Ecological Goods and Services (EG&S): and Agriculture: Exploring the Issues and Challenges

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EG&S in the agricultural policy context

- Ecological Goods and Services are the *benefits* society derives from healthy functioning ecosystems
  - Clean air, clean water, biodiversity

- EG&S are *not a specific tool*, but a desired outcome
  - There are many means to increase ecological services
  - It does not necessarily imply regular payments from government

- When ecological services need to be provided, governments often face pressure from the public to regulate, and from landowners to compensate
Most OECD countries face these sort of pressures

- EU progressively shifted payments from production to landscape, heritage structures and other public goods

- US created programs such as CRP (Conservation Reserve Program) to reduce commodity surpluses, but refocused them to protect fragile land
  - CRP counters the negative effects of USDA support for annual crops

- Past Canadian programs like GreenCover and Permanent Cover Programs had similar aims

- Programs in other countries create “program envy” in Canada

- This context led Canadian FPT Agriculture Ministers to request analysis of EG&S options in 2005
This issue is politically sensitive and complex

- Public demand for environmental benefits and reduced damage will grow with increased competition for land use

- Some producers will continue to demand compensation

- How to treat voluntary stewards equitably compared to those demanding compensation? And how to treat farmers as opposed to other landowners?

- Targeting is difficult:
  - Some Producer groups prefer uniform incentives available to all
  - Unconditional annual acreage payments are highly preferred by ALUS (Alternate Land Use Services) lobby
  - Many producers view good stewardship as a cost of doing business or of being a good neighbour
Policy advice inputting to these decisions:

- 2006 National Symposium on EG&S
- Eight pilot projects completed in 2009
- International experience
- Other policy research:
  - Reference levels, regulatory costs
  - Reverse auctions (with EC)
  - Tax Credits, Easements, Tradable Development Rights
- Cost-benefit analysis of EG&S options
Industry pilots...

1. PEI EG&S Pilot
2. Nova Scotia Federation of Agriculture
3. Eastern Canada Soil and Water
4. Basin-Versant de la Rivière-Aux-Brochets
5. EcoRessources
6. Manitoba ALUS pilot
7. DUC EG&S from wetland restoration
8. SK - Lower Souris Watershed
Key results from pilots and research: Many policy tools are available, with varying efficiency

- Fiscal and market-based instruments (MBIs) are generally more efficient:
  - Tradable permits (e.g. GHG Offsets)
  - Conditional payments (e.g. BMP insurance)
  - Environmental certification (e.g. Eco-labels)
  - Reverse auctions
  - Tax incentives/rebates

- Support measures traditionally used by governments are often less efficient:
  - One-time payments
  - Annual payments
  - Cross-compliance
Regulation is sometimes needed, in varying degrees

- Compulsory regulation can be a viable policy option when:
  - There is a strong public demand for government action
  - Implementation costs for producers and governments are relatively low

- Flexible regulatory frameworks can allow mitigation measures or market-based instruments to function:
  - GHG offset systems
  - Water quality trading
  - Tradeable development credits

- Environmental markets can sprout without any government regulation
  - Hunting and fishing on private lands
  - Set-asides of wetland and habitat with voluntary donations from ENGOs
  - Voluntary consumer markets for GHG offsets, fish habitat, etc.
Focus should be on building local, place-based solutions

- Costs of improvements, such as reducing phosphorus leaching, vary enormously

- Priorities vary as well:
  - For example, phosphorus is a priority issue in watersheds with blue-green algae outbreaks, but not everywhere
Using the right policy tool for a given issue

- MBIs are much more efficient than uniform payments

- Uniform annual payments are generally the least efficient option to enhance EG&S
  - Hard to target to local circumstances and hard to adjust as time changes
  - Not suited to multiple partners
  - Over-pays for land with low opportunity cost
  - Inflate land values or rental rates
  - Create expectations and on-going liability for governments
And getting non-agricultural partners to participate

- Non-agricultural departments have jurisdiction over land use
  - Authority rests with environment, natural resources and zoning departments

- Non-government bodies want these services as well
  - Some new players driven by corporate images or corporate social responsibility mandates (e.g. Syngenta, Royal Bank, Banrock Station) in addition to the traditional groups with their own conservation mandates (e.g. local watershed groups, Friends of Ont Greenbelt Foundation, Nature Conservancy, etc.)

- Local communities can use both moral suasion and cost-sharing to help determine a fair mix of “carrots and sticks”

- Most approaches involve non-agricultural and/or non-government partners:
  - E.g. Environment, Natural Resources, Finance, Municipalities, Habitat Organizations, Large Regulated Emitters, Land Developers, etc.
Environmental programs under Growing Forward offer one-time payments for farm plans and BMPs
Other approaches have been tested and deployed across the country by governments and stakeholders.
Partnerships with other players could create opportunities for farmers and avoid future regulatory measures

- Most environmental authorities lie in other departments or with municipalities

- However, agriculture is a very important player on the landscape:
  - Largest supplier of GHG offset credits
  - Large potential to supply wildlife habitat for conservation groups
  - Main supplier of phosphorus credits for water quality trading
  - Main non-point source of nutrients, pesticides and pathogens

- Generally, Agriculture departments more trusted by farmers than other departments
  - More expertise in working landscapes
  - More experience in non-regulatory approaches
FPT Departments of agriculture have a role to play in moving forward with market-based instruments

- Working with other agencies and partners to seek win-win solutions for environmental challenges
- Ensuring that MBIs can be built on a basis of sound science, and that results can be measurable
- Sharing lessons learned and expertise built-up through pilot projects and other work
Summary

- We know what the principles for an EG&S approach need to be:
  - Focus on building local solutions
  - Use the right policy tool for a given issue
  - Get non-agricultural partners involved in coordinated efforts

- A key challenge will be how to work with non-agricultural partners to help change mindsets and create opportunities