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Value-Added Ag-Based Economic Development: A Panacea or False Promise?

Part Two of A Two-Part Companion Series: What Should We Expect of Value-Added Activities?

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Introduction

This paper is the second in a two-part companion series on Value-Added Ag-Based Economic Development. In the first part of the series, we focused on the definition of value-added and the difficulty of deciphering household income attributed to value-added activities. In particular, we constructed a framework for understanding range and characteristics of economic activities of the farm household outside commodity production. In this paper, we outline what policymakers and others hope to achieve through value-added agricultural development and examine whether there is any theoretical or empirical basis for such expectations. Using the framework and definitions developed in the first paper, we examine a range of economic activities (both value-added and parallel deployment of resources) and argue that they are not all created equal when it comes to income enhancement, regional employment and land use.

What is the Promise of Value-Added?

As argued in the first paper of this 2-part series, value-added strategies are often suggested as a solution to the "small farm" problem. Various state and federal programs have created policies and programs to actively encourage farm families to consider value-added strategies. The focus of this paper is specifically on whether there is an *a priori* reason to expect that value-added agriculture, on an aggregate basis, is good for farm family income and/or the rural economy.

In order to explore whether value-added policies are desirable or successful, it is important to articulate the specific expectations expressed by farmers, researchers, and policymakers. There are three elements to most arguments in favor of farmers pursuing value-added strategies:

- Enhancing or stabilizing farm family income
- Contributing to rural economic development through employment and new income sources for rural residents
- Maintaining land in agricultural (or open) use

Enhancement of income - The term "value-added strategy" implies a return to farmers that exceeds what they can hope for in the marketplace for standardized or bulk commodities. Using the term in this way moves the discussion beyond the accounting principles stressed in Part 1 of this series; here we are explicitly focused on a business model (or models) that feature new tactics and new products for growing the farm business. But, this focus brings on a new collection of concerns. Namely, the term may lead to the false hope that higher prices automatically equate to higher profits. In addition, the term by itself does not reflect the fact that, in today's economy, higher returns are often associated with higher risk. We address in this paper the issues of risk profile and what conditions favor successful performance in value-added markets.

Increased employment - Economic development policies more often than not are focused on the potential for employment. Accordingly, those favoring value-added strategies often point to the potential for new jobs that could arise from supporting such approaches. This stance is uncontestable on conceptual grounds. All agree that job-making is a critical element in economic development. But the job-making element in ag-based businesses is cloudy at best, as with any other industry that is structured around relatively small, usually family-operated business entities. Unfortunately, the reporting in Federal statistics at present, as noted in our earlier paper does little to put the employment issue into sharp relief. Namely, the categories for family income used in USDA's Agricultural Resource Management Survey (ARMS) and other government data sources do not provide enough detail to parse out how labor services in farm households is allocated towards value-added activities. Without more detailed evidence, we are left with making only an *a priori* evaluation of the employment impacts of value-added agriculture. Speculation of this sort can lead in several directions. Although there are some examples that might be expected to have a net positive impact on rural employment (e.g., complementing commodity production by recruiting new employees to carry out new transport and/or processing capabilities), it was argued in the first paper in this series many value-added businesses simply make use of residual family labor. In this case, significant value can be added without more jobs, leading to little meaningful employment generation outside the business. Further, as with other small businesses, these add-ons can and do lead to opportunities to barter goods/service or transact for cash, all of which might not find their way to published statistics regardless of the care taken with their construction.

Retention of farmland - Finally, value-added strategies are often touted as helping keep people on the land and thus help keep the land in open space usage. To our knowledge, the linkages between structural change in agriculture, value-added business strategies, and changes on the rural landscape are an open empirical question. As we shall see, there are types of value-added businesses for which this is a valid conclusion. In other cases, there is a weaker link with the retention of farm land.

Before further exploring the correlation between value-added agriculture its desired effects on income, employment and the landscape, we look more closely at the farm family's income portfolio to see what factors might favor success in value-added businesses. .

Choices for Farm Families

Structural changes in agriculture are widely documented. Scale economies and global competition are putting increasing pressure on farm businesses, squeezing out the middle-sized firms and leaving behind a bi-modal structure in U.S. agriculture. It is not uncommon to hear the view that farmers ultimately have to “get big or get out.” However, in reality the choices are rarely this stark. There are some important forks in the road leading away from commodity-based farming, including various configurations of farm resources (labor, land and capital) used in activities that have varying degrees of dependency on agriculture. Harrington and Koenig (2000) use the term “strategic differentiation” to describe strategies which fall in between the options of pursuing large-scale farming and completely exiting from agriculture. They argue that strategic differentiation has been the survival response of farmers to the evolutionary change in the structure of agriculture. As they note, “Family control of farming has been an exceedingly durable and flexible institution.”

How should farmers make decisions about what to do in the face of current trends? Economic theory posits that allocation of human resources on farms is a result of utility maximization. Further, theory stresses that both markets, where pecuniary impulses are on display, and non-pecuniary factors are at work, all subject to the labor constraint of the farm family (Bollman 1979, Streeter). This formwork is very useful because of the relentless focus on the trade-offs—the opportunity costs in economic parlance—associated with alternate courses of action. This often overlooked principle dictates that the true “cost” of one choice is the benefits to be had by an alternate choice. Keeping this opportunity cost concept in mind, the way forward is to view value-added enterprises in comparison with alternate choices.

In particular we offer a considered and we hope exhaustive list of options for farm businesses who are struggling to survive:

1. <u>Commodity Based Options</u>
    - **Get bigger** (produce more of the same or even some new, largely undifferentiated, farm commodities)
    - **Cooperate** (engage with formal cooperative models or look for purchasing and/or selling alliances)
2. <u>Value-Added Options</u>
    - **Reach down the value chain** and add value to the farm and food business through production and post-production activities
3. <u>Diversification of the household income portfolio</u>
    - **Parallel deployment of resources**, such as (exploit any available rents on land or buildings; increase services production—provide more public access for recreation; agri-tourism; companion animals—boarding) kenneling, training; increase revenue by milking public land conservation schemes)
    - **Off Farm Work,** such as driving a bus, teaching school.
    - **Non-Farm Business,** such as owning a Subway franchise.
4. <u>Exit Option</u>
    - Get out of farm and food business while there’s still time and still some pool of salvageable financial and human assets.

These options, along with specific examples are shown in Table 1. If farmers opt either to grow their commodity business or simply to exit agriculture, it is not especially hard to predict the associated impact on income, employment and the rural landscape. We can easily visualize growing, say, a 100-cow New York Dairy farm into a 500 cow dairy farm. However, any substantive deviation from that essentially linear business expansion brings on numerous subtleties. For example, many farmers with small businesses do not have the inclination nor the human and/or capital resources grow their businesses. But, for lifestyle or a myriad of other reasons, they do not want to leave farming. For them, the real question marks surround the other options.

Two categories in particular will be the focus of the remainder of this paper: Value-added options and parallel deployment of activities. We argued in part 1 of this series that it is important to distinguish between these two categories, as they have distinct requirements when it comes to labor, capital assets and managerial skills.

The discussion that follows is intended to lead to a more complete view of what is needed for a value-added business to be successful. In particular, it is important to contrast how the value-added activities differ from the business currently operated by the farm family, in order to understand the gap that must be bridged for successful differentiation. To facilitate the discussion, we take a short detour to introduce key concepts from the entrepreneurship and strategy literature.

Table 1. Scheme for Categorizing Activities Associated with Value-Added Agriculture

Commodity Based Strategies	Method	Example
1. Commodity-Based Farm Business	Increase production either independently or in cooperation with others	grain production, livestock production, dairy, greenhouse
Stategies Involving Value Added Products	**Method**	**Example**
Production-oriented		
1. Biotechnology	Use specific genetics in the product desired by the marketplace	pig intestines to researchers, genetically treated dairy cows for pharmaceuticals
2. Managerial focus	Use managerial techniques such as special cultivation or livestock handling	organically grown livestock or crops, anti-biotic-free livestock
	Use tracking via information systems	identity-preserved products
3. Specialty Commodities	change production to meet a niche market	sheep cheeses, goat milk, adzuki beans, buffalo
Post-Production oriented		
1. Distribution	Do marketing via direct selling	Sell commodities directly to end user via roadside stands, farmer's markets
	Use new distribution vehicles	catalog, on-line sales
	Establish a brand or trademark	Vidalia Onions, buy-local programs
2. Promotion	Add own processing capabilities	beef packing, specialty jams, apple packing
3. Processing	Add processing capabilities, either independently or in partnership with others	partnership in vertically integrated corporation
Strategies involving Parallel Deployment of Resources	**Method**	**Example**
1. Exploit specialized human capital	Start an Agricultural Service Business	fertilizer services, vet services
2. Exploit land and/or buildings .	Collect rental income	land, facilities (storage), and rights (hunting rights, right-of-way)
	Create a service business	companion animals: boarding, kenneling, training
	Provide access to public for recreation	Cross-country trails, snow mobiling
	Promote Agri-tourism	Destination farm, pumpkin farm
Non-Farm Options	**Method**	**Example**
1. Off Farm Income	Seek employment off the farm	school bus driver, teacher
2. Non-Farm Service Business	Start a small service business unrelated to the farm	insurance agent, home-based business (Mary Kay, Telephone services)
3. Non-Farm Product Business	Start a small product-focused business unrelated to the farm	furniture, woodworking
Exit Options	Sell Farm	

Important Detour- Concepts from Strategic Management and Entrepreneurship

In order to analyze value-added activities, we'll be using the following key ideas from the fields of strategy and entrepreneurship:

1. Classification of business models and strategies (including value proposition and revenue model)
2. Competitive Analysis and Sustainable Competitive Advantage
3. Risk Analysis and Risk Profile

Business models and strategies

Although the terms "model" and "strategy" are used interchangeably throughout the management literature, Magretta (2002) makes a useful distinction, describing business models as the "stories that explain how enterprises work" and a specific business strategy as an explanation of "how you will do better than your rivals."

She points out that a good business model will answer the questions:

- who is the customer?
- what does the customer value?
- how do we make money (economic logic explaining how value is delivered to customers at an appropriate cost)

The answers to these questions are commonly called the **value proposition** and the **revenue model**. The value proposition is focused on what customers need and want, and more importantly what they are willing to pay for, and hence is considered as **customer focus**.

Magretta distinguishes business models from business strategies, which answer the question: how will we beat our rivals?

We are not interested in the semantic debate; what is important for our discussion is the implication that whatever shape new agriculturally-based enterprises take, to be successful, they will have to feature a sound business model and winning strategy.

Here we can pick up some additional helpful ideas from the management literature to frame our discussion. In their extensive work on business strategy, Kaplan and Norton (2001) make the argument that there are three basic means for differentiating a business:

- **Product leadership**: focus on creating new products and being the first to market.

- **Customer intimacy**: create a strong bond with their customers and sell to meet their needs.
- **Operational excellence**: deliver a combination of quality, price and ease of purchase that no one else can match.

Once a business has the right customer perspective, it must decide on its economic logic, that is, whether it will emphasize a **revenue growth strategy** or a **productivity growth strategy**. In other words, will revenues grow by increasing the customer base or because the entrepreneur can maintain cost advantages and/ using existing assets more effectively? Kaplan and Norton then argue that although both are needed to some degree, one usually dominates. To execute the differentiation strategy and create a revenue stream, a business needs the right internal processes and human resources.

Choosing the right strategy depends on a clear evaluation of the vision and mission of the entrepreneur (why is he in business?) and the strengths and weaknesses of the business, in terms of how they map out to the opportunities and threats of the marketplace.

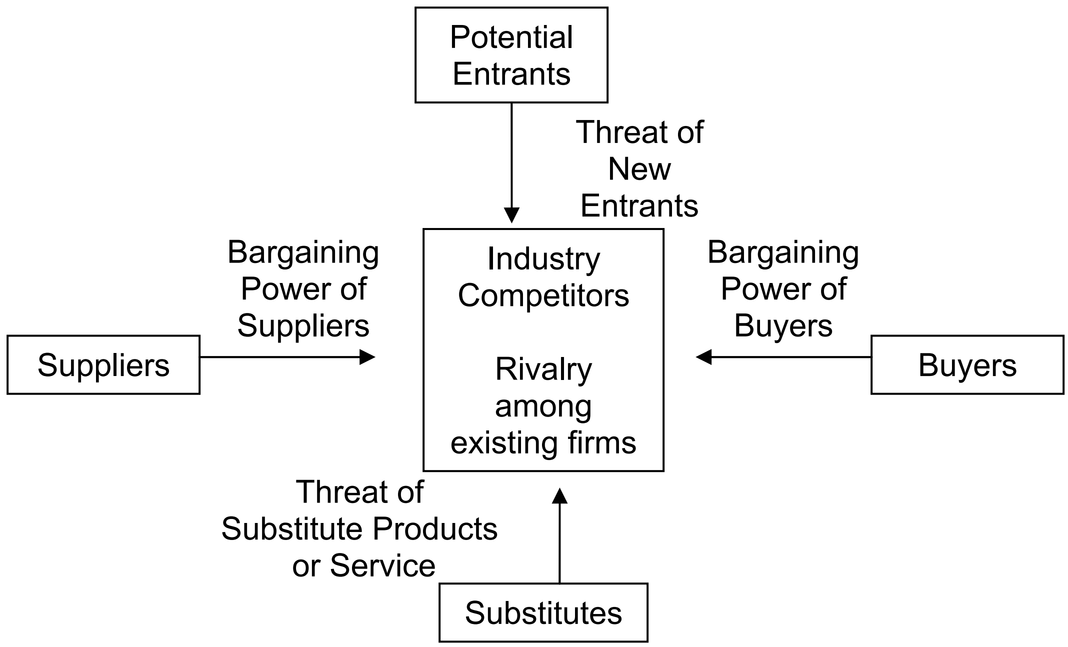
Competitive Analysis

Now turning to a discussion of competition, based on Porter's classic work, there are five forces that shape competition in any industry (see Figure 7). To succeed in a sustainable way, every business must address not only current but future entrants into a marketplace. In addition, there are threats if buyers have considerable market power because the can put pressure on profit margins. By the same token, if input suppliers have enough market power, they can pressure margins from the other direction. And finally, every business faces the possibility that consumers will direct their dollars to competing products.

The concept is further extended with the additional term "sustainable competitive advantage." It is not enough to be first on the scene with a new and innovative approach to a problem or opportunity; to be successful an entrepreneur must also create barriers to entry (such as branding, proprietary technology, strategic alliances or unique human capital). Without a barrier to entry, an entrepreneur assumes the large risk of being a first mover in exchange for expected high returns, but will not be able to prevent erosion of the return as the premium attracts larger or faster economic agents into the same niche. It will not remain a specialized niche if it is easy to do.

Thus, to survive in a given business environment, the entrepreneur needs a sustainable competitive advantage, or the unique characteristic of the business that will help him deal with all five sources of competitive pressure.

Figure 1. Porter's Five Forces Model



Source: Porter, Michael. *Competitive Strategy*.

Assessing the Risk of New Ventures

Tying these concepts together, any business proposition can be evaluated in terms of its risk profile. The riskiness of a business depends on:

1. Production risk
2. External risk
3. Financial risk
4. Market risk
5. Industry (competitive) risk
6. Personal risk

As those in agriculture are more than familiar with production risk and little can be done about external risks, we focus the discussion on items 3-6. In order to evaluate the **financial risk** of a venture, it is important to understand the amount of funding required and the assets that must be in place for success. In addition, there must be adequate cash flow to service any debts that are incurred. **Market risk** depends on the entrepreneur's knowledge of the customer. Market risk is reduced if effective demand is documented. Customers must have a willingness and an ability to buy the product or service. **Industry risk** for the venture is evaluated based on: 1. availability of existing or potential substitutes 2. bargaining power of suppliers 3. bargaining power of buyers 4. potential for rivals to enter the market. **Personal risk** is difficult to quantify. Most new ventures require the entrepreneur to stake a personal guarantee, but it is the intangible personal risks (such as risk of reputation) that often matter the most. If the venture involves family members as investors or partners, it can increase the personal risk as well.

Applying the Concepts to the Farm Household Portfolio

The concepts of business models and strategies, competitive forces, and risk assessment are useful in comparing commodity based businesses and value-added enterprises. In doing so, we develop a checklist relating to the challenges of value-added enterprises. In other words, we identify the conditions that must be present to increase the chances that a value-added business might be profitable. Once developed, the checklist is discussed in light of the characteristics of farmers who are interested in value-added businesses.

Business Models and Strategies

For commodity-based businesses, the business model is one of operational excellence. The customer is someone who uses the commodity (can be a consumer or a processor or other intermediary). Customers may value a range of qualities, but by nature commodities are considered interchangeable and thus differentiation is not based on the product but instead some aspect of the exchange process (volume, speed, consistency, etc.). Most successful commodity-based agriculture makes money by combining low-cost strategies (technology) and use of marketing mechanisms (such as contracting or forward pricing) to manage price risk. Thus, many farmers share a similar business model, one that features **operational excellence**. The revenue model is one that emphasizes a **productivity strategy**. Accordingly, the internal processes are focused on production technologies and the business is capital intensive rather than labor intensive.

In commodity agriculture, the dominant forces are: the bargaining power of buyers and the threat of new entrants. The **competitors are well known**, and detailed statistics on supply are kept by government sources. What has distinguished successful farmers, however, is the ability to deal with the competitive forces in the market. As price takers, individual farmers have traditionally been relatively powerless over the determination of price. Changes in production technology have increased competition through oversupply and global trade has transformed the commodity markets into highly competitive environment. Thus, farmers have dealt with competition through strategies that have focused on **reducing bargaining power of buyers** or found ways to **survive the threat of new entrants** (through using scale advantages, vertical integration, etc.)

It is mostly large sized farmers who have successfully combined both a good business model and a sound strategy and provide the largest share of food and fiber; mid-sized farmers have been squeezed out and smaller farmers depend increasingly on off-farm sources of income.

It is primarily the smaller farmers (who still make up the bulk of farm numbers) who are now seeking the so called value-added route. **What can prevent the strategy from being successful is the failure to realize that both the business model and the business strategies have to be re-worked**. Entering into value-added businesses or ag- and food-based businesses requires a re-engineering of the agripreneur's approach to the marketplace.

Most of the value-added activities listed in Table 1 are based on models featuring **customer intimacy**. (The exception is use of biotechnology, which one could argue is based on product leadership – getting to market consistently with innovative products.) These customer-focused businesses require **revenue growth** (not productivity growth) that is based on increasing market share. In turn, this requires a radical change of thinking for most producers. Those in agriculture typically have been far removed from the end user, separated by a series of players in the marketing chain. Skills such as market research and analysis may be lacking in farmers who have relied for many years on commodity markets. First and foremost, the focus must turn to customer analysis. In contrast to commodity-based business models, a value added model is dependent on an intimate and accurate assessment of who the customer is and what the customer wants.

Thus, our checklist begins with:

To Succeed in a Value-Added Business Requires:

- √ A change in mindset, towards an approach that is focused on customer intimacy (depending on the newness of the customer base and the degree of differentiation of the product or service)
- √ Needed skills include ability to research and analyze the market

Competitive Forces

On the competitive front, ag and food-based entrepreneurs are likely to face industries quite different from the familiar commodity marketplace. For one thing, the competition often is not well defined. Entrepreneurs entering value-added markets must research and understand current and potential competitors and be prepared to counteract any responses to their entry into the marketplace. Table 2 shows various options evaluated on the basis of two basic elements of competitive forces: Barriers to entry (how easy is it to copy the approach?) and Bargaining Power of the various economic players.

The evaluation shown in Table 2 is only an *a priori* guess about the relative competitive forces in each market. Value-added opportunities must be assessed carefully on an individual basis. However, it is very important to acknowledge that competitive forces can be very high for some value-added businesses. It is notable that some of the approaches that are most easily copied are also those strategies that we argued above would be available to managers with the widest range of managerial abilities.

Regardless of the actual distribution of market power among buyers and sellers, every strategy in the value-added category requires the farm business to define its own specific competitive advantage. This re-emphasizes the need for a change in mindset, away the thinking associated with a commodity market where by definition your crop or livestock meets standardized criteria, and towards a philosophy of differentiation.

Getting farmers to understand the concept of sustainable competitive advantage can be challenging. To illustrate, consider the adamant tone and emphatic nature of comments made by John Ikerd in writing to Missouri farmers (in Born, 2001) about value-added opportunities:

> " …if you decide to produce exactly the same thing that someone else is producing in the same way they're producing it, and if you succeed, any profits you realize will not be sustainable and neither will theirs. If you expect someone else to provide you with opportunities, you are destined to be disappointed. If you expect someone else to solve your problems, you will be disappointed. You have to do something creative and productive yourself if you expect the market to reward you for having done it. And, if it's easy to do, it won't be worth much. If someone else provide you with the market, they-not you, ultimately will realize the benefit. You didn't create the market-they did. If someone else provides you with a new pest management or fertility program, they-not you, ultimately will realize the benefit. You didn't increase productivity-they did. You certainly can learn from others and can integrate others marketing and production services into " your " production-marketing system ... but your uniqueness is the only source of profitability that cannot be competed away and thus, is the only source of sustainable profits. "

Table 2. Relative Competitive Position of Producer in Various Choices within Farm Family Income Portfolio

	Method	How easily is the strategy copied?	Bargaining Power of Producer vs. Input Suppliers and Customers
Commodity Based Strategies			
1. Commodity-Based Farm Business		Very Easy	Output buyer
Stategies Involving Value Added Products			
Production-oriented			
1. Biotechnology	Use specific genetics in the product desired by the marketplace	Difficult, if intellectual property rights properly protected	Whoever owns intellectual property rights has the most power
2. Managerial focus	Use managerial techniques such as special cultivation or livestock handling	Moderately easy	Initially, producers, but as organics (etc.) becomes mainstream, power shifts to buyer
	Use tracking via information systems	Moderately easy	Market power shared - all members in the chain must certify in order for identify-preservation to work
3. Specialty Commodities	change production to meet a niche market	Can be very easy, or very difficulty depending on the commodity	If it is a true niche market, there will be few buyers, so producer has market power unless consumers find substitute
Post-Production oriented			
1. Distribution	Direct selling	Very Easy	Shared between producer and consumer
	Use new distribution vehicle	Very Easy	Depends on relative size of supply and demand
	Branding, trademark	Moderately difficult - may involve legislation and producer cooperation	improves producer power
2. Promotion	Add own processing capabilities	Difficult - requires substantial asset acquisition	Can increase the relative position of the producer
3. Processing	Partner with others in the vertical chain to process	Difficult if relationship is managed carefully	Improves producer power relative to the next level in the food marketing chain
Strategies involving Parallel Deployment of Resources			
1. Exploit specialized human capital	Agricultural Service Business	Moderately easy, depends on whether knowledge in the content area is rare or common	On a local basis, can strengthen producer's relative position if there are few competitors
2. Exploit land and/or buildings	(see Table 1)	Difficult if location is unique	Strengthens Producer's position

One wonders if the repetition involved in Ikerd's comments reflects his experience with the difficulties of getting farm businesses to shift gears and focus on the simple but powerful concept of sustainable competitive advantage.

Based on the discussion above, we can add a few more things to the checklist:

To Succeed in a Value-Added Business Requires:

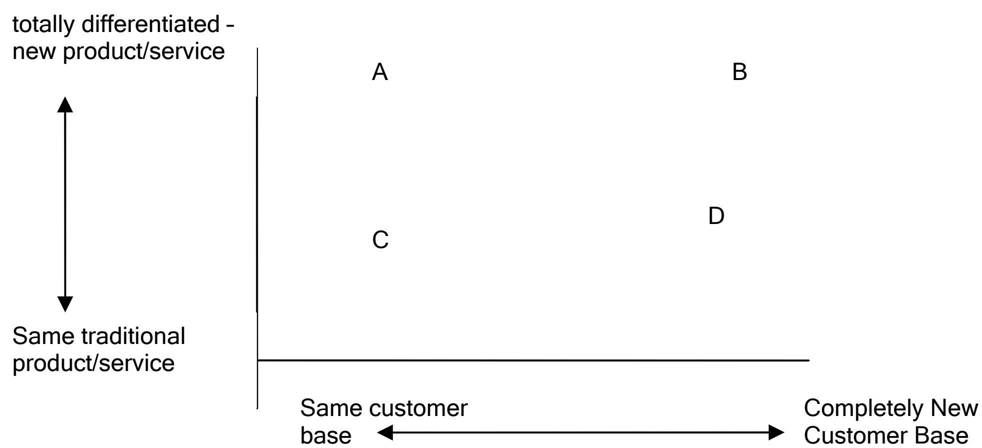
- √ a change in mindset, towards an approach that is focused on customer intimacy (depending on the newness of the customer base and the degree of differentiation of the product or service)
- √ the skills and ability to research and analyze the market
- √ **a careful assessment of the competitive challenges (which may be very difficult, depending on how easy it is for others to copy a successful strategy)**
- √ **a well protected unique advantage to last in the long run (a sustainable competitive advantage)**

Risk Assessment

In the discussion above, we argue that value-added businesses can carry substantial **industry or competitive risk**. What about other dimensions of risk? As shown in the first paper in this 2-part series, only a few of the value-added activities require extensive acquisition of new assets. Thus, activities such as building processing facilities, adding new equipment create higher **financial risks** than activities such as direct marketing. Another consideration is the length of the selling cycle of the new value-added commodity. If there is a long startup time before any sales are made, the new business venture must raise more money at the beginning in order to service debt and buy inputs.

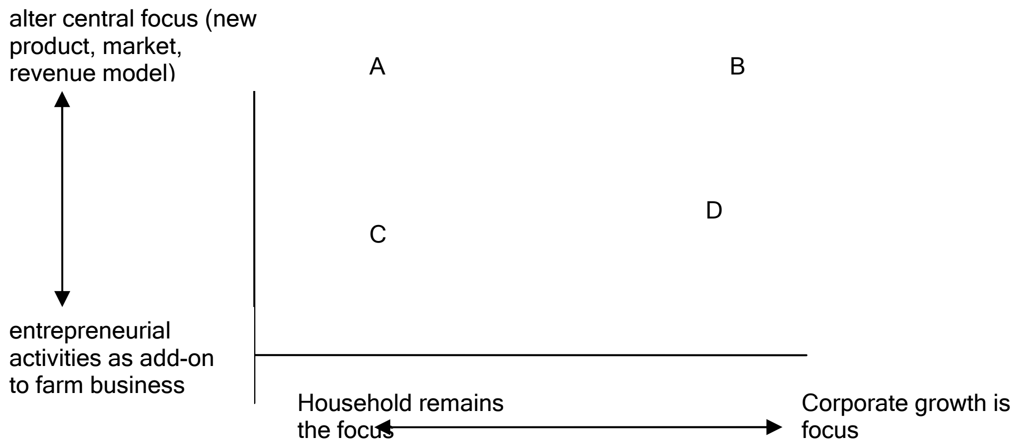
Market risk varies from business to business and depends on how far the value-added venture is differentiated from the traditional farm business. One way to look at the situation is illustrated in Figure 2. As shown on the vertical axis, a value-added product may retain the same characteristics or may be highly differentiated into something considered a completely new product. The horizontal axis, illustrates the range between selling to the same customer and approaching a totally new customer base. In the lower left hand quadrant (point C) you have the current business (same product, same customer) and in the upper right hand quadrant (point B) you have a business that is completely transformed with no remaining relationship to the previous company. At point A you are selling a new product to a familiar product, while at point D you are selling the same product to a new customer base. An example would be a transition from hog production at point C to the sale of processed pig intestines to pharmaceutical companies (point B). Choosing the right placement for a new business depends heavily on the resources, production options and technologies available to the agripreneur. Risk increases as the entrepreneur moves away from the origin.

Figure 2. Choices for Entrepreneurs Regarding Product and Customer



With regard to personal risk, it is likely to increase when moving from a commodity business to most forms of value-added enterprises. This is in contrast with the majority of the parallel deployment strategies, which entail relatively little risk. One way to look at this is illustrated in Figure 3, which shows the combination of two elements of the business: the degree the focus of the entire household economic unit changes, and the extent to which the business moves from a family-based business to a corporate business.

Figure 3. Various Pathways from a Farm Business to a Value-Added Business



Various positions on this graph represent differing risk and income positions. For example at C, there is lower risk and lower income potential. Fewer changes are needed, the family can probably provide the core management and labor needed and probably less funding will be required. At B, the high-growth strategy will require high level of funding needs, addition of business partners or alliances, and a larger employee base. Technology needs at C might simply be a web-page, while B could require full blown supply chain management technology. One could argue that because farm businesses (especially smaller farms, who are most involved in exploring value-added agriculture) are used to tacking new activities on to an existing business that the most likely starting point for farmers is near point C. Personal risk increases as you move away from the origin.

Based on this discussion of the possible risk profile of value-added activities, we can add to our scorecard:

To Succeed in a Value-Added Business Requires:

- √ a change in mindset, towards an approach that is focused on customer intimacy (depending on the newness of the customer base and the degree of differentiation of the product or service)
- √ the skills and ability to research and analyze the market
- √ a careful assessment of the competitive challenges (which may be very difficult, depending on how easy it is for others to copy a successful strategy)
- √ a well protected unique advantage to last in the long run (a sustainable competitive advantage)

About the Risk in a Value-Added Business:

- √ **If additional assets are acquired, the business will have additional financial risk**
- √ **Market risk and personal risk can vary greatly and must be assessed carefully on an individual basis. They are impacted by:**
    - o **the degree of differentiation of the product**
    - o **the difference in the customer base as compared with current familiar markets**
    - o **the degree to which the business is an add-on activity as opposed to altering the central focus of the family business**
    - o **the movement away from the household as the business unit towards a corporate model**

Table 3 is a summary of the differences between traditional commodity businesses and value-added activities. In terms of overall strategy, farm businesses must shift from a production focus to a customer focus, since most value-added businesses require product leadership or customer intimacy (as opposed to operational excellence). To reach a specialized niche, in contrast to the standardized nature of selling commodities, value-added businesses require market research and an on-going monitoring of the customer base. Whereas a commodity business has very well defined competition and is clearly based on a revenue model that is geared toward production, value added businesses require a type of competitive intelligence work, and movement to an revenue model dependent on increasing market share.

Taken together, the final score card above and the summary shown in Table 3 are a sobering reminder that it is not a trivial exercise to move from a commodity-based business to a value-added approach. Compared to other options facing the farm family household, it may not always be the best choice.

Table 3. Changes Due to Move from Commodity-Based Business to New Value-Added Market

	Commodity-Based	New Value-Added Market	Implications
Overall strategy	operational excellence	Customer intimacy or product leadership	Shift away from focus on production and towards marketing
Attitude towards customer	many customers buying standardized product	niche of customers buying differentiated products	Market research and knowledge of customer must improve
Competition	well understood, documented in public sources	usually not well understood or documented in public sources	Market research on competition and tracking of competitive responses
Value proposition	• operational excellence	• customer intimacy OR • product leadership	Careful analysis of all three approaches to choose the right one
Revenue model	productivity growth strategy	revenue growth strategy (increasing market share)	Need a clear understanding of the size of the market and the potential for market share

Discussion and Recommendations

The preceding material was presented to lay the groundwork for evaluating value-added strategies against the expectations that they will improve farm family income, lead to increased employment and keep land in farming.

What are the Implications for Farm Family Income?

Like all entrepreneurial ventures, value-added ventures have some chance of succeeding and a non-trivial chance of failing. Thus it is not safe to assume that value-added strategies will necessarily lead to increased farm family income. Value-added strategies are usually considered only when a commodity-based production has not yielded satisfactory household returns. This can be due to a variety of factors: high or variable input costs, poor managerial abilities, low quality of natural resources, or changes in environmental or legislative issues. The real question is whether any of the same factors will work against the new venture as well. Taking business owners who are already struggling with one venture (the farm business) into unknown territory involving new markets and new customers may be unwise, especially if management ability is not a strong point in the existing business. At the extreme, it might even be considered throwing such owners to the wolves.

The discussion to this point might be summed up by saying what a successful entrepreneur once told us: "If it was easy, everybody would be doing it." Building a profitable, sustainable value-added business is difficult and can involve considerable risk. A pro-active attitude is needed, along with a willingness to change mindset. Choosing the right strategy from the array listed in Table 1 requires strategic analysis and the accompanying business planning.

That said, the affect of a value-added business on farm family income can be very positive if a farm owner does the following:

- carefully compares the value-added approach with other income-enhancing opportunities
- chooses an opportunity well-matched with personal mission
- articulates a well-defined strategy that is well-matched with the strengths of the business
- pays attention to the elements in the Scorecard for Success developed above
    - Change mindset to customer intimacy
    - Learn to research and analyze the market
    - Carefully assess the sustainable competitive advantage and competitive challenges (Need a well protected unique advantage to last in the long run

- Monitor and evaluate competition
- Assess and manage financial, market and personal risks

What are the Land Tenure and Employment Implications?

Based on the discussion above, it is unclear whether value-added activities necessarily will lead to farm land remaining in open use applications. This is not a very satisfactory answer, and leads us to recommend further empirical work in this area.

Value-added activities do not seem particularly promising in terms of adding jobs to rural communities, unless some of the riskier alternatives are selected (e.g., building processing capacity). However, if value-added businesses are started with adequate planning and manage to succeed and grow, there may be long term gains in employment.

Implications for Education/Training, Research and Policy

What are the implications for economic and rural development? Policies aimed at helping create successful, sustainable ag-based development, must keep a focus on the research, planning and strategy elements of business development. Programs aimed at helping "family-sized" businesses research and understand the marketplace and choose a reasonable business model and strategy will be most helpful. But old paradigms and patterns of thought may be in jeopardy. Too often, even today, the vision is "how can the farm support the family"? We submit that more pertinent question can be "how can this farm family grow their business"? Although funding programs can be useful, they are unlikely to succeed without a clear support structure to help change the mindset and enhance the skill set of those moving into value-added niches.

What are the education implications? Concepts and frameworks from the strategy literature and from the entrepreneurship field can be very helpful to new value-added entrepreneurs. Ag- and food-based businesses need education to help them make the link between the analysis of market research and strategy.

What are the research implications? In all cases, it is clear that household-level data is crucial to a meaningful research effort. It would be very interesting to document the migration of businesses towards non-commodity companies and to understand in more depth the individual and social gains that accrue. Examining case studies to provide color and shape to the models outlined in this paper would be fruitful. Models using ERS newly endorsed typology of farms might have the capability of portraying inter-firm/ inter-household competition. Perhaps such models could be used to answer the following types of questions: How can small agricultural enterprises survive and compete with larger commercial establishments? What roles can off-farm and farm-related income sources play in the survival of farm households? What roles do tax preferences play? What roles do policies play?

This paper raises serious problems with economic development policies that issue a blanket recommendation that farm families in stress move toward value-added approaches. Given the prospects that value-added businesses can involve substantial risk and may not achieve the goals of the policy, policymakers and researchers must give more useful guidance to producers in order to ensure sound decision-making.

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