

**FINANCING AND SUPPLYING INPUTS TO THE 21ST CENTURY
PRODUCER**

by

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Preface

The U.S. agricultural industry is in the midst of major structural change — changes in product characteristics, in worldwide production and consumption, in technology, in size of operation, in geographic location. And the pace of change seems to be increasing. Production is changing from an industry dominated by family-based, small-scale, relatively independent firms to one of larger firms that are more tightly aligned across the production and distribution chain. And the input supply and product processing sectors are becoming more consolidated, more concentrated, more integrated.

Agriculture in the 21st century is likely to be characterized by: 1) adoption of manufacturing processes in production as well as processing, 2) a systems or food supply chain approach to production and distribution, 3) negotiated coordination replacing market coordination of the system, 4) a more important role for information, knowledge and other soft assets (in contrast to hard assets of machinery, equipment, facilities) in reducing cost and increasing responsiveness, and 5) increasing consolidation at all levels raising issues of market power and control.

These profound changes in the agricultural industry present new challenges and new opportunities that require new ideas and concepts to analyze and implement. They require new learning and thinking. Some of those new ideas and concepts are presented here, not as empirically verified truths, but as “thoughts” to stimulate different and better thinking. They have been developed based on observations, analysis and discussions with numerous managers and colleagues in agribusinesses in North America and Europe. This series focuses on Financing and Supplying Inputs to the 21st Century Producer; companion series are also available on Farming in the 21st Century (Staff Paper 99-9), and Value Chains in the Food Production and Distribution Industries (Staff Paper 99-10).

Our purpose in sharing these “thoughts” is to invite discussion, dialogue, disagreement — in general to encourage others to develop better “thoughts”.

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Grower Segments in Production Agriculture*

The dramatic changes now occurring in production agriculture are changing the way we define a farmer. Farmers of the future may be better described as growers, and these growers will not all look alike or be as uniform in size or type of operation as today's farmers.

Growers of agricultural products will likely be delineated into two distinct categories in the future -- traditional growers and industrialized growers. Traditional growers will operate in much the same fashion as family farmers do today. They will be primarily in commodity product production; own a significant portion of the land and other resources used in the operation; manage and operate the business as a family; use impersonal, open markets to sell their products; finance the business with family equity and conventional debt; use modern technology; and operate on a larger scale compared to today's farmers. As a group, traditional growers or producers will be a declining segment of the industry both in numbers and in volume.

The industrialized segment of production agriculture will include three different types of growers: 1) large-scale commodity producers, 2) large-scale (and some small-scale) contract growers, and 3) managers or deal-makers. These three different types of industrial growers have enough similarities that they may not be easily distinguishable in practice. Large-scale commodity producers will use manufacturing concepts to produce generic or component specific commodities that will generally be sold in impersonal open markets much like most grain and livestock markets today. The distinguishing features between traditional growers and large-scale industrialized commodity growers will be the much larger scale of the industrialized grower (larger by orders of magnitude of five to ten times), and the intensity of use of manufacturing techniques in production as well as management and organization of the business.

In contrast, contract growers in the industrialized sector will be more focused on specific attribute raw material products, and they will participate primarily in negotiation coordinated markets through contracts, strategic alliances and similar arrangements rather than the impersonally coordinated commodity markets of the large-scale commodity grower. With respect to scale of operation, technology and a manufacturing approach to production, few differences will exist between large-scale commodity growers and most contract growers except as dictated by the attributes of the product produced.

The third group of industrialized growers will be distinguished from the previous two categories in terms of their method of organizing and actually implementing the production process. Whereas industrialized large-scale commodity and contract growers own a significant portion of the assets used in production (machinery, equipment and facilities more so than land and buildings), the manager or deal-maker obtains machine services from contractors, service companies or through custom operations; acquires labor through hiring independent contractors; and leases the land. In essence, the manager or deal-maker brings few if any physical resources to the table. His (her) competitive advantage is in the negotiation or deal making activity and s/he obtains most if not all the physical and financial resources needed for the growing process from others. The manager or deal-maker might be viewed in some sense as the integrator who negotiates a contract with the end-user to produce component specific commodities or specific attribute raw materials, and then negotiates with those who own the land, machinery, equipment,

*Boehlje, Michael and Lee F. Schrader. "Agriculture in the 21st Century", *Journal Production Agriculture*, Vol. 9(3):335-340, 1996.

facilities and labor to produce those specific products. In this context, the value the manager or deal-maker contributes to the production and distribution process is that of coordination; s/he in essence reduces the cost and inefficiencies of coordination between the stages of the process, and his/her reward depends on how large these costs or inefficiencies are and how effective s/he is in reducing them.

In general, industrialized growers will be more important suppliers to component specific commodity and specific attribute raw material markets. Traditional growers will have a relative advantage (but not necessarily an absolute advantage) in generic commodity production, but competitive pressures will force them to adopt manufacturing concepts to be competitive with large-scale industrialized commodity growers.