

- A beef alliance's calves must offer competitive economic benefits to a feedlot in cost or efficiency over other calves to "capture" the market from other sources of calves.
- A cooperative processing plant for ethanol or some other product must be cost-efficient to compete with similar plants producing similar products.
- Producers marketing directly to consumers must compete with many other producers as well as supermarkets and other food suppliers.

Competition from others seeking to participate (integrate) into the value chain or previous participants seeking to "recapture" their position can lead to enhanced price competition and greater market risk for captured value. The competition in captured value-added markets can lead to the same "treadmill" situation as commodity production agriculture has always faced — the need to increase efficiency and production continuously to stay competitive.

If created product demand is established, stable and potentially higher prices with limited direct competition may result. To illustrate:

- A unique or branded product differentiates itself from other products, creating its own demand.
- Contractual agreements for value chain identity-preserved products limit competition from other producers who might be willing to sell for lower prices or try to produce and sell lower quality products.
- Each farm creating an activity experience has a unique location and geographic features that usually cannot be duplicated exactly by competition.

However, the actual marketing and selling of created-value products may be more difficult if market channels and product identity are not established. This requires market feasibility studies, marketing plans and (for most producers) new marketing skills in addition to the new production skills for the product or services.

Capital Investment

Capital investment requirements can vary considerably for both captured and created value-added

enterprises. For example, capturing added value by backgrounding calves may require little additional capital investment in contrast to a producer group that is capturing value by making a large investment in a packing plant. Creating value by producing identity-preserved grain with special characteristics may not require a significant investment, but marketing a branded specialty food product may require large investments in processing, distribution and development.

Business financing should include adequate operating funds (working capital) to sustain the value-added enterprise through the start-up phase — the business must meet cash-flow needs until value-added income is generated! For both captured and created value-added enterprises, the amount of funds and time required vary considerably. For example, capturing value added may require only a few months and limited added cost with a calf backgrounding alliance, while construction and start-up of an ethanol plant may require a much longer time and considerable operating expense before any production returns are received. Creating value with identity-preserved crops may cause limited delays, depending on contractual arrangements, with little added operating costs. However developing a branded product may require considerable time and expense before any product is actually sold.

Whether value is captured or created, it is important to remember that higher-risk investments should offer higher or quicker returns, while lower-risk investments tend to offer lower or slower returns — *"if you take risk, you should get paid for it!"*

How much value can be added?

A number of factors affect how much value may be added to products. The amount of value a producer (or group) adds can be related to whether the value is captured or created and can greatly influence the profit potential or success of the enterprise. Consider two different value-added enterprises for soybeans, a cooperative venture in a crushing plant (capturing value) or producing a new soy nut product (created value). In the late fall of 2001, a soybean crush margin of more than \$1.00 per bushel offered favorable returns to soybean processing. This crush margin represents the added value of meal and oil produced from processing a bushel of

soybeans (value of meal plus value of oil minus soybean price per bushel). In contrast, during this same period of time, a 9-ounce package of soy nuts was selling at a specialty foods store for \$3.95 — adding almost \$420 of value to a bushel of soybeans!

Producers considering building a soybean crush plant should take into account the narrow margins associated with this enterprise. While the above crush margin of more than \$1.00 has been favorable, it is not typical and occurs less than 10 percent of the time. Soybean crushers normally face narrow margins, and some plants even shut down during periods when the margin is unprofitable. Production risk (processing technology has developed competitive processes) and marketing risk (meal and oil are commodities that are easily traded and sold) are easily understood, resulting in narrow profit margins and many competitors. The same situation can apply to other enterprises that capture added value.

Creating a value-added product, such as soy nuts may offer a large margin of value that can be added. However, production risks along with management skills are also greater, and the markets may be limited. Large volumes of soybeans can be crushed

for meal and oil, but only a few bushels of soybeans would supply many specialty food stores with soy nuts, and there may be few (if any) market alternatives for excess production. Market development, food safety and packaging laws also could require considerable time and investment. However, the created added-value product might provide a much greater profit margin — especially for a small-volume producer.

Understanding how value is added is important to evaluating production and marketing risk along with determining capital needs. Capturing value often emphasizes attention to market competition and controlling production costs. Creating value may require new production techniques, product development, service, market analysis and selling skills. Although capital requirements vary for both captured and created value-added production, returns relative to risk along with adequate capital and resources are often keys to success.

From farm production to consumer marketing, risk affects every aspect of value-added agriculture. Table 1 summarizes risks associated with agricultural enterprises that capture or create added value.

Table 1. Risk level for capturing or creating added value in agricultural enterprises.

	Capturing	Creating
Production risk		
Production process risk	Usually low (processes known)	Often high (new product or process development)
New producer skills	Low-medium	Medium-high
Regulations/legal requirements	Low-medium	Medium-high
Market risk		
Amount of competition	Usually high	Low-medium
Market access	Low (usually easy to access)	Medium-high (access may be difficult)
Capital investment		
Capital requirements	Low-high (amount needed varies considerably)	Low-high (amount needed varies considerably)
Financing/cash-flow	Low-high	Low-high
Amount of value added		
Low price/profit margin	High (narrow price/profit margins)	Low-medium (potential for wide price/profit margins)