



Although it is true that Canada stretches over almost 10 million km², only 25 per cent of the land is easily habitable, and that is now all but used up. Moreover, the most suitable land for agriculture or tree growing is in the area best situated for building cities and industries, for transportation and recreation. Therefore, land that is rich in renewable resources is subject to greater and greater pressure.

Farmlands

Around 11 per cent of Canada's land is considered arable, but only 5 per cent is suitable for major crops. In addition, 90 per cent of the best land lies in a radius of 160 km around large urban centres.

Agriculture, Canada's second-largest industry, provides employment for 500 000 persons, including some 300 000 farmers. The best agricultural land lies mainly in the Prairie and Mixed Wood Plains ecozones.

The amount of organic matter and nutrients in the soil are two key factors in its productivity. Losses of organic matter are a cause for worry in many regions. Researchers have noted a decrease of over 40 per cent in the Prairie Ecozone; in the Mixed Wood Plains, losses are over 50 per cent. Research shows that until 1960, crops drew more of their nutrients from the soil than they did from fertilizers. However, by 1980 the situation had reversed itself in all provinces except Alberta and Saskatchewan.

Acid rain and use of nitrogen fertilizers speed up the natural process of acidification. Excessive acidity reduces crop efficiency and can contribute to the release of toxic elements that are likely to accumulate in plants or pollute water courses through run-off.

Irrigation makes it easier for salts in lower soil layers to come up to the surface. The nutritive balance is upset and crops decrease. Salinization is most apparent in the Prairie Ecozone: 100 000 ha have been affected by excessive irrigation in Alberta and Saskatchewan.

The economic value of soil lost each year because of erosion is probably over a billion dollars. Run-off is especially noticeable in areas where wide-row crops are grown, such as corn and potatoes. Sandy soil or fallow land is especially subject to wind erosion. Crop rotation helps to reduce annual losses.