

## Examples of sustainable agriculture initiatives across Canada

Province/Issue	Solution	Result
<b>British Columbia:</b> Control of soil erosion on intensively cropped fields during heavy winter rains.	Winter cover cropping between the rows of agricultural and horticultural crops, offering protective cover to the soil.	Winter cover cropping reduced soil loss by 78% for strawberries and 76% for grain corn. Cover crops turned into the soil also add organic matter and improve soil quality.
<b>Alberta:</b> Poor water quality in some streams and rivers, partly because of livestock access.	A project called "Cows and Fish", with the Alberta Cattle Commission, Trout Unlimited, and other partners. Ranchers apply grazing strategies such as access management and streambank revegetation to restore riparian health.	Water quality has improved and fish numbers have increased. Farmers and ranchers are now more aware of the importance of maintaining riparian health.
<b>Saskatchewan:</b> High to severe wind erosion of cultivated land.	Reduced area in summerfallow and enhanced crop residue management through reduced tillage (e.g., direct seeding and chemical fallow).	Between 1981 and 1996, wind erosion risk dropped by 8% because of changes in cropping system, 25% because of changes in tillage practice, for a total reduction of 33%.
<b>Manitoba:</b> Sustaining soil and water in the rural landscape.	Neighbourhood municipalities in Manitoba Conservation Districts working together as a watershed community to improve the rural environment.	In 1999, 8000 hectares of forages were seeded, 1300 kilometres of drains maintained, 56 kilometres of grassed waterways installed, 10 gullies repaired, 20 dams constructed, 120 wells sealed, 6 fisheries-enhancement projects completed, and 70 educational programs given in schools.
<b>Ontario:</b> Need for holistic approach to environmental challenges on the farm.	Creation of the Environmental Farm Plan Program, with a workbook to help farmers assess their farms and then devise an action plan.	By April 1999, there were 16 000 participants; about 6000 of these received an environmental farm plan incentive of up to \$1500 to help correct an environmental problem on the farm, for a total program payout of about \$7 million so far.
<b>Quebec:</b> Need of farmers for information on environmental farming practices.	Formation of farm conservation clubs, voluntary groups of 20 to 70 farmers with a shared interest in improving environmental management on their farms.	About 60 clubs have formed in the province, representing about 2300 farms; members direct the activities and benefit from the advice of an environmental advisor; members exchange information and keep abreast of new agri-environmental technologies and services.
<b>New Brunswick:</b> Disposal of unwanted pesticides and pesticide containers.	Operation Clean Sweep: farmers took unwanted pesticides to depots around the province every fall for 3 years or returned empty containers to the vendor.	Good participation of farmers; a change in attitude toward waste disposal; containers directed to a recycling facility.
<b>Nova Scotia:</b> Integration of sustainable agricultural resource management practices.	Formation of the Nova Scotia Environmental Farm Plan (EFP) program and revitalization of the Nova Scotia Soils Institute.	By 1999, more than 150 farmers had completed phase 1 of the EFP program; some had begun carrying out their plans. The Nova Scotia Soils Institute complements the EFP program by bringing resource users from various sectors (forestry, environment, farmers) together to coordinate rural soil and water management initiatives.
<b>Prince Edward Island:</b> Soil erosion on land under potato production.	Use of mulching, a new practice of spreading hay or straw on the field after potatoes are harvested.	As little as 2.3 tonnes of hay mulch per hectare can reduce soil loss by 75%. Soil loss was 3.1 tonnes under 2 tonnes of straw mulch per hectare and 1.8 tonnes under 4 tonnes of straw mulch per hectare.
<b>Newfoundland:</b> Poor soil drainage and low yields.	Installation of a series of perimeter interception ditches that follow the contours of the land.	System produces irregularly shaped fields, but crop yields improve considerably.