

A Review of Ontario Agriculture

Clayton Switzer

On behalf of the Ministry of Agriculture and Food and the province of Ontario, I'd like to welcome all of you to what I'm sure you'll find a very rewarding and informative conference. And I'd like to extend an especially warm welcome to those of you from outside the province — particularly our guests from the United States. My purpose this morning, according to the program, is to offer a "Review of Ontario Agriculture." Since people have been farming in this province for the last 200 years, I'd say the reviews were in and we were a hit. Agriculture and food production is the industry that built this province. And it's still a major part of our economy — as I'll point out.

Background

But first, I hope the locals will forgive me if I provide our out-of-province visitors with a bit of background. There are roughly ten Americans for every Canadian, and we're each others' best customers. Ontario is the largest single customer for American-made products in the world and our two-way trade with the U.S. is about the same as the entire nation of Japan. Some 1.7 million jobs in Canada are dependent on exports to the United States and the same is true for the U.S. Over 90 percent of all Ontario exports go to the U.S. and about 65 percent of our exported agriculture and food products. Ours is the slightly larger country — 3.9 million square miles compared to 3.6 for the U.S. But rather than raw land figures, these numbers are more telling — 43.6 percent of the U.S. land area is farmland. For Canada, the corresponding proportion is only 5 percent — and for Ontario, 6.6 percent. Out of the 226 million acres of land in Ontario, we only have 16 million acres with Class 1, 2 and 3 soils and not all of this is in farm use. Of the 198 million acres in Northern Ontario — only 1.2 million is farmland. Of the balance in the south, about half is farmland or 13.7 million acres. Geographically, Ontario is more or less the centre of Canada with four other provinces to the west of us and five to the east. It's home to about 9 million people — over one third the population of the whole country. It's Canada's major industrial area and its agricultural heartland, as well, leading the country in many areas of agricultural production. Our climate is roughly the same as Michigan or Western New York. The southernmost tip of the province is as far south as the northern border of California. But for the most part, our climate is what you'd expect from a northern inland location — warmer summers and colder winters.

Remarks by Clayton Switzer, Deputy Minister, Ontario Ministry of Agriculture and Food, to the 32nd Annual NACTA Conference, Ridgetown College of Agricultural Technology, Ridgetown, Ontario on June 16, 1986.

We produce about 200 different commodities here but the major ones are livestock, dairy products and corn. In addition, the province is home to about 40 percent of the country's food processing industry. Primary production means about \$5 billion a year to Ontario's farmers. Food processing and the related industries add about \$10 billion to this total. Food production is carried out all over Southern Ontario and in specific pockets in the northern parts of the province. Our overall level of agricultural production is roughly comparable to what you might find in the state of Wisconsin. To give you a better idea of how we compare, I'd like to look at Ontario's output of some of our major commodities compared to large-scale producers south of the border. Grain corn is our number one field crop — at about 220 million bushels a year. However, Ontario's crop is only about one-eighth the size of that produced in the state of Iowa. Similarly, Ontario produces between 35 and 40 million bushels of soybeans a year — about ten percent as much as Illinois — and our annual 35 million bushels of winter wheat is about one-twelfth as much as Kansas. Turning to livestock production, here's how Ontario stacks up when it comes to cattle. We have roughly 2.5 million head of cattle on our farms. That's a small herd compared to Texas with its 13.6 million. Our 3.4 million pigs equal only about a quarter of the number in Iowa. Our milk production — at 5.6 billion pounds a year — is roughly one-quarter that of Wisconsin, and 56 percent of this milk is used for industrial purposes. Yet, when you compare our overall agricultural industry with that of our neighboring states in the Great Lakes area — we equal Wisconsin, as I said earlier, and outstrip most of the others. Our production levels of some commodities may be small potatoes, relatively speaking, but because of our diversification — all the components add up to quite an impressive total — about \$5.2 billion a year. That gives you some idea of the scope of the industry in Ontario.

Current Picture

Now, I'd like to turn to the Ontario Ministry of Agriculture and Food — and where we fit into the picture. I recognize that in the United States, the major financial involvement by government is at the federal level — through the U.S. Department of Agriculture. We have an active federal agency, as well — Agriculture Canada — but in addition to the national programs, the government of Ontario sponsors a wide range of programs in this province. At present, the annual budget of the Provincial Ministry is \$457 million. To give you a better idea of what we get for that money, let's look at the mission of the Ontario Ministry of Agriculture and Food. The Ministry's mission is to encourage an efficient and competitive

agriculture and food sector and, in doing so, we want to protect and enhance the human and natural resources of this sector — for the well-being of all the people in Ontario. We don't see this — in the words of the old TV show — as a "Mission Impossible."

In fact, we've developed a number of programs and strategies to make this happen. Time doesn't permit me to do much more than scratch the surface of these, but, generally, our efforts come under one of three headings — financial stability, competitiveness, and education and training.

Our attempts to promote financial stability take on a variety of forms. These can range from loan or grant programs all the way to our efforts to work with the other provinces and the federal government to develop a national agricultural strategy for Canada. Of course, financial stability can be affected by factors that have little to do with how good or bad a manager an individual farmer is. If interest rates or prices fluctuate, if energy or other input costs increase — even if eating habits change — these can all alter the financial stability picture. In addition, education, research, marketing and all the other elements influence financial stability in the long term.

Competitiveness, too, is affected by many influences. We have to be ever mindful of the mercurial tastes of consumers. We have to be ready to take advantage of new sales opportunities and marketing techniques — and keep producers informed about these. And these are just the home-grown issues. As a trading nation and a net exporter of food, Canada is affected by many issues not of our own making. We're affected by what happens in the United States or what the European Community does in the area of world trade. If these two decide to fight, then we feel the blows, as well.

The third element of our strategy for the industry relates to training and education. There are about 81,500 farms in Ontario and, when you consider that Ontario produces over 200 commodities, the possible combinations are enormous. I wouldn't want to say that no two Ontario farms are alike — like snowflakes — however, the possibility exists for literally thousands of individual production problems and unique situations around the province. The logical approach to dealing with the on-going needs for training and advice is an Extension Service and Ontario has one of the finest.

Begun nearly 80 years ago, Ontario's network of agricultural representatives has been the model for other jurisdictions throughout Canada and the United States. Today, we have 54 county and regional offices around the province and we run a variety of seminars and short-term training courses to keep farmers up-to-date. We also have a program of post-secondary education in six locations. At the University of Guelph, we have degree programs associated with the Ontario Agricultural College and the Ontario Veterinary College. Then, we also have two-year diploma courses.

Some of these are available at Guelph, as well, but for the most part, they are found in our five colleges of agricultural technology. In this context, if you hear someone talking about "CATS," they don't mean the Broadway musical. That's our short form for Colleges of Agricultural Technology. There are five of these institutions across the province, including Ridgeway College. Ridgeway is the largest in terms of enrollment, and New Liskeard in Northern Ontario is the smallest. And Alfred College, in the eastern part of the province, offers instruction solely in French — the only post-secondary facility in Ontario to do so. For the year just ended, we had a total of 1,370 students enrolled in the two-year programs — including those at the University of Guelph — and the cost of the total program is \$16.9 million a year — \$15 million at the colleges and \$1.9 million in Guelph. In addition to their teaching role, the "CATs" are important as centres of research — often research that's specific to the climate and growing conditions of the areas they serve.

Canadian Ag Research Leader

Ontario is a leader in this country when it comes to agricultural research. Much of the progress we've made in agriculture we can credit to the efforts of our research labs and institutions. Ontario has the largest budget for agricultural research of any Canadian province — about \$33 million a year. The bulk of this, about \$19 million worth, is carried out at the University of Guelph. However, we currently invest some \$4 million in research projects at the colleges.

Before I conclude my remarks, there is one area that's a concern to us in Ontario. And I'm sure that many of you are experiencing this in your schools. That's the problem of declining enrollments. In 1984, we graduated our largest-ever class in the diploma programs, 654 students. Yet, that same year in the fall, we found fewer young people signing up for these courses. Part of this is attributable to the general reduction in the number of students in our secondary schools — a problem facing all our colleges and universities in this province. But a large part of this decline has to do with the economic situation on the farm and the image people have of agriculture. The Ministry sponsors a range of programs aimed at the general public — presenting an up-to-date picture of what agriculture in the 80's is all about. The intention is to counter the nostalgia and misinformation that colours people's perceptions of this industry. In addition, we are trying to reach the high school students at the point when they are making career decisions. We're working toward getting an agricultural component into high school science courses. We've co-sponsored a guidance film called, "You're Needed in the Food System" and the "CATS" are in the midst of producing their own recruitment films for visits by staff to the province's high schools.

As far as the economic prospects on the farm are concerned, the Ministry has a range of programs, as

I've already mentioned, aimed at increasing financial stability for our food producers. But, as I also said earlier, we are not completely masters of our own fate in this regard. We are influenced by what the European Community does — by what the United States does. And beyond that, agriculture is a business that has always had its ups and downs. But people still have to

eat and those areas that have a climatic advantage will always be in agricultural production.

So, if you asked me my view of the future, I would say the long-term prognosis is good.

In closing, I would just like to say that I'm pleased to have had this chance to talk with you. And I hope you have an interesting and worthwhile three days.

The Challenges in Agricultural Education

H. VanderPol

The challenge in agricultural education is having the ability to produce professionals who can cope with the "real" world — a "real" world that includes all components of the modern enterprise. This presentation will attempt to provide one view point of this challenge.

Historical Perspective

In order to deal with the present and future it behooves us to, at least briefly, put a historical perspective on this subject so that a proper base can be established. To look at Agricultural Education from this historical perspective requires that we look as well at the evolution of agriculture, a look which for the purposes of this paper will restrict itself to the North American scene.

The interrelationship that has existed between agriculture and agricultural education is most complex. Suffice it to say that the needs of one have been manifest in the direction the other has taken. Unquestionably, the challenge over the years has been production, and consequently, agricultural education has focused, with limited exception, on this phase of our industry. This focus has served the industry well; as a matter of fact, currently there exists a very real danger that an overadjustment in focus might take place to the point that this ongoing integral component of our educational system will be relegated to a secondary role. This is something that is totally unjustified and, more importantly, inappropriate. North American agriculture will only survive and prosper in the long term if it is and remains technologically advanced and efficient. Historically, we've been able to achieve this objective and it must be maintained from an educational perspective; however, it is no longer sufficient as the sole component in achieving competitiveness as has been the case in the past. North American agriculture has survived on its productive efficiency and capacity; however, we must complement this with much more sophisticated utilization of other resources so as to develop a truthfully "most competitive" industry. It is not going to be enough to expect production technology to carry the day for North American agriculture. What will carry the day is

an industry that provides those who choose to be part of it with the tools required to utilize all available resources to their fullest so as to put together enterprises that are and will remain "world class" competitive.

Today's Focus

Today, without question, the focus of agricultural education is changing — changing at a rapid rate. Unquestionably, in the last 10 years a significantly greater emphasis has been put on equipping our agricultural managers with the tools to become more efficient managers of financial resources. The current emphasis on integrating the management of financial and production resources is a significant and legitimate, long overdue, intermediate step toward what essentially will be the "full management package."

The focusing in on this management tool is the direct result of our industry's past follies with respect to production. We've seen what the green revolution can do and we've quite nicely managed to "out produce demand and under market supply." This naturally has shrunk margins and caused a demand to be placed on our agricultural education system to develop systems and individuals which can cope with this new phenomena. The traditional owner-operator in agriculture has been production oriented; however, today he has to be able to manage financial resources just as adequately as he has previously managed his fields and/or livestock. Even if he is equipped with the tools to do this successfully today, he will not be successful indefinitely unless he recognizes that he has not yet achieved the level of management expertise that will be required to survive and prosper in the future.

The next generation of managers are going to require the ability to manage a whole new group of inputs and outputs that will be part of the agricultural enterprise. These managers are going to have to have the ability to manage risk, in the form of physical and financial resource allocation; stress, in terms of the emotional component of human behavior, and people in terms of meshing functions with ability. This last component will more than anything else separate the truly successful from the just plain survivors.

Implications for Education

Let's then briefly look at what this means to agricultural education, and let's start by asking how this changing profile of the educational system's product

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