

Canadian Food Inspection Agency / Agence canadienne d'inspection des aliments

Canadian Food Inspection Agency

Our vision:
To exist as a science-based regulator, trusted and respected by Canadians and the international community.

Our mission:
Dedicated to safeguarding food, animals and plants, which enhances the health and well-being of Canada's people, environment and economy.

Sidney Laboratory Centre for Plant Health Sidney, BC

Dan Thompson
AVICC AGM, April 8 – 10, 2011

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Canadian Food Inspection Agency

Serving Canadians - Coast To Coast To Coast

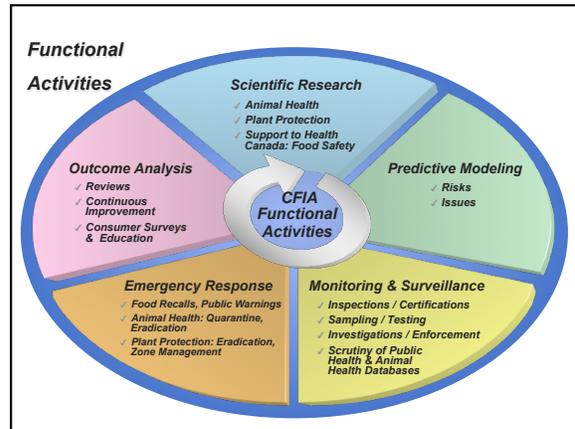
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CFIA Relationship to 14 Programs

Canadian Food Inspection Agency

Safe Food	Animal Health	Plant Protection
<ul style="list-style-type: none"> Fish Dairy Egg Meat Hygiene Honey Fresh Fruit & Vegetables Processed products Food Safety Investigations Fair Labeling Practices 	<ul style="list-style-type: none"> Animal Health Veterinary Biologics Humane Transportation Feed 	<ul style="list-style-type: none"> Plant Protection Seed Fertilizer

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Canadian Food Inspection Agency Laboratory's

Atlantic Area Labs
Dartmouth N.S. (food / fish)
Charlottetown P.E.I. (Centre For Animal and Plant Health)
St. John's Nfld. (fish / plant)

Western Area Labs
Sidney B.C. (Centre for Plant Health)
Burnaby B.C. (fish, food)
Calgary Alta. (food)
Lethbridge Alta. (Animal Diseases Research Institute)
Saskatoon Sask. (Health of Animals Laboratory
Western Seed Laboratory)
Winnipeg Man. (National Centre for Foreign Animal Diseases)

Ontario Area Labs
Mississauga (fish)
Scarborough (food)
Ottawa (Food)
Nepean (Animal Diseases Research Institute / Ont. Plant Labs, Biologics Evaluation Laboratory)

Quebec Area Labs
Longueuil (fish, food)
St. Hyacinthe (Health of Animals and Food Laboratory)
Quebec (fish)

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Role of Centre for Plant Health

- To prevent the introduction & spread of plant viruses and related diseases
- National plant introduction and post entry quarantine facility
- Research support for CFIA programs
- National repository of virus-tested plants

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Clients and Staff

- CFIA Plant Health
 - Regulatory staff HQ
 - Regional operations staff
- Producer Associations
- Provincial Grower Groups
- Technology Development Collaborators
- Office of Biotechnology
- Staff
 - 36 (49 in summer) total
 - 5 Biologists, 3 Scientists



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Role of Diagnostic Sections

- Test non-approved material from foreign sources (Section 43 import permit)
- Test approved material from foreign sources (Audit)
- Test domestic material for export certification, e.g. new fruit varieties
- Virus elimination
- Nuclear repository of virus-tested stock
- Surveys and post-entry quarantine



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Testing Methods

- Woody bioassays in field and greenhouse (3 months to 3 years). Only way to detect some diseases.
- Herbaceous bioassays (2 to 3 weeks). Not all viruses sap-transmissible.
- Lab tests (ELISA, PCR) – accurate and sensitive but require knowledge of causal agent



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CFIA Environmental Scan

Objective: To provide CFIA with an environmental scan of issues that may impact the business of the Agency

The Scan:

- Annual report by Policy and Program Research Division
- The scan is organized into five areas:
 - Society and Demographics;
 - Environment and Natural Resources;
 - Governance, Policy and Regulations;
 - Economics, Business and Trade; and
 - Science and Technology.
- Short term is defined as being two years, medium term as five years and anything beyond 2015 as longer term
- We then look at potential implications for the CFIA business lines

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Society and Demographics

Short and Medium Term

- Increasing concern for safety of ingredients and materials in food and products
- New immigrants (approx. 80%) settling in Toronto, Montréal, Vancouver, Calgary and Ottawa*
- Internet use increasing rapidly in Canada: 80% of those 60 or older were regularly connected in 2009, up from 73% in 2007**
- Baby Boomers are more affluent, more independent and have higher expectations from governments compared to the current generation of seniors

Longer Term

- The population of over-65s will more than double, from 4.7 million in 2009 to between 9.9 million and 10.9 million (an estimated 25% of the projected population) by 2036***
- The average age of farmers is increasing, with farm operators under the age of 35 making up only 9.1% of all farm operators****
- International travel is projected to grow 6.5% annually on average to 2020 thus increasing the risk of pandemics



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Environment and Natural Resources

Short and Medium Term

- National water levels are expected to be the same, but with regional variability*
- Green House Gas emissions continue on 'business as usual' forecast; probability of regional drought and flooding increasing
- Due to the complexity of climate change, the impact upon agriculture is difficult to accurately quantify**

Longer Term

- Temperatures will continue to rise with best estimates suggesting a 1.8 to 4.0 degree C increase over the next century—regional differences within Canada and globally
- Agricultural productivity in Canada and around the world will increasingly be dependant on water quantity and quality



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Governance, Policy and Regulation



Short and Medium Term

- Proposed food safety legislative reform in U.S. will likely impact Canada's export requirements and safety standards
- Both global and domestic consumers have increasing expectation to influence governments
- Countries with developing governance structures are increasingly entering into trade

Longer Term

- Restricted government spending in order to eliminate deficit by 2015
- One World, One Health convergence of risk management across disciplines
- Renewed focus on regional agreements likely to follow bilateral efforts

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Economics, Business and Trade



Short and Medium Term

- Heightened tensions in currency markets and related risks associated with global imbalances could result in a more protracted and difficult global recovery*
- Economic recovery to be more gradual than projected with growth of 3.0 per cent in 2010, 2.3 per cent in 2011, and 2.6 per cent in 2012**
- Domestic consumption and housing activity expected to slow**
- U.S. recovery weaker than projected, constraints are beginning to moderate growth in emerging-market economies*

Long Term

- Global agricultural production to grow more slowly in the next decade but remains on track to satisfy estimated long term demand***
- Globalization of economy, people and culture to continue*

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Economics, Business and Trade



What is Globalization?

- Globalization describes the process by which nation-states are becoming integrated through a global network of economics, technology, culture, governance, biology/ecology and ideology
- Globalization is driving changes in production, distribution and consumption*

Globalization : Trends

- The information and communications revolution increasingly allows for products to be sourced, manufactured and distributed in a global economic context**
- Between 1997 and 2009 CFIA regulated commodity exports have risen 12% and imports have risen 69%, although commodity markets continue to be volatile***
- Canada's top emerging suppliers are from developing world with varying degrees of regulatory capacity and oversight*
- International travel is projected to grow 6.5% annually on average to 2020****

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Economics, Business and Trade



Global Stories: A Taco and a Pig



Story of a taco: this map depicts the transportation of all of the ingredients that went into the building of a taco (e.g. avocado from Chile, rice from China)



Story of a pig: Research conducted over three years following all the products that incorporated a single pig (e.g. photo paper, heart valves, bio-diesel and ammunition)

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Science and Technology



Short and Medium Term

- Products of biotechnology with focus on climate related tolerance as well as non-food/feed applications (molecular farming, biofuel production)
- Digitalization of traceability, labelling and other systems (consumers with hand-helds looking up 'mega labels' with various ratings and environmental scoring)
- Increased genomic knowledge leading to better understanding of the mechanisms by which animals and crops cope with disease, parasites, and insects
- Food and agriculture applications of nanotechnology entering the Canadian market*

Long Term

- Hand held with imaging technology that can capture images of micro-particles using a sensor array – pathogen or disease detection**
- Manufactured foods (meat in a petri dish)
- Plants capable of producing seeds that are clones***
- Rapid development and application of technologies like nanotech
- Convergence of technologies – GMO, nano, synthetic biology and artificial intelligence

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Impacts on CFIA



- Variety of food and products from an increasing number of countries, some of which have governance in development
- Increase in demand for certification of claims and transparency and traceability
- Increased pest and disease risk (less winter kill)
- New risk of invasive alien species due to increased globalization
- Changes in the evolution and incidence of zoonotic diseases
- Increased worldwide demand for meat

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