

A DESCRIPTIVE STUDY OF SASKATCHEWAN MARKET GARDENERS

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Background

In the discussion paper *Forging Partnerships in Agriculture*, the Government of Saskatchewan outlines its vision of how to take the agriculture industry into the twenty-first century:

Our guiding principle must be to foster a self-reliant, sustainable agriculture and food industry, and viable communities in rural Saskatchewan. We must ensure the maximum opportunity for the highest number of families and individuals to earn a livelihood from agriculture.

This statement is echoed by that found in Francis et al. (1990) which states that, "viable farms and families can help support viable communities which is a crucial factor in preserving the quality of rural life that will keep agriculture strong" (p 158).

Market gardening offers considerable opportunity for rural families and individuals to supplement their farm income. It is a specialized form of agricultural production characterized by high inputs, high productivity, and high returns per unit area. Wolters (1989) states that market gardeners can expect a minimum gross return of \$2,000 per acre and up to \$15,000 or more for specialty vegetables. However, in order to obtain these high gross returns, considerable input costs are incurred, frequently up to \$1,000 per acre. Also, if the produce requires storage and marketing at a later date, then storage costs, which are roughly the same as production costs, must be deducted from the gross income (Saskatchewan Water Corporation, 1987). Unlike yields of cereal grains (1 ton per acre), vegetable yields of 8 to 10 tons per acre are common (Saskatchewan Water Corporation, 1987).

Defined

Although the term "market garden" is commonly used, its meaning is ambiguous. In 1913, Corbett described market gardening as "the production of vegetables to meet the needs of the local population". The definition used by Alberta Agriculture is "the production and selling of vegetables and small fruits directly to the consumer" (Agri-fax 1986).

Both market gardeners and commercial fruit and vegetable producers are involved in the production of fruits and vegetables, but they are differentiated by the marketing avenues they choose. Market gardeners sell their produce directly to the consumer, whereas commercial fruit and vegetable producers sell their produce to a wholesale agency, which in turn re-sells the produce to a retailer, who in turn resells it to the consumer. For the purpose of this study, the following definition was established.

Market garden - an operation that produces and markets the majority of its produce directly to the consumer. Produce is restricted to consumable items including fruits, vegetables, and herbs.

Significance

The number of farmers reporting production of fruits and vegetables has increased almost 30 percent over the past two decades (Statistics Canada 1991). This may not appear to be a rapid expansion of the industry, however there are external factors to consider. Market gardening, an intensive form of agricultural production (small acreages, high inputs and returns per acre, high

labour requirements per acre) is very different from the conventional extensive form of production (large acreages, low inputs and returns per acre, low labour requirements per acres), and convincing farmers to switch from extensive to intensive production is no easy task. Most farmers are accustomed to making their living off of a section or more of land, so convincing them they can make a living off only a quarter section of land, is a challenge.

It was projected that there were fewer than one hundred market gardeners in Saskatchewan who met the definition of market gardener as outlined in this study. There were, however, many more producers of fruits and vegetables whose marketing tactics did not satisfy the market gardener definition used in this study, but who made a significant contribution to the fresh produce market. Marketing through the farmers' markets were a number of home gardeners who sold excess produce if they had it. The difference between these individuals and market gardeners is that market gardeners grow fruits and vegetables with the intent of selling them, as opposed to homeowners who, if they have more produce than they need, will sell it.

Market gardeners are scattered around the province, usually in a location not too distant from a town or city, but depending on the crops grown and the method of marketing used, market gardeners can locate their operations anywhere. It is recommended they have a reliable source of water close by for irrigation purposes.

In 1991, the farmers' market co-operative's gross income from the sale of fruits and vegetables was approximately one million dollars, with a substantial portion of that being contributed by market gardeners, and small-scale producers accounting for the remainder (Bardahl 1993). Farmers' markets are only one marketing option used by market gardeners. Other common marketing options include gate sales, U-pick, door-to-door, and road-side stands. Taking all these marketing options into account, market gardening in Saskatchewan could easily be a multi-million dollar industry.

Results

The total number of participants in the survey was relatively small, as a number of market gardeners chose not to participate in the survey. Of the surveys returned, thirty-one were deemed suitable.

Occupational Status: Of the market gardeners surveyed, 48% identified themselves as farmers who operate a market garden as one operation on the farm. Twenty-six percent operate a market garden as a full-time occupation, while another twenty-six percent operate a market garden and maintain off-farm employment.

Age: Forty percent of market gardeners who participated in the study were between the ages of 40 and 49. Roughly 30 percent of market gardeners were under 40 years of age, and 30 percent were over 50 years of age. The findings in this study were comparable to studies of Saskatchewan, Alberta and Ontario farmers. Therefore it was concluded that market gardeners were similarly aged to other farmers. Since a large percentage of market gardeners were farmers who had a market garden as one operation on their farm, it was not surprising to find that they were similarly aged to other farmers.

Education: Twenty-five percent of responding market gardeners had not completed high school, 25 percent had completed high school, 18 percent had some technical or college training, 18 percent had attended university but had not completed a degree, and 14 percent held a completed university degree. In comparison to studies of Saskatchewan, Alberta and Ontario farmers, it was concluded that market gardeners in this study had obtained a similar level of formal education as other farmers.

Size of Operation: The market gardens surveyed ranged in size from 1 to 80 acres. Thirty-nine percent of all market gardeners had operations of one to five acres in size; 13 percent had operations of 6 to 10 acres; and 13 percent had operations that were 10 to 15 acres in size. Twenty-nine percent of market gardeners surveyed had operations in excess of 26 acres.

Number of Years Experience: The years of experience ranged from 1 to 30 years, with an average of 10 years. Forty-three percent of the participants had one to five years experience; 17 percent had 6 to 10 years experience; and 23 percent had 11 to 15 years experience. Only 17 percent of market gardeners surveyed had more than 15 years experience. In comparison to other farmer studies, it was concluded that most market gardeners did not have as many years experience operating a market garden, even though the mean age was similar to other farmers. This is perhaps because market gardening, while not a traditional form of agricultural production on the prairies, is attracting new people to the industry.

General findings: About 20% of market gardeners grow only fruit crops, while 80% rely on vegetable crops only. Sixty-two percent of market gardeners surveyed had increased the size of their operation in the past five years. The average increase in size was 145%, and it was predominantly the smaller operations (1 - 15 acres) who were expanding. Twenty-two percent stated they had not changed the size of their operation. Larger sized operations grow a larger number of different crops. Just under one third of all market gardeners surveyed grow in excess of 21 different fruit and vegetable crops.

Seventy-four percent of market gardeners initiated their operations, while 26% inherited or bought an existing operation. Thirty-five percent of those surveyed hire some full-time staff (average of 5 staff hired per year), while 52% hire some part-time staff (average of 4). Forty-two percent said they were organic producers but only 15% were certified organic. Eighty-four percent have an irrigation system, with side-roll being the most common type of system.

It was hypothesized that full-time market gardeners would access information differently than part-time market gardeners, however such was not found. It was concluded that full-time and part-time market gardeners demographically were not significantly different, and did not access information differently, except that full-time market gardeners used a larger number of communication channels than did part-time market gardeners.

Ownership of Electronic Communication Equipment: Eighty-four percent of market gardeners surveyed owned a television, 13% owned a satellite receiving dish, 74% owned a video-cassette recorder, 84% owned an audio-cassette player (tape player), and 39% owned a home computer. Very few market gardeners had a modem, simply because of the cost associated with installation and operation. It was concluded that ownership of electronic communication equipment was not a limiting factor to information transfer. Ownership, however does not necessarily mean use of the equipment for accessing or using information.

Usage of Communication Channels. On average, market gardeners used 13 different communication channels in the past year. The most commonly used communication channels were: conversation with other market gardeners; seed catalogues; general gardening books; horticultural magazines; conversation with Extension Agriologists; U of S publications; conversation with U of S staff; production manuals; and conversation with agribusiness. Roughly half these channels are interpersonal communication channels and half are mass media channels. From other studies, it was determined that communication channels used by farmers were very comparable to those used by market gardeners. The ratio of mass media to interpersonal communication channels used by farmers was identical to that for market gardeners, therefore it was concluded that market gardeners used the same communication channels as farmers. This should not be surprising, as the majority of market gardeners are farmers.

When asked to indicate their most preferred communication channel, both market gardeners and farmers stated they preferred to use: one-to-one conversation, print materials, field days & demonstrations, and TV/radio. It was therefore concluded that market gardeners prefer to access information via the same communication channels as other farmers.

From this study I concluded that the majority of market gardeners are not a special, innovative or unique type of producer. They are farmers who want to earn a little extra cash, and they can with a small market garden. For the extension agent who wants to get information to market gardeners, I recommended they use the same communication channels as for other farmers.

I see a positive future for locally produced fruits and vegetables. A number of factors are helping to create this future: the increased awareness of food production; a changing attitude towards diet with increased emphasis on fruits and vegetables; and the introduction of new foods to the consumer's diet induced by an ever increasing cultural diversity.

References

- Alberta Agriculture. Information Needs of Alberta Farmers and Farm Families. Edmonton, Alberta: Planning Secretariat, Alberta Agriculture, 1983
- Bardahl, John. Personal Communication. President (1993) Saskatchewan Farmer's Market Co-operative. 1993.
- Frances, Charles; King, James; Dewitt, Jerry; Bushnell, James; Lucas, Leo. Participatory Strategies for Information Exchange. American Journal of Alternative A&culture, 1990, 15, (4), 153-160
- Saskatchewan Water Corporation. Marketing of Fresh Vegetables - Irrigation Handi-Facts. July 1987.
- Statistics Canada 199 1. Census of Canada 199 1. Government of Canada, Ottawa.