neilsen, is to require mandatory labeling and provide transparency around the assessment process. "Many states in the U.S. have legislation pending for mandatory labeling. And in Europe, of course, it's being done on a regular basis now, not only for consumers to make an informed choice, but also for traceability of the product."

When developing a new product, Koch added it should to beneficial, desirable, affordable and appropriate for the market, so working with customers is important. For example, in response to consumer concerns over black spot bruising in potatoes, Simplot Plant Sciences, which has operations in Canada and around the world, developed a new potato variety called "Innate". It eliminates the unsightly spots and reduces the levels of a potentially harmful chemical called acrylamide.

Goldstein said these innovations have expanded the benefits of GMOs from industry to consumers. "When GMOs were first introduced, the benefits were for the industry. Now we see new products being developed, such as the non-browning potato and non-browning apple, where there is an actual benefit to the consumer."

While genetically engineered crops are a growing industry in Canada, Goldstein said organic agriculture is also on the rise. "From AAFC's perspective, that's a good thing. We are there to support industry. If they choose to go the organic route, that's great and if they choose to use biotechnology, that's also great."

Relevant documents:

GMO Inquiry 2015, Canadian Biotechnology Action Network; http://gmoinquiry.ca/

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