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**How to Create Dynamic Agri-food Regulatory Policy in an Era of Accelerating Technological Innovation**

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Speakers: Dr. Pierre Bilodeau, Executive Director, Science Branch Canadian Food Inspection Agency; Evan Fraser, Director, Arrell Food Institute, University of Guelph; Cornelia Kreplin, Executive Director, Bio Sector, Alberta Innovates Bio Solutions; Michael M. Lohuis, Vice-President, Research & Innovation, Semex Alliance; Crystal Mackay, President, Canadian Centre for Food Integrity; and Tyler Whale, President, Ontario Agri-Food Technologies

Moderator: Malcolm M. Campbell, Vice-President (Research), University of Guelph

**Takeaways and recommendations**

Policy considerations

* Innovative agrifood regulations and policies require science-based evidence and the “right environment” to be successfully implemented.
* Policy/regulatory reforms have not kept up with pace of innovation; policy should drive/incent areas where innovation is most desired, needed and strategic.
* Canada needs a regulatory policy environment that allows Canadian organizations to adopt innovative technologies to remain competitive in an increasingly competitive global environment. Countries that lag in adopting new technology will fall behind global competitors.
* Use artificial intelligence to speed review of scientific literature to accelerate review and approval of new drugs.
* Technologies and policies must focus on improving global ag-systems, particularly for small acreage farms in developing countries.
* Develop a collaborative approach to technology/policy framework amongst like-mind nations.
* Fund policy and regulatory science.
* Enact recommendations pertaining to agriculture in the Advisory Council on Economic Growth report.
* Focus on sustainable growth that delivers safe, healthy and nutritious foods, while balancing challenges such as climate change, water use, overpopulation and antibiotic use in livestock.
* Look into allowing in “initial token offerings” (an online fundraising method) to fund new digital platform technologies for agriculture.
* Policies should reflect an industry that is evolving from traditional farm jobs (e.g. husbandry) to tech-savvy jobs like logistics and software.
* Measuring impact in agriculture is difficult because of the significant lag time from research to farm production; one solution is to measure outputs that build the sector’s capacity (e.g. number of post-secondary graduates, number and impact of scientific publications).

Building public trust

* Canada can build on its strength in food safety to become the trusted global leader in safe, nutritious and sustainable food.
* Governments need to take a leadership role in providing straightforward and science-based regulatory pathways that evaluate new and emerging technologies (e.g. gene editing) to counteract unsubstantiated claims on social media.
* Waning public trust in government agencies means that good science and regulatory approval are not enough to guarantee consumer acceptance of a product. The public needs to be engaged early in transparent discourse to build trust. Look to other countries for best practices.
* Provide the public with more data (e.g. tracking from farm to plate) to build trust. Consumers want an honest assessment of risks and rewards.
* Scientists and farmers rate high as trusted and credible sources, but they don’t have a voice.
* Look at forming a national certification program that is science-based.
* Develop policies that focus on safety; harmonize with like-minded jurisdictions; and ensure regulations enable experimentation.
* Create incentives for farmers to create breeding programs for crops and livestock that focus more broadly on environmental resilience and not just yield.
* Use plain language to communicate evidence, and make this information more readily available on social media and the mainstream media.
* Agricultural research should incorporate ethical, legal and social implications, as a condition of funding.
* Move agriculture from being a commodity to something that is an important health determinant (i.e. by building better connections between the agricultural community and the health community).