

STRATEGIC THINKING AND OPPORTUNITIES

J. Wilson Loree, P.Ag.

Head, Agricultural Business Management Branch
Alberta Agriculture, Food & Rural Development, Government of Alberta.
Olds, Alberta, Canada

ABSTRACT

Agriculture and rural communities are in a major period of transition created by a confluence of major drivers of change seemingly happening all at the same time. Major drivers include shifting from supply push to demand pull, greater market volatility, farm/food industry restructuring and concentration, biotechnology revolution, e-commerce, international trade policy, and national policies of varying support for agriculture.

Continually decreasing margins across agricultural production accentuate the drive to bigger size in an attempt to capture economies of scale to maintain living standards. Concentration of farm output by the larger farms is evident in the analysis of farm typology statistics for Alberta, Canada. Smaller farms sustain living standards with significant off farm incomes. Responding to the evolving situation, firms generally employ one of three strategies:

- *attempt to be low cost producer of the commodity.*
- *attempt to employ a differentiation strategy*
- *a focus strategy directed to a narrow market may contain components of either low cost or product differentiation*

The ability to decide which of these themes to implement and then implement successfully will be key to the viability of many businesses and farms in these times of major change. We see the strategy in the retail markets as 'big box' or 'boutique' operations. Probably the toughest position to be in is to get caught without striving toward any of the three options.

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INTRODUCTION – DRIVERS OF CHANGE

To say that agriculture and rural communities on the Canadian prairies are changing these days is an understatement. Most observers and commentators readily conclude that we are in a major period of transition. There is a confluence of major drivers of change operating all at the same time when any one on its own could drive major change. Downward trends of grain commodity prices, along with increasing input costs have combined to stress many mid-sized grain producers. J. B. Penn, Senior Vice President of Sparks Commodities from Washington, DC in a presentation to an agricultural Leaders Challenge Workshop in Alberta, Canada in February 2000 talked about the combination of major drivers which are:

- shift from ‘supply push’ to ‘demand pull’ era of focusing on consumer requirements rather than on production capabilities.
- greater market volatility - we see higher highs and lower lows than ever before
- farm/food industry restructuring – increasing concentration in before farm gate manufacturing and distribution, and after gate processing and retailing
- biotechnology revolution - creating potential for unique, cheaper, or more specialized products
- e-commerce - that potentially can remove some of the inherent difficulties in our systems to match producers and buyers of unique products
- international trade policy - that seems to be unable to keep other countries from subsidizing their exports or keeps other countries’ products out of their markets
- national policies - that may or may not support or encourage agriculture

These drivers for change come at a time of continually decreasing margins across agricultural production (and the rest of the economy too). The operating expense ratio for Alberta as a whole was 41% in 1966, increasing to around 80% in the past few years. This means that a greater and greater portion of the returns from sale of commodities (gross income) is required to cover the purchased inputs, leaving a smaller and smaller portion to cover overheads,

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fixed costs, living and capital purchases. It is no wonder that we have seen the trend toward increasing scale of farm operations as owners strive to have enough volume of sales that the returns left over after paying operating expenses and depreciation might cover increasing living costs. The risks associated with some adverse event are also greater as it takes longer and longer to recover from a loss with the smaller margins. A farm operation may not have recovered from one adverse event like a crop loss or price drop before the next one in the cycle comes along.

FARM FINANCIAL SURVEY & TYPOLOGY

Many farm operators have turned increasingly to off-farm income to sustain the family living expenditures as the decreasing margins combined with their scale has not allowed for sufficient family incomes. This is illustrated in the analysis of the Canadian Farm Financial Survey (FFS) results combined with other tax-filer information. The FFS excludes operations with gross annual sales under \$10,000. In Alberta, there are about 20,000 sideline operations that sell a small volume of agricultural products. Based on methodology used by the USDA, staff at Agriculture & Agri-Food Canada have developed definitions of farm types that help to differentiate the structure of farms and family income distribution. The farm types defined are:

- **Retirement Farms** - Farms whose oldest operator was 60 to 64 and receiving pension income from CPP/QPP or 65 years of age and over, and where the difference in age between the oldest and youngest operator is less than 20 years.
- **Lifestyle Farms** - Those farms with gross farm sales \$10,000 to \$49,999 and off-farm income of \$50,000 and over.
- **Low Income Farms** - Those farms with gross sales of \$10,000 to \$49,999 and total family income below \$20,000.
- **Business Focussed Farms** (all other farms excluding Hutterite and Communal Operations)- Defined by size.
 - Small (total revenue of \$10,000 to \$49,999)
 - Medium (total revenue of \$50,000 to \$99,999)
 - Small Commercial (total revenue of \$100,000 to \$249,999)
 - Medium Commercial (total revenue of \$250,000 to \$499,999)
 - Large Commercial (total revenue of \$500,000 and over)

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- **Hutterite and Communal Operations** - data on family income is omitted as insufficient information is available to show income per family due to the communal nature of the operations.

The information in Table 1 confirms concentration of agricultural sales in the largest size typologies. Only in Gross Sales categories above \$250,000 does the proportion of total sales exceed the proportion of the number of farms. Here, 15% of the farm operations contribute over 64% of the gross sales. Observers of the farm scene know intuitively that there is significant off-farm income contributing to the living costs of many farms, but the extent documented in these results is a surprise to many. Most families seem to arrange their affairs, supplementing farm income by off-farm work, or farming part-time along with employment to maintain living expenditures around \$40,000. Given the margins achieved by commodity producers, it requires significant scale (including capital) to be able to generate this level of income from agricultural production alone.

INDUSTRIALIZATION – ESCAPING PERFECT COMPETITION

It is not surprising then, to observe the reactions of many individuals and firms in this era of industrialization of agriculture as they attempt to move away from the minimal returns and troubles of perfect competition and increase margins to enhance family living. By removing themselves from the perfect competition of commodity production, managers are seeking higher returns from some component of product identity. These concepts are outlined in a paper by David Saxowsky and Marvin Duncan of North Dakota State University entitled **Understanding Agriculture's Transition into the 21st Century - Challenges, Opportunities, consequences and Alternatives.**

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Table 1: Income by Typology, All Farms, Alberta, Canada. 1999

	Number of Farms	Total Revenue \$ Cdn	Net Operating Income \$ Cdn	Net Operating Margin %	% Farms	% Sales
- Retirement Farms	6,670	87,200	16,000	16.7%	17.53%	7.64%
- Lifestyle Farms	3,120	28,200	(4,800)	-31.3%	8.20%	1.16%
- Small Farms w/Low Family Income	2,555	29,800	(4,400)	-19.8%	6.72%	1.00%
- Bus. Focus - Small	3,585	28,600	4,500	13.2%	9.42%	1.35%
- Bus. Focus - Medium	7,150	71,600	13,000	18.7%	18.79%	6.72%
- Bus. Focus - Small Commercial	9,080	153,300	28,400	18.2%	23.87%	18.28%
- Bus. Focus- Medium Commercial	3,640	334,800	77,300	22.3%	9.57%	16.01%
- Bus. Focus - Large Commercial	2,085	1,567,100	193,500	15.8%	5.48%	42.92%
- Hutterite Colonies & Communal*	165	2,252,700	254,600	12.4%	0.43%	4.88%
- Total/All Farms **	38,045	200,100	30,900	11.2%		

Source: Statistics Canada, Farm Financial Survey, 1999

Excludes farms with Gross Sales under \$10,000 Cdn.

* Family income statistics are excluded due to insufficient data.

** Family income statistics exclude Hutterite and Communal Operations

Table 2: Net Worth and Family Income by Typology, All Farms, Alberta Canada, 1999

	Total Net Worth \$ Cdn	Debt to Asset Ratio	% Farm return on Net Worth	\$ Capital to Generate \$1.00 Revenue	Family Off-Farm Income	Total Family Income
- Retirement Farms	702,000	0.04	2.28%	\$8.43	28,000	45,600
- Lifestyle Farms	393,000	0.16	-1.22%	\$16.35	85,300	81,500
- Small Farms w/Low Family Income	301,000	0.16	-1.46%	\$11.54	11,800	8,700
- Bus. Focus - Small	362,000	0.11	1.24%	\$13.81	29,500	34,900
- Bus. Focus - Medium	546,000	0.15	2.38%	\$8.78	28,600	43,600
- Bus. Focus - Small Commercial	795,000	0.21	3.57%	\$6.30	22,500	55,600
- Bus. Focus- Medium Commercial	1,503,000	0.22	5.14%	\$5.46	21,600	105,900
- Bus. Focus - Large Commercial	2,603,000	0.30	7.43%	\$2.30	72,800	235,900
- Hutterite Colonies & Communal*	11,407,000	0.14	2.23%	\$5.51	-	-
- Total/All Farms **	838,000	0.16	3.69%	\$5.01	32,414	63,341

Source: Statistics Canada, Farm Financial Survey, 1999

Excludes farms with Gross Sales under \$10,000 Cdn.

* Family income statistics are excluded due to insufficient data.

** Family income statistics exclude Hutterite and Communal Operations

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They remind us that perfect competition is characterized by:

- many buyers and sellers
- mobile resources where inputs such as labour, capital and land can be shifted from producing one product to another if profits can be improved;
- homogenous products that are readily substitutable for each other - e.g. feed barley, canola, wheat
- equal access to production technology and market information
- ease of entry and exit - ability to buy or sell the resources that produce farm commodities.

The implications of the model of relatively 'perfect competition' where many agricultural producers find themselves today is one in which the prices of goods and services are driven toward the marginal costs of production. This case is made in a paper by Gary W. Brester of Montana State University and J. B. Penn of Sparks Commodities Inc. entitled **Strategic Business Management Principles for the Agricultural Production Sector in a Changing Global Food System**. If prices are 'too' high, resulting in (or anticipating) above average returns, new firms will enter the production process or existing firms will expand. The new or added output will compete with existing product on the market, driving prices down. Or if firms are receiving below average returns, their resources will be re-directed to other sectors or opportunities where the returns are higher.

This entry and exit of firms or production is illustrated in the many cycles typical of farm commodity prices over the years. However, recently, we are observing a phenomena on the Canadian Prairies where many operators are continuing production of low return commodities. This stickiness or slowness to adjust can be explained by a concept of high exit barriers described by Mintzberg, Quinn & Voyer (1995) in **The Strategy Process**. Where management's loyalty to a particular business is strong, many businesses keep on producing even though they may be earning low or negative returns on investment. Doesn't this sound a lot like commodity agriculture where farmers desire to continue their lifestyle? It is a phenomena that often occurs where the

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fixed costs are a significant share of total production costs. The low returns can be observed where the retirement, as well as small and medium business focussed farm operations in the Farm Financial Survey reported in Table 2 above achieve returns to Net Worth in the range of 1-2% even before depreciation is taken. Compare this to the over \$500,000 sales group where farm returns to Net Worth exceed 7% before depreciation. Excess capacity around the world stays in production and the resulting overburden in the market continues to impact both the healthy competitors and the less competitive producers. Mintzberg et al (1995) note that if the entire industry suffers from over-capacity, it may seek government assistance – particularly if foreign competition is present. This description sure reminds me of grains & oilseed commodity production in developed countries around the world. An option for an individual, given this dilemma is to avoid an industry with high exit barriers, thus sidestepping involvement in bitter price-cutting. That is assuming that they are not one of the farmers with high desire to continue even if returns are low. A solution for governments caught in the expensive game of supporting commodity agriculture might be to implement programs that would reduce the hesitancy for farmers to reduce production. But it still won't likely lead to above average returns unless at least some of the characteristics of perfect competition are limited.

Strategies to beat competition

Thus, strategies to remove an operation's outputs from the limitations of one or more of the characteristics of perfect competition provides an opportunity to earn higher rates of return because of difficulties for competition to enter the market. Some of the strategies used by farmers to extract themselves from competition are:

- Adopting technology that others don't have yet lets some get ahead - but it only works until the others also begin to use the same technology. This is illustrated by how fast herbicide resistant canola was adopted by farmers across the Canadian prairies – from standing start to 75% of the seeded area in the space of about three years.

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- Contracts that provide some farmers with technology only available to a limited few can create an advantage. Limiting access to the technology can extend the time line for additional profits as new or potential competitors cannot access the profit enhancing methods.
- Contracts or controlled production rights can also result in unequal access to market information and opportunities – as is used in quota systems.
- Value added processing reduces the characteristics of homogeneous products that are substitutable for each other, and it provides an opportunity to glean some additional value from the products. But it doesn't eliminate competition from other products that can be substituted for the one your business is putting on the market.

Thus the opportunities for production agriculture according to Saxowsky & Duncan appear to be:

1. “ low cost, large scale commodity production,
2. medium or small scale commodity production combined with non-farm sources of income, or
3. production or marketing of specialty products.”

Note the distinction between commodities (easily substitutable) and products (some unique valued characteristics). What we are really seeing is an attempt by businesses to position themselves in one of the three conditions that allow a competitive advantage over other firms who also produce products.

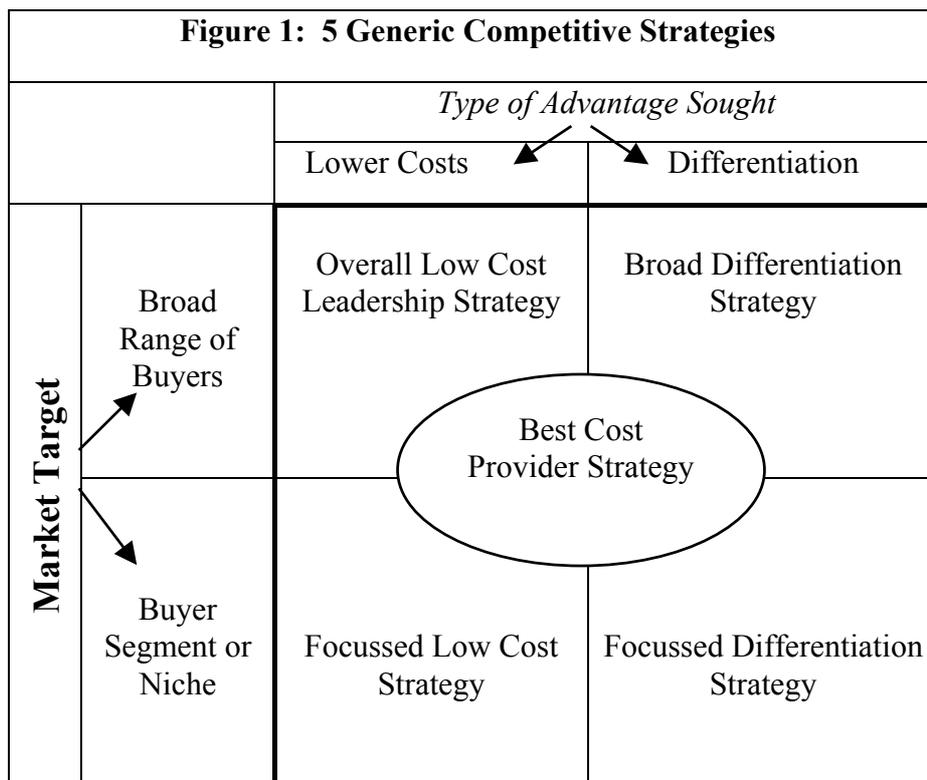
These concepts are supported in the paper by Brester & Penn noted earlier. To sustain this competitive advantage, they cite Michael Porter's conclusion that successful firms generally employ one of three strategies:

- attempt to be low cost producer of the commodity.
- attempt to employ a differentiation strategy where the output takes on real or imagined characteristics that set it apart in the market - it isn't the SAME as other products, thus is worth more.

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- a focus strategy may contain components of either low cost or differentiation, but is directed to a narrow market in which buyers might have unique characteristics of requirements.

This strategy is illustrated in Figure 1 where the strategic choices faced by the management of any business can be related to the type of advantage sought as well as the market target.



The ability to decide which of these themes to successfully implement is key to success of many businesses and farms in these times of major change. The worst position for a business is to not be driving toward or achieving any one of the three options. Many farm businesses have tended to plan by intuition in the past. Many observers believe that depending on intuition without a more organized approach to planning will limit opportunities for a business success in the future. If a business does not have a low cost position, or is not able to achieve it due to any variety of limitations, that business will be in a less secure position in the long term when other low cost producers of the same

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outputs are able to supply commodities into markets at lower prices. Facing cost structures higher than competitors, to succeed, a business must find another advantage – by focussing it's product or market in such a way as to be able to extract additional returns from the customers. Unfortunately (or fortunately), there are no 'cookie cutter' farms and no solutions that fit for all - each operation and management unit must look at their resources, including physical, financial and human, and follow a plan to try to position themselves for success. In some ways, producers, processors, and retailers are choosing to be like either a 'big box' or 'boutique' in their approach to business. Each has its benefits, requirements, and necessary skills to succeed, let alone, capital requirements.

AUTHOR

J. Wilson Loree, P.Ag.

Head, Agricultural Business Management Branch

Alberta Agriculture, Food & Rural Development

- B.Sc. & M.Sc. In Agricultural Economics University of Alberta, Edmonton, Alberta, Canada
- Executive Program at Queens University, Kingston, Ontario, Canada
- Manage farm management extension program for Province of Alberta.
- Director, Canadian Farm Business Management Council.
- Director, International Farm Management Association.

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