Reducing Risk through Cooperation

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Profitable farming relies on managing risk. Some forms of risk are readily apparent. The physical risks of drought, hail, and other weather events can impact yields and crop quality, and market risks of price volatility directly impact revenues. However, there remain other business risks that indirectly affect farm profitability. Access to markets, services, value-adding activities, and other competitive forces also include risks that need to be managed. Throughout this article, we will consider the challenges of a cotton farmer, but the implications apply to any commodity.

Consider the challenges facing a cotton farmer. Before planting, past prices have enticed other farmers to freely enter the cotton market causing excess supply that lowers the price of cotton in the near future. Because seed, chemicals, and fertilizer are purchased from a relatively small number of large companies, increased costs can be passed on to the farmer by charging higher prices. As harvest begins, thunderstorms threaten to decrease cotton yields and the quality of cotton modules waiting to be ginned. Cotton bales are sold to relatively few merchants who are better able to negotiate prices that maintain their profit margins. Consumers do not buy raw cotton, but rather demand finished products, like blue jeans, whose prices are determined by perceptions of value.

These forces and more create pressures that will negatively impact the profit of our cotton farmer. We can summarize our story as five basic factors that affect the farmer's profitability throughout the supply chain:

1. ability to reduce input costs
2. access to markets and services
3. minimization of potential risks to value or property
4. control over commodity prices
5. amount of participation in value-adding activities.

The overall solution to higher profits can be simple. Farm profit will improve as producers are able to lower costs paid, increase prices received, or both. The problem is that specific solutions to these challenges are impossible for an individual producer to overcome. Owning a cotton gin would guarantee an access to needed market services, but would cost hundreds of millions of dollars to build and operate. It also might require a far greater volume than one producer can provide in order to operate profitably. Purchasing inputs in larger amounts can lower prices and reduce handling costs per unit, but would require more volume and storage capacity than one producer can provide. Processing cotton fiber into yarn and textiles will provide a greater return per pound, but requires not only expensive factories, but managerial talent to run it, not to mention marketing and sales personnel required to reach consumers.

Therefore, in terms of farmer profitability, one of the greatest challenges to the cotton farmer is that consumers don't buy cotton lint or cottonseed. They buy cotton in the form of t-shirts, blue jeans, and athletic wear. They buy cottonseed in the form of cooking oil and potato chips and a meal at a restaurant. They buy cotton and cottonseed bundled with convenience, prestige, and other qualities that bring them happiness. In short, farmers produce commodities, but consumers buy products. The marketing system transforms commodities into products and delivers them to consumers in the form, location, and time they demand. If you compare the price per pound of cotton lint received by a farmer to the price of a shirt or a pair of blue jeans, it is clear that there is a lot of economic value added to cotton beyond the farm. Consider the price of cotton lint, which is currently around $0.70 per pound, and compare it to the price of designer jeans that can cost as much as $150.00 each. The value of a few pounds of cotton is greatly increased by the marketing system. Limited to their own operations, farmers would be unable to capture value from this chain of economic activity.

In that sense, the market has failed to provide producers of commodities what they need to be as competitive and profitable as they would like. Any business facing such a competitive condition has four solutions for improvement:

1. be the lowest cost provider
2. find ways to add value to your output

Table 1. Cotton Value Chain Ownership.

	Cotton Value Chain Ownership						
	Supply	Production	Ginning	Storage	Shipping	Textile and Oil Production	Wholesale and Retail
Farm Supply Cooperative	X						X
Farm		X					
Cooperative Cotton Gin			X				
Cooperative Compress				X	X		
Cooperative Oil Mill						X	X
Cooperative Marketing						X	X

3. focus on the needs of the buyer
4. control prices.

These solutions are achievable through cooperative business ownership. In general, a cooperative is a business that is owned and controlled by the people who use it. Commonly, owners share in the profits according to how much they patronized the business. For example, a customer-owner who provides 10% of the cooperative's revenues would receive 10% of declared profits. Profits are generally shared partially as cash, and partially as equity to be redeemed at a later date. In this way, participation in the cooperative generates a cash return that adds to the producer's bottom line, and ownership of a business in the producer's value chain. As long as equity is redeemed at face value over time, current users maintain ownership and control of the business.

As a side note there is an alternative to this traditional form of cooperation known as a new generation cooperative. Instead of relying on voluntary patronage of producers to generate equity, a new generation cooperative sells shares of ownership up front. Ownership of these shares also includes a contracted obligation to deliver a certain amount of business to the cooperative. The advantages of this less common form of cooperative is that the business has contracted the proper amount of volume in order to be profitable with an adequate and permanent equity base. This is especially important for businesses that manufacture products whose consumers expect a steady supply throughout the year (imagine a flour mill trying to grow their market share among bakeries when they have an abundant supply one year and none the next). In this way, a small group of large producers may jointly own a facility to process their crops into a valuable product. As the value of this business grows, so too does the value of their individual shares, which can be sold if a member desires to exit the cooperative.

Returning to our example, we can see that a cotton farmer may benefit from ownership of several cooperatives (Table 1). Seed, fertilizer, and other supplies might be purchased from a farm supply cooperative. As cotton is harvested, cotton modules are delivered to a cooperative gin for processing. From the gin, cotton seed is taken to a cooperative oil mill, and cotton bales are delivered to a cooperative compress (warehouse). A marketing cooperative can provide farmers access to a marketing pool, facilitate sales to merchandisers, and provide important business services for cooperative cotton gins. Participation in these cooperatives provides the producer with a greater amount of ownership of the value chain (Figure 1). That ownership can include greater profitability that can offset years of low farm income, or provide a buffer against price variability.

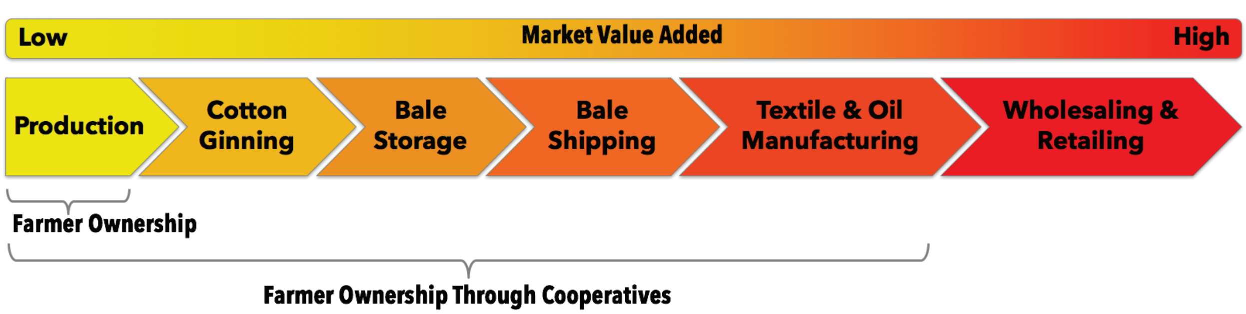

Figure 1. Farmer Ownership in the Cotton Value Chain.

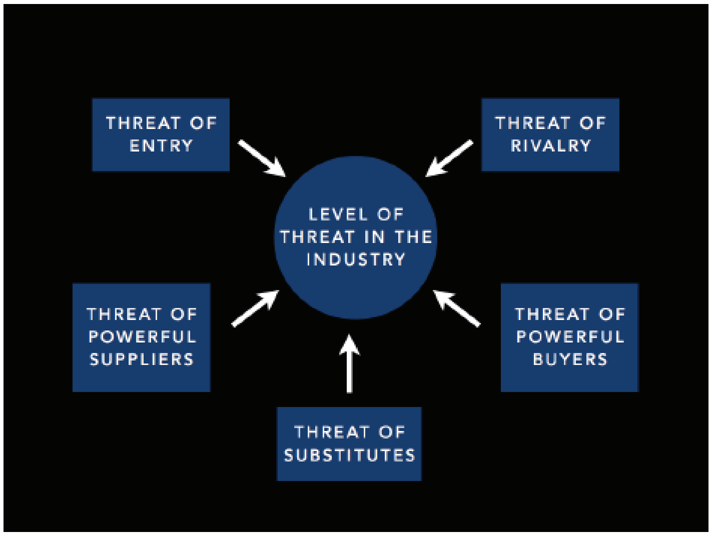

Figure 2.

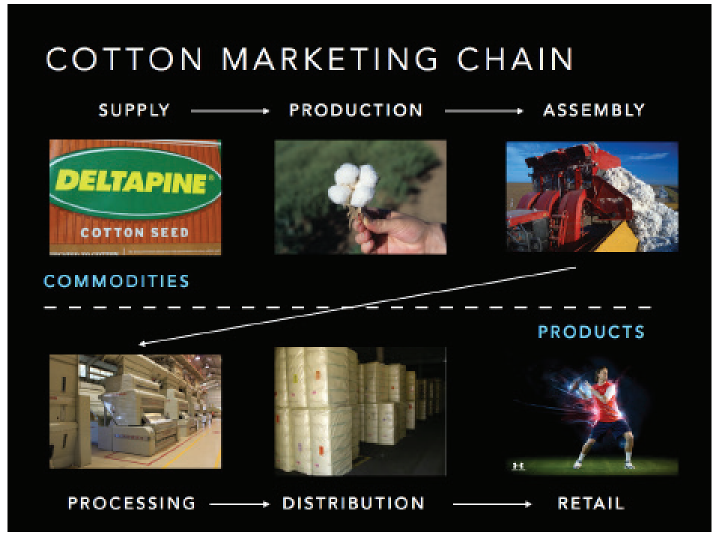

Figure 3.

You might even consider that a farmer's participation in cooperatives represents an investment in the infrastructure of our agricultural marketing system. Without this investment, would these market services and products be provided? Probably, but not in all market locations, and not under all market conditions. When these assets are cooperatively owned by farmers, there is a greater likelihood that services will be available in a bad crop year, and that profits will be shared in a good crop year. In short, cooperatives help farmers to manage the pressures that diminish profitability and bring greater prosperity to farms and communities.

This represents Porter's Five Forces model, which shows the types of threats that reduce business profitability. From this we can say there are five basic factors that affect the farmer's profitability throughout the supply chain:

1. ability to reduce input costs
2. access to markets and services
3. minimization of potential risks to value or property
4. control over commodity prices
5. amount of participation in value-adding activities (Figure 2).

This is the cotton marketing chain, or value chain. Regardless of the businesses involved, commodities will go through these basic functions of marketing before reaching consumers as products. Farmers sometimes complain about the "middle man" getting all the money, but these businesses are adding value that consumers are willing to pay for (Figure 3).

A demonstration of the value that is added to cotton as it goes to consumers. Remember that by the time cotton has reached the consumer in the form of clothing, it has gone around the world, been transformed into various products, and delivered to the consumer in a convenient time and location in a desirable form. The closer we get to

Figure 4.

Figure 5.

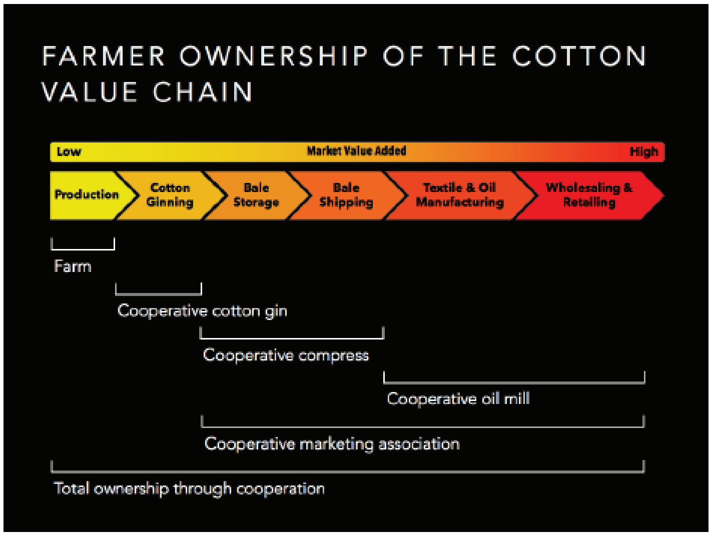

Figure 6.

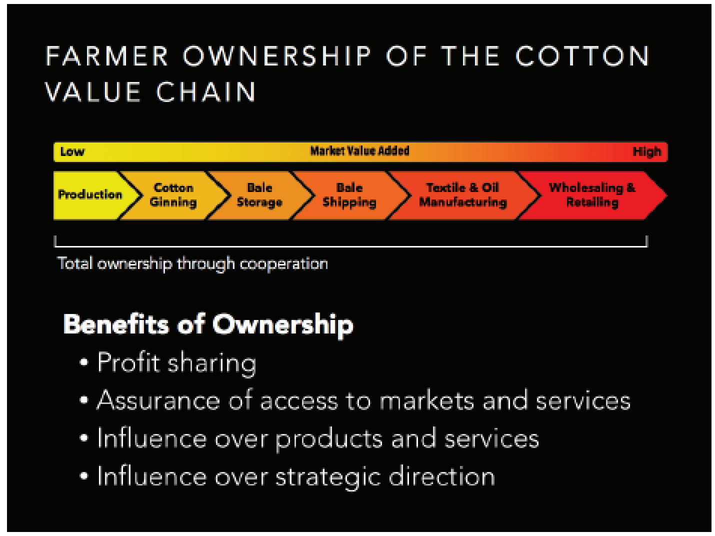

Figure 7.

the consumer, the more these firms need to advertise and brand their output in order to compete against one another (Figure 4).

Four general solutions for any firm:

- Being the low cost producer is a constant battle for all farmers. Those who can't keep their costs below their total revenue will eventually shut down.
- Adding value to output is advantageous when the added revenues outweigh the added costs of the activity. Why can't an individual farmer build their own cotton gin? They can but it would be expensive to build and operate, and most likely they won't have enough cotton to be profitable in ginning.
- Focusing on the needs of the buyer requires a different mentality than production. It requires sales, advertising, and marketing expertise.
- Collusion among firms to set price is illegal, but collective bargaining and marketing of commodities by farmers is legal through cooperation.

All these solutions are made possible for an individual farmer through cooperatives (Figure 5)

Consider the entire value chain from growing cotton in the field to finished goods in the store.

A farmer maintains ownership of cotton production but can also own other parts of the value chain through membership in cooperatives.

The following are examples, but not endorsements:

- Meadow Farmers Co-op Gin provides tarps, hauls cotton modules, gins cotton, bags, ties, and sends bales to the cotton compress. They catch the cottonseed and send it to an oil mill.
- Farmers Cooperative Compress stores cotton bales and ships them once they are sold.
- PYCO mills cottonseed into oil and manufactures oil products as food ingredients. They remove additional lint from the seed and sends it to other manufacturers for use in products like cosmetics, mattresses, and film.
- PCCA provides gins with administrative services, stores and ships cotton bales, and help producers sell their cotton. They have historically been involved in the production of denim and textiles (Figure 6).

Ownership of these businesses has the obvious benefit of added revenue from declared profits. Some might argue that they receive better prices at the gin and therefore don't need ownership. However, this may be shortsighted for a couple reasons. First, prices are not always so easily compared. What is included in the price of ginning? Are there other fees? Also, a good deal this year has no assurance for future seasons. Second, cotton must be ginned to have any marketable value, so there is value in having a business that is committed to taking your cotton. There is greater security in having some control over these businesses so you have some assurance that their interests are aligned with your needs (Figure 7).