

Federal Research and Monitoring

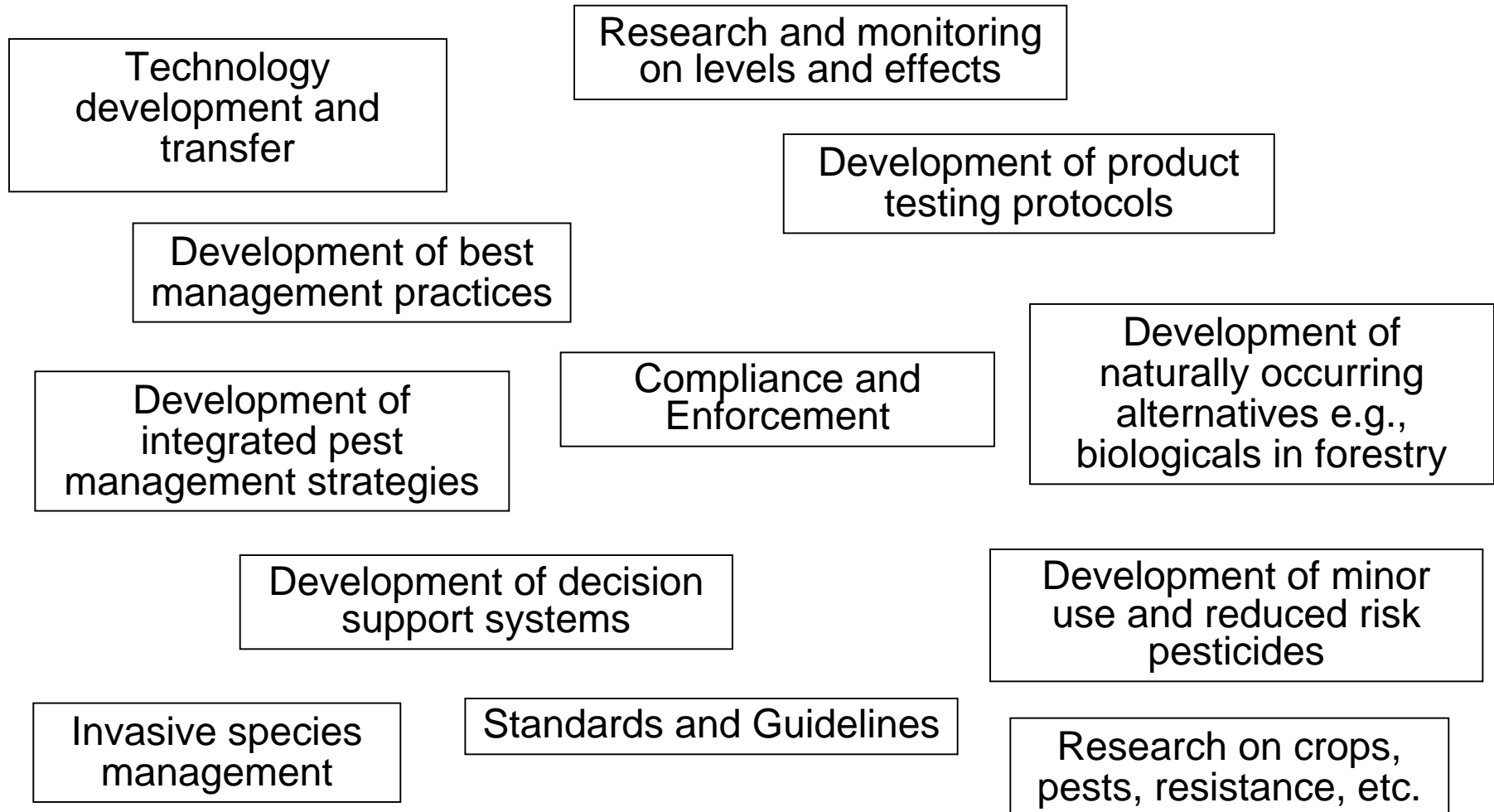
Presentation to the
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Federal Role in S&T

- ▶ Activities that focus on protecting and advancing the public interest on behalf of Canadians.
 - ◆ support for decision making, policy development and regulation;
 - ◆ support for health, safety and security, and environmental needs;
 - ◆ enabling economic and social development; and
 - ◆ development and management of federal and international standards.
- ▶ Federal research and monitoring activities on pesticides are in support all of the areas above.

Sound Science is Necessary in Many Areas



Federal Roles in Pesticide Research

▶ Health Canada

- ◆ Research and surveillance on human exposure to pesticides
 - Total diet residues studies & market basket residue studies
 - Risk assessment methods and test protocol development
 - Limited resources
- ◆ Note: PMRA does not conduct research and monitoring; mandate rests with other federal departments

▶ Environment Canada

- ◆ Research and monitoring on presence and effects in environment (species to ecosystems), presence in drinking water sources
- ◆ Test protocol development (e.g., toxicity to amphibians, plants)
- ◆ Risk assessment methods (e.g., birds, species at risk)

▶ Department of Fisheries and Oceans

- ◆ Research on effects in freshwater and marine ecosystems

Federal Roles in Pesticide Research

- ▶ **Natural Resources Canada**
 - ◆ Research and monitoring on presence and effects in forest environment
 - ◆ Development of reduced risk pesticides such as biological pesticides for forestry
 - ◆ Development of integrated pest management systems for forest pest management
- ▶ **Agriculture and Agri-Food Canada**
 - ◆ Development of reduced risk and minor use agricultural pesticides
- ▶ **Canadian Food Inspection Agency**
 - ◆ Residue limits in foods and feed
- ▶ **Federal governance:**
 - ◆ Bilateral MOUs currently
 - ◆ MOU amongst 6 federal departments being developed

Industry Role in Pesticide Research and Monitoring

- ▶ Provide all data to support registration (mostly pre-registration)
- ▶ Submit adverse effects reports which arise post registration (mandatory under new PCPA)

PMRA Research and Monitoring Priorities

- ▶ Monitoring fate and exposure (environmental, dietary, occupational, bystander)
- ▶ Monitoring effects
- ▶ Development and assessment of mitigation measures
- ▶ Risk assessment methods (probabilistic methods, safety and uncertainty factors, human health; cumulative assessments, refinements to existing methods)
- ▶ Test protocol development and validation

Challenges

- ▶ Lack of internal capacity at PMRA (no research and monitoring mandate)
- ▶ Lack of resources, especially for human health
- ▶ Need for better integration, common strategic approaches to address health and environment issues
- ▶ Need to go beyond traditional focus on single chemicals to look at complex mixtures, cumulative and synergistic effects
- ▶ Need for more research in social sciences
 - ◆ Social, ethical, value context for pesticide use

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Questions

- ▶ What other mechanisms should we establish, and to what other agencies and groups (e.g., CIHR, NSERC, SSHRC, academia) should we communicate with to have our research priorities more effectively addressed?
- ▶ Given the regulatory challenges, and limited resources in the federal government for research and monitoring, are PMRA's current priorities in the most effective areas?