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# Transforming Extension as the Agricultural Sector Changes

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## Transforming Extension as the Agricultural Sector Changes

#### **Abstract**

The agricultural sector continues to undergo a major transformation from traditional family farms to industrial, vertically integrated producers of differentiated branded products. As this transformation occurs, the financial structure, sources of credit, and managerial strategies employed by these firms also evolves. This article introduces Extension agents to the rapidly changing industry structure, methods of credit underwriting, loan products, or channels of fund delivery being applied to large-scale farming operations, more accurately described as "agribusinesses.'

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The agricultural sector continues to undergo a rapid transformation away from traditional family farms. What appears to be evolving are two distinct groups of farms (USDA, 2001). The first are small farms that generate less than \$250,000 of sales. These units are often referred to as "lifestyle farms" because the operators often have another occupation or are nearing retirement and continue to farm because of the enjoyment they derive from the activity. Extension is well positioned to service this clientele because production techniques and managerial strategies employed by firms of this scale are very similar to those of traditional family farmers.

However, at the other end of the spectrum, farms with sales over \$250,000 are quickly evolving into industrial, vertically integrated producers of differentiated branded products. As this transformation occurs, the production methods, financial structure, sources of credit, and managerial strategies employed by these firms also evolve. While many of the new production technologies being adopted in agriculture are scale-neutral (i.e., they can be easily adopted by both large and small farmers and don't lead to increased polarization), several managerial strategies are not. One of the most striking is the financing of these operations (Gustafson, 2002)

If Extension is going to continue to serve this segment of agriculture, it is incumbent upon us to vigorously investigate, research, and test the applicability of our previous financial education models in this new institutional setting. Many of our traditional paradigms, based on competitive and efficient family farms, do not apply to this new form of agriculture.

As Extension tries to increase our relevance to these large-scale firms, an often overused term for financial is "agribusiness finance." In most cases, though, the materials we have are just extensions of traditional "farm financial" theories of the past. They do not adequately address the rapidly changing industry structure, methods of credit underwriting, loan products, or channels of fund delivery being applied to large-scale farming operations more accurately described as "agribusinesses" (Heuer, 2001). Several examples below compare and contrast these concepts.

#### **Farm Financial Management**

Farm financial management theory is still very relevant in the proper application and has a rich heritage. Since the turn of the century when professional work in agricultural finance was initiated, research on financial management practices of farms has emphasized financial analysis, planning, and control; capital structure, leverage, and risk; as well as capital budgeting, investment, and asset replacement issues (Brake, 1977).

Models of farm financial management have typically reflected sole-proprietor, firm-households. The asset structure of these firms is dominated by land and other real estate assets. In the aggregate, real estate represents nearly 80% of the assets comprising low-sales farms and falls to near 60% for very large family farms. (USDA, 2001). The low current returns and cashflow associated with real estate creates liquidity problems for many firms, especially beginning farmers and those with high debt levels.

### **Financing Agribusinesses**

A significant void in this literature is the financing of large-scale farming and agribusiness operations. Unlike the farm sector where thousands of commercial banks, Farm Credit System, life insurance, Farm Service Agency, and trade credit lenders exist to serve the needs of farmers and ranchers, agribusiness lending is highly concentrated and dominated by five major firms. Recent market share data of the five largest agribusiness lenders indicates that this segment exceeds \$10 billion.

The criteria farm real estate lenders appraise when evaluating the creditworthiness of a new or existing borrower is reflected in the inclusion and weighting of variables in their credit scoring systems—a form of revealed preference. Most recent credit scoring models (Betubiza & Leatham, 1990) continue to emphasize asset-based lending criteria. A survey by Gustafson, Beyer, and Saxowsky (1991) also indicates that real estate lenders are most concerned about collaterializing their loans. Very few use cashflow as the primary emphasis is asset based criteria. Consequently, agricultural lenders who originate loans to family farmers focus primarily on the quality and composition of collateral securing their loans.

The financial structure and credit needs of agribusiness firms differs markedly from that of family farms. First, real estate represents only a small proportion of the capital structure of most agribusinesses. Dun and Bradstreet report that long-term assets including land, buildings and fixed equipment account for less than 25% of total assets. Current assets and inventory represent the largest class of assets, 50% according to Dun and Bradstreet (2001). In most cases, these firms are in the business of purchasing inventory, processing, and marketing finished products. Some large-scale farms, with grain elevator and/or input supply activities, engage in minimal processing and function primarily as merchandisers. To assess financial performance, primary emphasis is placed on liquidity, receivables, and inventory performance measures, especially working capital and turnover ratios.

Unlike farms where debt is mainly used to finance real estate, agribusiness credit is available mainly for financing inventory and receivables (e.g., feed in a large cattle feedlot). Inventory and receivables credit is available through a variety of financial products including floor plans, trading of warehouse receipts, and revolving credit. Agribusiness real estate and equipment is financed primarily by equity capital, primarily because of the low collateral value stemming from the illiquidity and specialized use of the equipment.

A review of a typical loan appraisal worksheet utilized by one of the major agribusiness lenders reveals insight into the decision process and financial variables that determine creditworthiness and amount of credit financing available to an agribusiness. The primary focus is on working capital—in particular, outstanding receivables, inventory and accounts payable.

Accounts Receivable lowpoint (<30 days)

- + Inventory
- Accounts Payable

Working Capital x 60-85%

Operating Credit Available

This determination of working capital represents the minimum operating capital necessary to operate the agribusiness in the coming year. The amount of credit that is available to finance this need is determined objectively by most lenders as a simple percentage of total need and ranges from 60-85%. Consequently, the amount of operating credit available to the firm is determined by multiplying the lender's rate by the firm's working capital. It is a fairly straightforward, objective process.

Agribusiness finance is also distinct from corporate finance or small business finance. Credit sources, loan types, and underwriting standards vary considerably among the three. Corporations have unique access to many additional forms of equity capital, while small businesses often have to rely heavily on personal sources of financing.

Commercial farms are moving closer to agribusiness methods of financing. In North Dakota, four major agribusiness lenders now offer specialized operating credit to value-added farming operations under terms similar to those of agribusiness firms. As production agriculture becomes increasingly dependent on input supply firms, distributors, and processors for the goods and services, this shift will intensify.

As agricultural production technology evolved during the past century, Extension quickly developed educational programs that assured rapid adoption among producers. As agricultural firms continue to evolve in size and scope, agricultural producers and their lenders will acquire informational and business relationships more closely aligned with large-scale farm firms and agribusinesses. Future Extension programs targeting these firms will have to understand and embody these relationships in their educational materials.

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