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FOR SUSTAINABLE AGRICULTURE

Cooperation: A survival strategy for small and medium-sized farms

Abstract: Farm input and supply cooperatives are commonly used with success in U.S. agriculture. There may be potential for similar cooperative strategies to help small and medium-sized farmers share machinery, labor, and expertise.

Question & Answer

Q: What are the benefits to farmers who act cooperatively?

A: The project showed that there are significant potential gains from cooperation among small and midsized farmers in the western Corn Belt. Producers who are able to jointly own one or more pieces of farm equipment can not only reduce equipment costs per acre, but also access newer and more expensive technologies that would otherwise be beyond their reach. The project demonstrates that successful sharing arrangements can come in a wide variety of sizes and forms. There is no one best way. Finally, the project showed that equipment and labor sharing may not be for everyone. Some personal characteristics, beliefs and attitudes can make it difficult for equipment sharing groups to succeed.

Background

The viability of small and medium-sized farms is threatened by the increasing concentration in industrial agriculture. These operators must seek alternative strategies to compete successfully. One option is active cooperation with similar farm businesses, whether it is the sharing of a piece of equipment or sharing all aspects of the operation and functioning as a single entity.

The overall objective of this project was to understand the effectiveness of existing cooperative farming arrangements

in the Midwest United States and identify the advantages and disadvantages of such agreements for sharing resources among groups of farmers. The specific objectives of this project were:

- Create an extensive database of small and medium-sized farms in the Midwest United States that have engaged in formal and informal cooperative agricultural agreements.
- Using a case-based approach, evaluate strengths and weaknesses of the cooperative arrangements used by the farms identified in objective #1.
- Synthesize information gained in objective #2 to develop recommendations and educational programs for establishment of cooperative agricultural agreements by small and medium-sized farms.

Approach and methods

The project team sent a letter and e-mail requesting participation in a web-based survey to university Extension agricultural field specialists and county directors in Iowa, Illinois, Nebraska, North Dakota and Wisconsin. Survey responses identified a wide range of cooperative arrangements operating in these states and identified potential candidates for the case studies.

The project developed 10 case studies about producer cooperation, ranging from two producers sharing one piece of equipment to a group of producers sharing every aspect of their operations and functioning as a single entity.

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\$26,479 for year one
\$2,412 for year four

Outreach materials and programs were developed to share the information learned from formulation of the case studies and to provide tools to evaluate cooperation as an option for producers.

Results and discussion

The survey of Extension professionals in five Midwest states identified 52 groups engaged in some sort of cooperative arrangements. The majority shared both machinery and labor. More than half the groups had verbal agreements for sharing resources; however, 40 percent said the type of agreement was unknown. The survey provided new knowledge about resource sharing, but did not provide detailed information.

The 10 case study analyses used site visits and in-depth interviews with producers to help evaluate the effectiveness of cooperative farming arrangements to improve farm profitability, efficiency, and quality of life. Specific, detailed information was collected about why and how cooperative farming arrangements were organized, as well as the pecuniary and non-pecuniary benefits of these arrangements. The case studies helped identify potential problems associated with sharing resources and the strategies these producer groups have employed to resolve them.

Knowledge acquired from the survey and case studies was used to develop guidelines for establishing cooperative agricultural arrangements that facilitate resource sharing among small and medium-sized farmers. Educational materials were created for use by farm management specialists and used in a series of workshops on this topic that were funded by other sources. Workshops attended by 108 producers were held in Algona, Fort Dodge and Mount Vernon, Iowa and Nevada, Missouri. A workbook is available that includes sample by-laws and agreements, a summary of legal options for business organizations, and sample spreadsheets or templates for allocating costs among members.

Conclusions

Major Benefits

- Reduced equipment capital and operating costs.
- Access to more efficient equipment and new technologies.

- Access to reliable skilled labor.
- Improved labor efficiency due to 2+ skilled operators farming jointly.

Potential Disadvantages

- Managing departures of group members is difficult and potentially costly.
- There is some loss of autonomy in operation and decision making
- An additional time burden for coordinating farming operations and joint purchases.

Important Factors for Success

- A strong desire and willingness to work together with other farmers.
- Mutually accepted and clearly specified rules for selecting fields to be worked.
- Selection of an optimal set of equipment to work the group's aggregate acreage.
- A defined process for decision making and resolution of disagreements.
- Mutually accepted methods to account for differences in acreage and labor hours.
- An agreement for managing the departure of a member.

General Conclusions

- Cooperation tends to be motivated by machinery costs and shortages of skilled labor.
- Many groups find that labor synergies and specialization are as important as cost savings.
- Managing entry/exit from a cooperative group is one of the biggest obstacles and drawbacks from cooperation.
- There are a variety of different kinds of sharing arrangements that can be effective.
- Written agreements are important if more than two or three farmers are involved.
- Personality intangibles such as beliefs, tolerance, and temperament are important.

After completing this project, the team had a much better understanding of the capabilities, as well as the advantages and disadvantages, of various types of cooperative farming arrangements. The approaches taken to address the resource constraints faced by various types of producers were compared and contrasted. Many of the potential pitfalls were identified for cooperative farming arrangements

and strategies used to resolve conflicts successfully. The project outcomes were evidence-based and will serve as resources for educational programs in farm management aimed at resource-limited producers. This is important because education can expand producer awareness of options for accessing cost-reducing technologies and achieving economies of scale enjoyed by larger farm operations.

Producers who attended workshops on this topic showed interest in using cooperation as a way to transfer farm business ownership to the next generation. The current workshop agenda includes information about cooperative business strategies for small and medium-sized producers, but does not focus on intergenerational transfer. A component that emphasizes the unique issues posed by intergenerational transfer is under development as part of another project.

Impact of results

The results of the survey improved the team's knowledge about resource-sharing agreements among producers in the Midwest. More was learned about what types of producers are using these arrangements, what types of resources they are sharing, and how they are organized. The incremental benefits from sharing labor were an unexpected finding. Anticipated cost savings from equipment were present, but when operator labor also was shared, all groups identified significant additional benefits from working as a team rather than as individuals. In most cases, this benefit was considered to be at least as important as equipment savings.

Producers involved with the project gained new information about the use of cooperation as a method to improve the viability of their operations. The survey information also showed that the case studies developed by this project could be used as an important training tool.

An ISU Extension field specialist met with five people who had planned to attend the workshop in Carroll that was cancelled and shared the meeting materials with them. One group is formalizing a cooperative agreement to form a new group. Another set of workshop participants is preparing to expand and formalize their sharing agreement beyond its current scope.

Education and outreach

The investigators created a workbook that was used by the workshop participants. It is being repackaged for distribution by the Midwest Plan Service as a North Central Regional Center publication. Many of the workbook materials are available at www.machinerysharing.info or www.extension.iastate.edu/coops/workshops.

Presentations on the project and its findings were made at several meeting and events. Among them were the American Agricultural Economics Association meeting in July 2007, the Annual Agricultural Machinery Conference in May 2007, and the National Extension Risk Management Education Conference in April 2007. Information from the workshops has been shared at ISU Extension in-service meetings and at local meetings in several Iowa communities.

Articles about producer resource-sharing that described this project have appeared in the *Iowa Farm Bureau Spokesman* and *No-Till Farmer* magazine.

Leveraged funds

Additional funds leveraged by this project included support from Iowa State University (\$83,622), North Central Risk Management Education Center (\$36,665), and USDA-Rural Development (\$168,651) for a total of \$288,938.

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