

Soil Erosion

increasing erosion and ultimately reducing the quality of our soils.

They also suggest that the Senate Report has drawn attention to the soil degradation situation in Canada. Their association would like more government effort and funding for research and education efforts in regard to soil preservation and conservation.

They go on to say that to be more competitive in the world, farmers need new crop varieties, improved cultural practices, better insect, disease and weed control and must look to Agriculture Canada to fund research and provide research facilities.

The association states that pesticides play a very important role on today's farms. Farmers want to ensure their safety and the future viability of their land and therefore strongly urge the Government to put in place a better system of testing and assessing the benefits and risks of pesticides before they are registered.

This issue is not confined to Canada. When I worked in Africa trying to help Third World farmers in that part of the world, much of their effort was to try to deal with the soil erosion problem. In fact, it may well be the case where we will see some of the breakthroughs in terms of intercropping of different crops, of new varieties being developed, where some of the support which we give to research in African agriculture will come back and benefit Canadian agriculturists.

• (1440)

The key point, and the reason I am so pleased to be able to support this motion of the Hon. Member for Davenport, despite his urban location, is to stress what we had stressed to us in our rural constituencies, that is, the sense of urgency which must be brought to bear by this Government, and any future Government, with respect to this issue. It is an urgency which is of importance not just from a broad environmental point of view, which I think was stressed by the Hon. Member for Davenport, but an urgency which is important from the point of view of the future economic viability of the farm community in this country.

Mr. Bob Brisco (Kootenay West): Mr. Speaker, I believe the Hon. Member for Davenport has brought to our attention a very important and critical problem which faces Canada and other nations of the world, and it has for a long time. When I reflect on agriculture, I always reflect back to a panel of paintings in the Railway Committee Room which tells in five paintings the history of the early development of Canada. It shows a mid European village in the middle of winter in the first panel. The second panel shows a ship approaching the shores of Canada in the Gulf of St. Lawrence with immigrants lining the railings of the ship. The third panel shows the immigrants with a small clearing in the aspen poplar fields of timber in the Prairies Provinces as yet uncleared. The next panel shows the clearing and the work to develop the land. The final panel shows the field ripe with wheat and the farmer

looking at the end product. That really is the early history of the development of a proud history of agriculture in Canada. Yet here we are today worried about the affect of what has gone on in the past and which continues today. In the past, of course, the processes were quite different. Today, we have the addition of chemicals, pesticides, herbicides, the overcropping of soil, and so on. It is a very serious issue.

Land degradation is purely and simply the destruction of our resource base. It occurs all across Canada and impacts upon agriculture, forestry, wildlife, recreation and a host of other activities. In fact, land degradation affects every Canadian. The importance of the environment to the Canadian economy may not be fully appreciated. Over 40 per cent of the gross product, 33 per cent of the labour force and 52 per cent of our exports are directly related to economic activities which are dependent on the environment. Canadian forests provide \$29 billion worth of wood products, \$13 billion in exports and 265,000 directly related jobs. Wetlands support economic activities valued in excess of \$4.6 billion per year. Yet we see our wetlands diminishing and intrusions into our forests by good management and by bad management. It is not difficult on site to tell the difference between good and bad forest management and practices.

The agri-food industry contributes \$8.4 billion to the gross domestic product, employs over one million Canadians and shows a trade surplus of \$4 billion. Nevertheless, there are clear signs that we have been harming the physical base of all these activities. In agriculture the signs are obvious. For example, some estimates indicated that at least one third of New Brunswick's potato land is severely affected by erosion and up to 12 centimetres of topsoil have been lost from some fields in the past 20 years. It is an old saw that they are just not making land anymore. What we have is all we have and what we lose through our own folly is an ultimate loss which will take anywhere from one hundred to one thousand years to replace, just in part.

In the Prairies, wind erosion is a serious problem. The wind-blown soil loss from one storm in southern Manitoba was calculated at 160 tonnes per hectare, which is 14 times the annual soil loss considered "tolerable" by soil conservationists. What future is there for land which has been degraded in that fashion? What practices contributed to that circumstance which would see that volume of topsoil disappear into atmosphere only to be distributed across the northern part of the United States.

Taken collectively, wind and water erosion, salinization, acidification, compaction, nutrient loss and contamination of farm lands in Canada costs our farmers \$1 billion annually in lost revenue. Soil degradation does not stop at the farm fence. Soil, nutrients and chemicals lost from farm fields because of wind and water erosion travel downwind or downstream. Water quality for wildlife, recreation, fishing and industrial use may be affected to the extent of eliminating these uses. So we end up with not only an agricultural and environmental problem, but with a very serious economic problem.