### The Economic and Environmental Impacts of Agricultural Subsidies: An Assessment of the 2002 US Farm Bill & Doha Round

Karel Mayrand – Stéphanie Dionne Marc Paquin – Isaak Pageot-LeBel

Second North American Symposium on Assessing the Environmental Effects of Trade Mexico, 26 March 2003

> UNISFÉRA CENTRE INTERNATIONAL CENTRE

## **Objectives**

- To assess the economic and environmental impacts of the 2002 US Farm Bill and the potential impacts of the Doha Round.
- To assess the environmental impacts of different categories of agricultural subsidies.
- To derive policy implications for the Doha Round agricultural negotiations and more generally on the formulation of agricultural policies in OECD countries.



### **Agricultural Subsidies in OECD Countries**

### Figure 1: Composition of PSE in OECD Countries (2001)





### **Agricultural Subsidies in OECD Countries**

Figure 2: PSE as % of Farm Receipts in OECD Countries





### **Agricultural Subsidies in OECD Countries**

Figure 3: PSE for Wheat in OECD Countries (1999-2001)





### An Overview of the 2002 US Farm Bill

- \$180 billion over 10 years
- Estimated increase: \$73.5 billion 78%
- 65% increase in commodities programmes
- 23% increase in conservation programmes
- Increases the use of coupled payments



### The Impacts of the 2002 US Farm Bill

- Coupled payments likely to impact more on the environment
- Magnitude of support likely to distort production decisions
  - Incentives for intensification of production
  - Crop flexibility limiting measures
- Higher agricultural outputs
- Impacts on world price and markets
- Positive impacts of conservation programmes



### Impacts of the URAA on Agricultural Support

Figure 4: PSE in OECD Countries (1988-2001)



UNISFÉRA CENTRE INTERNATIONAL CENTRE

### Impacts of the URAA on Agricultural Support

Figure 4: PSE for Wheat in OECD Countries (1999-2001)





### The Potential Impacts of the Doha Round

- Reengineering of domestic support policies
- Continued decrease in PSE levels
- Increase in world commodities prices
- Relocation of production favouring developing countries (wheat)



### An Overview of Environmental Impacts of Agricultural Subsidies

- The scale effect
- The product effect
- The technology effect
- The structural effect
- The equity effect



### **Classifying Agricultural Subsidies According to their Environmental Impacts**

### Figure 6: PSE Classification vs Environmental Impacts



UNISFÉRA CENTRE INTERNATIONAL CENTRE

### The Potential of Agro-environmental Programmes

- Agro-environmental programmes: 5% of total Green Box expenditure in OECD countries (1995-1998)
- Increased rapidly in recent years
- Until recently North America lagged behind
  0.5% of PSE in USA (1997)
  - □ 0.8% of PSE in Canada (1996)



### Conclusion

- Higher subsidies lead to production intensification and environmental impacts
- The phasing out of Amber Box policies would benefit both trade and the environment
- OECD agricultural support remains largely concentrated in the most environmentally harmful categories of subsidies



# **Policy Recommendations**

- A multilateral sustainability assessment of domestic support programmes in OECD countries should be undertaken
- The conclusions of this process could orient the redeployment of agricultural domestic support in OECD countries
- Canada, Mexico and the United States should instruct the Secretariat of the CEC to develop and refine a methodology

