



Agriculture and  
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# Agricultural Policy

## Relevance, Direction and Links to Environment

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## *What are the future directions for agricultural policy in Canada?*

- Growing Forward
  - Federal, provincial and territorial governments share a common vision: *A profitable and innovative agriculture, agri-food and agri-based products industry that seizes opportunities in responding to market demands and contributes to the health and well-being of Canadians*
  
- The three policy outcomes of the new framework are:
  - A Competitive and Innovative Sector
  - A Sector that Contributes to Society's Priorities
  - A Sector that is Proactive in Managing Risks
  
- Growing Forward will include programming that:
  - supports an innovative and competitive sector
  - promotes environmentally sustainable production of safe, high quality food
  - adapts to meet regional needs while addressing national goals
  - is supported by a modernized regulatory system
  - address business risks associated with modern agricultural production



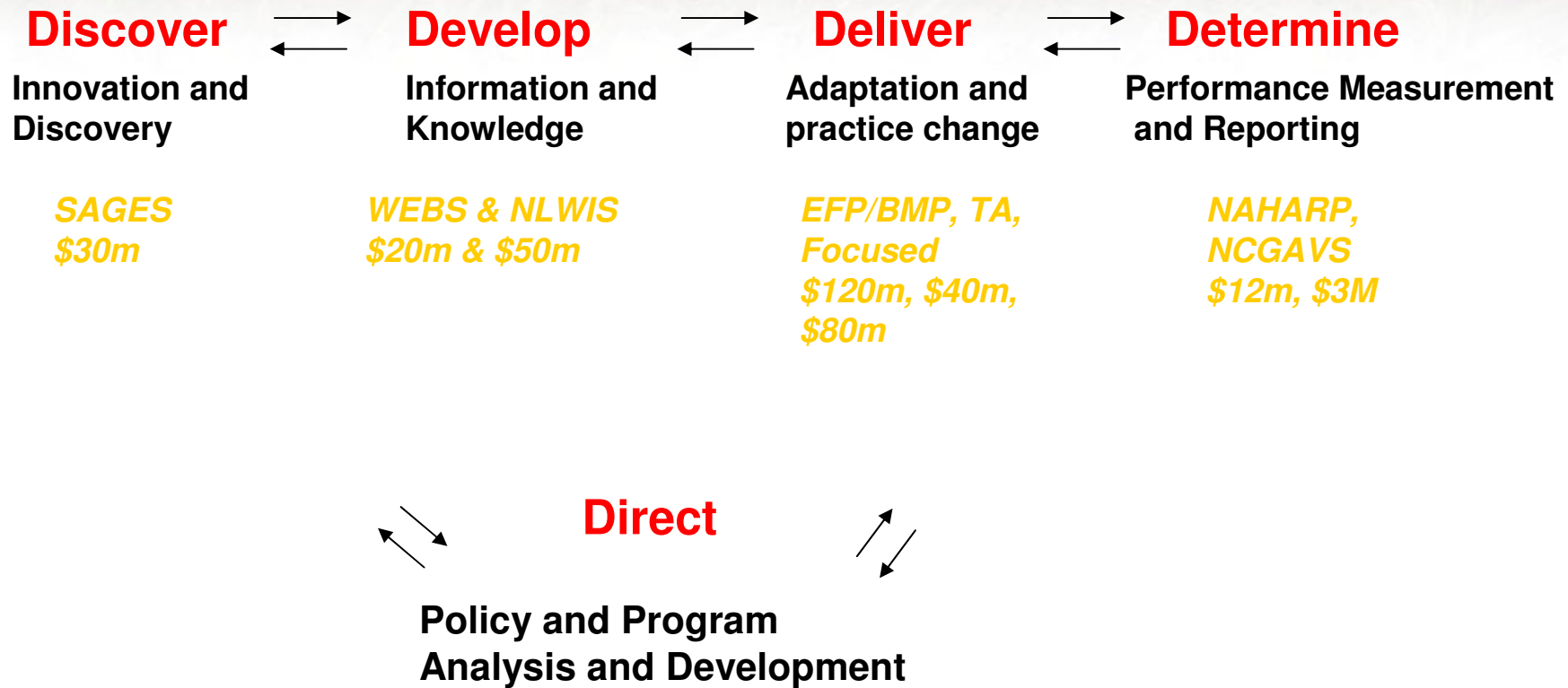


## *How is AAFC involved in environmental policy?*

- AAFC engagement on environmental issues is shaped by three factors:
  - shared jurisdiction for agriculture between federal and provincial governments
  - provincial jurisdiction over many aspects of the environment
  - within the federal government, responsibility for the environment is shared among departments
  
- Agricultural policy frameworks must navigate these overlapping constitutional authorities through a cooperative approach that
  - recognizes each level of government has a role to play in addressing agri-environmental challenges
  - respects the jurisdiction of each level of government
  - utilizes the strengths of each party through a suite of cost-shared programs at the farm level, combined with federal-only activities largely focused on scientific research, knowledge and information, and technical expertise

# PFRA-E Branch and Strategic Functions

*An economically and environmentally sustainable sector, able to meet or exceed society's expectations*



## *Agri-Environmental Policy Context and Objectives*

### **Policy drivers**

- Agricultural production is a significant user of land and water, impacts air quality and biodiversity and is a source and sink of GHG emissions
  - through regulation and the marketplace, society will continue to demand that industry fulfills its expectations and obligations with respect to the environment
- Competition is increasing for the natural resources on which agriculture depends
- Environmental stresses of - and on - agriculture continue to intensify and are magnified by the effects of climate change
- In situations where the producer's cost of environmental action cannot be recovered from the marketplace, government incentives are key to making progress toward a more economically and environmentally sustainable industry. Developing new markets from which producers can gain revenue for environmental performance is a key emerging issue.

### **Agri-environmental policy aims for :**

- A sector better able to respond to and anticipate the demands of society and the marketplace
- A sector making more efficient and sustainable use of available natural resources
- A sector better able to adapt to changing environmental conditions



## *How does AAFC fit into federal environmental policy?*

- Environment Canada leads federal environmental policy and communicating Government of Canada environment priorities.
- AAFC provides the scientific and technical expertise required to address environmental issues at the sectoral level
- AAFC's role with respect to the environment is an important part of how and what we report to Parliament
  - Providing information, research and technology, and policies and programs to achieve health of the environment is part of AAFC's mandate
- Historical influences are also relevant, particularly in western Canada where AAFC has a long tradition of dealing with the environmental impacts of agriculture, dating back to the establishment of the Prairie Farm Rehabilitation Administration during the 1930s



## *Prairie Farm Rehabilitation Administration (PFRA)*

- Established by an Act of Parliament in 1935 in response to the widespread drought, farm abandonment and land degradation of the 1930s.
- Original mandate: "...secure the rehabilitation of the drought and soil drifting areas in the Provinces of Manitoba, Saskatchewan and Alberta, and to develop and promote within those areas, systems of farm practice, tree culture, water supply, land utilization and land settlement that will afford greater economic security."





## *How can agriculture benefit the environment?*

- Beneficial Management Practices (BMPs) to minimize soil erosion
  - Soil erosion occurs through three main processes (actions of wind, water and tillage)
  - AAFC promotes the use of BMPs to reduce soil erosion on farmland, by compensating farmers for some of the costs associated with implementing these BMPs
  - While the BMPs chosen will all reduce or minimize soil erosion, some BMPs have benefits that accrue mainly to private individuals (farmers protecting their own productive land), while others provide more public benefits (clean water and ecosystem enhancement through maintenance of healthy riparian zones)
  - As part of the PFRA & Environment Branch, the PFRA has had an important role in researching and encouraging the adoption of BMPs



## *How can agriculture benefit the environment?*

### ■ Shelterbelts

- One effective way to combat wind erosion is through the planting of shelterbelts
- A shelterbelt is a line of trees or shrubs that protects the erodible topsoil of a farming operation from the action of the wind.
- Through the PFRA Shelterbelt Program, farmers can apply for tree and shrub seedlings at no charge (farmers are responsible for transportation, planting and maintenance of their shelterbelts)





## *How can agriculture benefit the environment?*

- Riparian Area Protection (reduce water erosion)
  - Riparian areas are areas where water, soil and vegetation interact
  - The action of water or livestock in these areas can erode land and reduce its productive capacity
  - AAFC encourages the use of BMPs to protect the land from erosion, reduce water contamination, and improve habitat for plant and animal life living in the riparian area





## *How can agriculture benefit the environment?*

- Conservation Tillage
  - AAFC researchers (AAFC Lethbridge Research Centre) and participating farmers first experimented with conservation tillage in the 1970s
  - The concept involved leaving crop residue such as straw and stalks intact and seeding the next crop directly into the unploughed land
  - The practice led to better topsoil preservation, and more efficient use of water and land
- In addition, each acre of conservation tilled land traps significant amounts of carbon
  - The concept has been widely adopted, and represents a dramatic cultural change in agriculture in the past three decades



## *Is AAFC agri-environmental policy working?*

- Performance Measurement and Reporting is also an important element of any policy framework
- Agri-Environmental Indicators
  - In order to provide decision makers with current information, AAFC reports on indicators of agri-environmental health through the National Agri-environmental Health and Reporting Program (NAHARP)
  - One indicator used is soil erosion risk. According to NAHARP reports, the risk of erosion on Canadian farmland has been decreasing since the 1980s.

	Low to Very Low Risk		High to Very High Risk	
	1981	2001	1981	2001
<b>Water Erosion</b>	89%	92%	6%	4%
<b>Wind Erosion</b>	84%	92%	6%	3%
<b>Tillage Erosion</b>	49%	76%	23%	2%



## *What could future agri-environmental policy include?*

- Ecological Goods and Services (EG&S)
  - Generally defined as the benefits derived from the functioning of healthy ecosystems
  - EG&S from agriculture include air and water purification, erosion control, and maintenance of biodiversity
  - AAFC has funded a number of pilot projects to test new EG&S approaches. These pilots are underway across Canada at a cost of about \$4.5m. These projects, funded by AAFC, represent a Federal-Provincial-Territorial effort.





Questions or Comments?

