

GROWING TOGETHER

**Report to Ministers of Agriculture
Federal-Provincial Agriculture Committee
on Environmental Sustainability
June 30, 1990**

EXECUTIVE SUMMARY

1. INTRODUCTION

The Federal-Provincial Agriculture Committee on Environmental Sustainability was set up under the Agri-food Policy Review in November 1989. Their task was to develop an action plan to address natural resource base and environmental quality issues facing Canada's agri-food sector; and to report to federal and provincial Ministers of Agriculture. The Committee was assisted by a Working Group with members drawn from federal and provincial governments, producers, and other agri-food sector stakeholders.

The issues dealt with were: soil concerns associated with degradation and urban encroachment; water quality linked to pesticides and other agricultural contaminants; the relationship between agriculture and wildlife habitats; excess or inadequate water supply; problems such as climate change and ozone depletion; inefficient energy use and the lack of economically viable alternatives to fossil fuels; pollution and waste management problems; and concerns linked to genetic resources.

These issues were examined with the view that sustainable agri-food systems are those that are economically viable, and meet society's need for safe and nutritious food, while conserving or enhancing Canada's natural resources and the quality of the environment for future generations. In the agri-food sector, environmental sustainability is the capacity to maintain indefinitely the environment necessary to sustain agri-food production.

Collectively, these issues were seen to constitute a threat to the environmental sustainability of agriculture and of the agri-food sector as a whole. However, since these are not the only issues that affect overall sustainability, other aspects of sustainable agriculture are being addressed by other task forces and processes. For example, food safety, pesticide registration, competitiveness, and farm safety nets, are being addressed under the Agri-food Policy Review. The present report focuses on those sustainability issues that are most closely linked to natural resources and environmental quality, while recognizing the need to integrate economic and social concerns

As a subset of the overall concept of sustainable agriculture, the goal for environmental sustainability that guided the Committee's deliberations was the following:

To maintain or enhance the natural resources that the agri-food sector uses or affects, while ensuring environmental, economic and social integration.

To achieve this goal the following three objectives were identified

1. *To conserve and enhance the natural resources that agriculture uses and shares.*
2. *To be compatible with other environmental resources that are affected by agriculture.*
3. *To be proactive in protecting the agri-food sector from the environmental impacts caused by other sectors and factors external to agriculture.*

2. POLICY SETTING

The report highlights the major policy developments during the 1980's on topics such as sustainable development, the National Agriculture Strategy, the federal-provincial Soil and Water Accords and the National Soil Conservation Program (NSCP). It identifies a few of the many studies that have documented the extent and severity of environmental sustainability issues in the Canadian agri-food sector. Many of these studies linked the problems to both underlying economic conditions and some of our major sectoral programs such as Crop Insurance, Western Grain Stabilization, Western Grain Transportation Act, and others. The need for thorough policy and program reform in support of environmental sustainability is emphasized throughout the report, and emerges as one of the principal recommendations.

3. ISSUES AND FUTURE ACTIONS

Each of the eight main issues is explored in detail, a vision for the future presented, and actions to take us to the year 2000 are recommended. In order to make the vision a reality, the Committee stressed the need for a more holistic approach to the management of our natural resources. The holistic approach is one that integrates all factors including environmental, economic and social, on the basis of systems, rather than individual elements back on the amount of tillage; remove highly erodible and environmentally sensitive lands from production; maintain cover crops or crop residues for soil cover; incorporate legumes in crop rotation, and other practices which maintain both productivity and environmental quality.

The Committee's vision for the eight issues is:

1. *A secure and well-managed resource base of agricultural land and soil to support the long-term productivity and competitiveness of the Canadian agri-food industry.*
2. *An agri-food sector that contributes to improved surface and groundwater quality through the use of environmentally sustainable production and processing practices.*
3. *An agri-food sector that has adapted itself to, and manages on a sustainable basis, the surface and groundwater resources available to it*

4. *Canada's agri-food sector and wildlife resources to be managed for sustainability and long-term mutual benefits.*
5. *An agri-food sector that is able to respond to air and climate change, and which does not itself contribute to air and climate problems.*
6. *An agri-food sector that is more energy efficient, less polluting and less dependent on non-renewable energy sources.*
7. *A major reduction in the impact of pollution on air, soil and water resources used by the agri-food sector. An agri-food sector that has minimized its contribution to air, soil and water degradation and Pollution.*
8. *Canada to have an accessible and sufficiently diversified genetic resource base that can be effectively utilized to assure the sustainability of agriculture for future generations.*

Examples of actions required to move the sector towards these visions are summarized under the following headings:

1. Agricultural Practices

Which: reduce summerfallow, diversify and extend crop rotations and conserve moisture; cut

2. Research

On economically and environmentally sound production practices: holistic ecosystems-based management practices; interactions between agriculture and wildlife; integrated pest and fertilizer management; climate change; alternative energy sources; technologies to support the three "R's" of reducing, reusing and recycling in the agri-food sector; methodologies and technologies for maintaining genetic resources; criteria for assessing environmental sustainability of programs; the impacts of environmental problems on the agri-food sector. There is a need for much more on-farm research and on-site demonstrations.

3. Education and Awareness

Enhanced information regarding best management practices compatible with the ecological limits in defined areas or ecozones; better training, on-farm demonstrations and information for farmers and extension professionals on holistic management practices; improved curricula and teaching materials for agricultural colleges and universities; an awareness campaign targeted at the general public.

4. Land Use Planning and Management

Protection of the agricultural land base through: greater multi-purpose land use and rural landscape planning; improved mechanisms for resolving conflicts and strengthening compatibility between agriculture and wildlife; reforming municipal assessment and taxation policies to provide greater protection for farmers; reviewing legislation and enforcement with respect to land use zoning with a view to protecting farmland from urban encroachment and enhancing environmental protection.

5. Monitoring

Through: developing comprehensive data bases on agricultural resources and environmental quality; improved monitoring of land use change, degradation and the state of conservation in the sector; developing both physical and economic indicators.

6. Policy and Program Reform

Including: accelerated development of programs under the new crop insurance legislation that are supportive of environmental sustainability; reform of safety-nets to enhance resource sustainability; implementing cross-compliance, by making eligibility for program benefits conditional upon approval of individual farm conservation plans, including waste management strategies; greater use of long-term programs to address long-term resource and environmental problems; and other policy and program reform measures which strengthen both economic viability and environmental sustainability.

4. FRAMEWORK FOR ACTION

The Committee's framework for action emphasizes the goal of maintaining or enhancing the natural resources that the agri-food sector uses or affects, while ensuring environmental, economic and social integration. A key element of the framework is cooperative partnerships between governments and other stakeholders. The framework also highlights the importance of both direct action through long-term programming and indirect action through immediate policy and program reform. Regionally sensitive implementation in line with respective roles and jurisdictions of all partners is an important dimension of the framework. The Committee recognized the need for greater resources to enable the adoption of a holistic approach to environmentally sustainable agriculture. It also noted that existing Federal--Provincial Soil and Water Accords could serve as a model to be broadened to embrace all aspects of environmentally sustainable agriculture.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

- 1. An agro-ecosystems approach to managing the sector is the key to conserving or enhancing the natural resources that agriculture uses or shares.*
- 2. The same agro-ecosystems approach that leads to conservation or enhancement of the agricultural resource base, will also effectively address the off-farm environmental*

quality concerns which are so closely linked to management practices, inputs and technology used on the farm.

- 3. The adoption of effective resource management and environmentally sustainable practices is directly related to the economic feasibility and viability of the practices.*
- 4. Environmental sustainability is an important key to long-term sustainability and competitiveness in the agri-food sector.*
- 5. The assessment of agri-food sector performance and its contribution to national income must take into account both the impact on soil, water and other natural resource capital, and the public cost of environmental damage resulting from activities in the sector.*
- 6. Producers, extension personnel and the general public must be the target for education and awareness activities that have been strengthened and refocused towards environmentally sustainable agricultural systems.*
- 7. Current efforts to make the agri-food sector more environmentally sustainable are encouraging, but a more consistently holistic approach must be pursued in all areas, particularly education and research, to ensure significant, long-term improvement.*
- 8. The proposed action plan to address environmental sustainability in the agri-food sector should be considered as a subset of the whole sustainable agriculture effort. It will have its fullest impact if the other elements encompassed in a broad sustainable agriculture strategy are implemented .*
- 9. Actions which enhance environmental sustainability will also lead to greater market responsiveness, self-reliance and regional diversity that red Sects the strengths and needs of each region in the Canadian agri-food sector.*

Recommendations:

Governments and industry are strongly encouraged to confirm and demonstrate their long-term commitment to environmental sustainability of the agri-food sector through the implementation of the following recommendations:

- 1. Adopt the comprehensive policy framework comprising the issues and future actions, and framework for action identified in this report, and apply in a regionally sensitive way the actions outlined, to ensure environmental, economic and social integration.*
- 2. The federal and provincial governments should review respective and joint programs and activities related to environmental sustainability issues, so that long-term support is both adequate and responsive to regional conditions and swords*

3. *Accelerate reform of policies and programs that contribute to resource base and environmental degradation, and reallocate resources to support environmental sustainability.*
4. *Improve federal-provincial-industry cooperation and coordination by building on the existing Federal-Provincial Soil and Water Accords*
 - a) *to confirm the Accords as the formal mechanism through which long-term environmental sustainability will be brought about;*
 - b) *to broaden the scope of agricultural resource base and environmental issues that can be addressed under the Accords, in order to provide for a more holistic approach; and*
 - c) *to involve farmers, agri-food industry representatives and others, such as local governments where appropriate, with the work of the Accord Management Committees.*
5. *Institute a national advisory council to ministers on resource base and environmental quality issues involving the agri-food sector, drawing membership from the Accord Management Committees, national organizations and educational institutions with an interest in the environmental sustainability of the agri-food sector.*
6. *Under the ad vice of the Accord Management Committees, develop and implement long-term, cost-shared environmental sustainability agreements to provide additional resources for measures such as technical and financial assistance, monitoring, research, education and awareness activities, to encourage adoption of sound resource management practices.*
7. *Governments to provide leadership through legislative and regulatory measures for protecting agricultural resources and the environment.*
8. *Governments, educational institutions and industry to take immediate steps to strengthen and reorient research and education programs and awareness activities towards a more holistic, environmentally sound management of natural resources.*
9. *All governments to adopt consistent criteria for assessing the environmental sustainability of agricultural policies and programs.*
10. *Immediately initiate a detailed examination of the feasibility and acceptability of implementing suitable cross-compliance measures in federal and provincial agricultural programs.*
11. *Develop indicators to monitor and assess the state of natural resources and environmental quality in relation to agriculture.*