Pesticides can destroy insects but may take with them the insects' natural enemies, as well as many plants and organisms that are important for an ecosystem to function properly. Farmers become part of a vicious circle where they depend more and more on these products. As well, a good part of the pesticides spread into the soil and water where they threaten the health of humans and animals.

Governments are becoming stricter in the control of agricultural chemicals and are diligently searching for alternative solutions. Many farmers are now using an integrated approach to the problem. This calls for a combined use of biological and chemical products, as well as other tactics such as tracking, which allows them to know when an infestation is going to take place. In this way they hope to considerably reduce the need for pesticides.

Scientists are also worried about genetic deterioration, the use of wetlands for farming, increasing urbanization and other economic factors that are compromising the long-term stability of farming.

Federal and provincial governments have joined forces to prepare a national agriculture strategy. They recognize the importance of protecting and refurbishing soil and water through conservation and development programs in order to guarantee farm productivity. The private sector is encouraging these efforts through Soil Conservation Canada, a nongovernment organization devoted to protecting Canada's soil and water.

Other land uses

Approximately one-third of Canada's population lives in greater Montreal, Toronto and Vancouver, the country's three largest cities. The 1 200-km corridor between Windsor and Quebec City, where 55 per cent of Canadians live, covers only 2 per cent of the land.

Canada's soil is subject to many constraints. Although less than 0.03 per cent of the land is used for mining, the exploration, production and transportation of mineral and energy resources take up over 100 million ha, or around 11 per cent of the total land mass. Urbanization is now claiming a good part of Canada's choice land, as development swallows up the farmland near cities. Quebec, in particular, has adopted strict zoning regulations to protect its best farmlands.