Swedes set goals on environmental issues

by Hugh Maynard

Canadians were shamed into fitness in the 1 970s by the example of the average 60 year old Swede who, it was claimed, was in better shape than the average Canadian half the age. The Swedes are once again the ones to watch, as they have adopted environmental legislation for agriculture that aims to cut the use of chemical inputs in half by the end of the century.

This Scandinavian country makes an interesting comparison to Canada because it has many similarities. Although nowhere near as big, it has a similar climate, proportionally the same number of farmers to total population (100,000 out of 8 million) and areas of intensive agricultural production.

In addition, they are going about all this change in the midst of a self imposed 'free trade' arrangement that will make Swedish food production "self-reliant and market responsive", a soon-to-be concept familiar to Canadian farmers.

The legislation has come from strong public demand to improve the environmental conditions. Swedish farmland is a thin layer of topsoil over bedrock which has resulted in excessive nun-off of nitrates and other agricultural chemicals into water ways. Therefore, targets were set to lime the amount of active ingredient applied to farm land, as well as limits on the density of animals and the spreading of manure.

In addition, cultivation without chemical use is being given government support and an 'environmental' levy of up to 10% of sale price has been placed on chemical inputs.

Other means

While the price of food and therefore the income of farmers has been set free to the follow 'the market', the Swedish government has directed its support measures towards non production concerns such as the environment.

Training and inspection programs have beers established for the spraying of agricultural chemicals. An advisory service and university research program was also created to assist in reducing nutrient leaching and reaching the 50% input reduction goal. Programs have been put in place to reduce the amount of uncovered land during winter and the planting of "catch crops" to prevent leaching in susceptible areas.

Others will promote landscape preservation and diversity. Windbreaks, restoration of wetlands and retention of natural meadows are all eligible for support measures. A new program to reduce surplus crops will encourage extensification of agricultural production and assist in the planting of big-energy forests, which would be used to fuel central municipal boilers for hot water, heat and electricity.

Sweden has decided to eliminate its 12 nuclear reactors within the next decade, which provide 45% of its electricity requirements, and is urgently looking for sources of energy replacement.

Reaction

What about f armors, the ones most affected by these imposed measures? Their reaction is a mixture of skepticism and support, a willingness to do their part but wary of the political 'maneouvering that has brought many of these changes.

Bo Dockered is president of the Swedish Farmers' Union and he sees both good and bad coming from the changes. "The free market will take the politicians out of the equation" of food production, he says, and he thinks that will be a good thing. But he also warns about the double-edged sword of farmers being told on the one hand to be efficient and productive, and environmentally conscientious on the other.

"Farmers are being confused by different messages coming from experts and politicians. Some say we should produce only using extensive methods and then the Organization for Economic Cooperation and Development (OECD) calculates everything using only economic figures. You can't have both, you can't do everything at the same time" he notes.

He is enthusiastic about the 'Green' set of figures that the International Federation of Agricultural Producers (IFAP) is developing for presentation to their 1991 annual meeting. "Environmental considerations will be taken into the equation and that will put new values on agricultural production" he says, adding that a two price system differentiating between production destined for domestic and international markets is a solution worth considering.

Dockered is also cautious about the prospects for extensification in Swedish agriculture. He believes the food production surplus in Western nations is only temporary and that productive farmland should not be lost to low out-put incentives.

"Extensification will not solve any problems for farmers. There is still a need for us to be as efficient as possible as producers. What we should do is ask for new growing systems that will reduce the leaching of nitrogen for example, and that will let us use as little chemicals as possible" he says.

"To start with extensification only is a way out for many farmers. Perhaps it will be suitable in some regions but you cannot solve problems in general with that.

Extensification is connected with old methods of growing and farmers have a much stronger demand for new systems that will take care of the environment but also are efficient. We have not done that so clearly and loudly but I think we should do that now" he concludes.

Trial and Error

The move towards low-input agriculture has not been without controversy nor pain. In one instance, the high nitrate content of Swedish water ways were initially blamed all on farmers and their cropping practices. However, once farmers began to reduce their application of fertilizer and change the management of their fields, nitrate levels did not decline correspondingly. It then became apparent that nitrate deposits from air pollution were leaching from the forests and causing more of a problem than at first thought.

While most crop protection materials have been put on a time-frame for reduction, growth regulators for cereals were initially banned outright. This was done as an election ploy by the government to gain back votes that were looking towards 'green' candidates.

The largest cereal crop in Sweden is rye and growth regulators were frequently used to prevent lodging while taking advantage of higher yields from maximum nitrate utilization. With the regulators gone from the market, the following rye crop was a disaster. The regulators had to be re-certified to give producers time to adjust their cereal crop management, with reductions phased in as with other herbicides.

But the Swedes are giving it a go. The initial five year target for chemical control reduction has been met in three years and the sector is looking at another 50% reduction by 1995. A draft report on recommendations for spreading manure evenly and in controlled quantities is presently being studied. The Swedes hope that new methods and equipment for manure management will assist in reaching the 20% reduction target for synthetic fertilizers by the year 2000.

The economic impact on farmers will be difficult to assess, especially since the environmental changes are being implemented alongside the economic de-regulation of the farm sector. The agricultural sector, from the minister down through to farmers, feels that they will prosper as well as accomplish some degree of environmental change. Canadians are certainly fitter than they were two decades ago. The question is will they become as 'green' as the Swedes in the next two?