Machinery ownership and operating costs represent a major farm expense for most producers. In response to rapidly escalating equipment costs and a shortage of skilled labor many producers have formed machinery cooperatives or other machinery sharing ventures. Machinery sharing allows producers to spread costs over more acres, achieving economies of scale and access to newer, more efficient and more technologically advanced equipment. Access to larger scale equipment can lead to more efficient use of operator labor. Machinery sharing often appeals to smaller producers who are unable to efficiently utilize equipment. Shared equipment arrangements may also be attractive to beginning producers and other operators that need to reduce the capital costs associated with equipment ownership.

Some machinery sharing structures also combine machinery operating labor among the participants. Incorporating labor sharing into a machinery sharing venture can help to alleviate a shortage of qualified operators. Some labor sharing arrangements allow participants to pay or receive remuneration from other participants when they provide a disproportionate share of the operating labor. These arrangements can provide a mechanism for a member to trade “sweat equity” for operating costs or investment. Labor sharing arrangements may also allow participants to specialize in operating particular equipment or in repair and maintenance which may increase efficiency and reduce repair expense.

Machinery sharing arrangements may be simple involving only a single piece of equipment or be complex involving entire compliments of equipment. Some arrangements which were originally established for machinery sharing have expanded to encompass joint purchase of inputs, collective decision making on operations and pooled marketing of products. These arrangements become a combined farming philosophy where the participants manage the collective farm lands as if they were a single operation. It should be noted that, depending upon the specific structure, collective farming arrangements may have implications on USDA “single entity” limitations for commodity payments.

The major benefit of machinery sharing arrangements is to reduce investment and operating costs. Other benefits include access to larger, more efficient and more technologically advanced equipment compliments. In most cases, the structures also provide a more rapid replacement cycle which decreases repairs and downtime. Despite these advantages equipment sharing has a number of potential concerns. These fall into the general categories of:
Most of these issues can be addressed through communication, planning and in the design of the sharing arrangement. It should also be noted that many informal arrangements have functioned successfully. A group of participants with compatible personalities and operating philosophies may be able to share equipment based only on a general sense of parity. A more formal structure is advantageous when the number and diversity of the participants increases. The structure of the arrangement can also become very important when participants change the size of their farming operation or when producers desire to enter or exit the arrangement.

While a well structure venture can minimize conflict, the compatibility of the people involved is important for any collective venture. While it is not realistic to expect participants to agree on every issue, they should have a willingness to listen to each other’s viewpoints and compromise. Typically, the most compatible machinery sharing participants are producers with similar philosophies on care of equipment operation, maintenance and have a similar farming style and work ethic. The participant’s financial condition and future farming plans should also be considered. A partner with a weak financial condition or someone who is scaling down their operation may have different attitudes toward replacing or upgrading equipment. Potential participants should also consider what would happen if another member was unable to meet their share of the loan payments or operating costs. The geographic location of the participants is also an issue. Transportation cost are minimized and communication improves when the member are located close to each other. Timing conflicts are obviously minimized when members are located over a wider area, farm different types of ground or even are located in another region.

Informal Arrangements

The simplest form of machinery sharing is when two or more producers agree to trade access to currently owned equipment. Two or more producers may also decide to jointly purchase equipment on the basis of an informal agreement. Participants typically divide the purchase price in proportion to projected usage and agree on some procedure to split repair and maintenance costs. The partners may have an understanding as to how scheduling, maintenance and other issues will be handled or may simply work through issues as they occur. Arrangements may be made for split billing of operating expenses or the partners may make periodic deposits into a bank account set up to handle expenses.

The obvious disadvantage of informal agreements is that there is no structure to fall back on if the participants disagree on operational issues or cost allocations. Participants also run the risk that another member will be unwilling or unable to meet their payment obligations. Producers sharing equipment under formal or informal partnership are also potentially liable for the actions of the other partners. Because there is no structure to limit liability to the machinery assets, an injured party could place a claim against the participants’ overall farm assets.
Contractual Agreement
As in most financial transactions, a written agreement can help assure that all parties have the same understanding about how a venture will work and provides a framework to fall back on if it doesn’t work. The agreement should specify how investment costs, depreciation and expenses will be allocated. It can also be useful to document key operating policies such as how usage will be scheduled, where the equipment will be housed and maintenance procedures. Other issues to consider in the agreement are use of the equipment on outside acres, insurance, financial commitments, record keeping and equipment replacement.

Ideally the contract should also specify a dissolution plan and describe how participants can enter or leave the arrangement. One system for equitable dissolution is to have an outside appraiser determine the buyout price. Another common structure is to allow one partner to establish a price with the other partner deciding whether to sell or buy at that price. Many agreements also specify dispute resolution proceeds and may require participants to agree to binding arbitration.

Limited Liability Company
A more robust structure for machinery sharing can be developed by establishing a separate legal entity which purchases and owns the equipment. These ventures are often structured as limited liability companies (LLCs) but other legal business structures such as partnerships, investor-owned corporations or cooperative corporations can also be used. LLCs, investor-owned corporations and cooperative corporations all have the characteristic of limited liability. The owner’s liability can be limited to the total amount invested in the venture.

The LLC business form is very flexible with most of the structure defined in the operating agreement. A machinery sharing LLC would generally specify governance by a board of managers consisting of the participant/investors. The entity may or may not hire an operation manager or other employees. The operating agreement of the LLC specifies the exact structure of the venture and the system for allocating income and expenses. Typically, the entity owns the machinery and finances the funds needed in excess of the equity contributions. The LLC receives fees from the members and deduct operating expenses, interest and depreciation associated with the equipment. The resulting profit or loss is passed on to the member’s tax return.

Establishing a machinery sharing LLC typically results in a more defined structure relative to informal arrangements or contractual agreements. The LLC structure also provides liability advantages. Because each LLC structure is essentially defined in the operating and management agreement it is difficult to characterize advantages or disadvantages. Many machinery sharing LLCs operates very similarly to cooperatives. Participants creating machinery sharing LLC or joining an existing venture should take the time to carefully analyze the operating and management documents.

Machinery Cooperatives
The cooperative corporation is a common business structure for producer-owned farm supply, marketing or processing operations. Cooperatives corporations provide the same limited liability benefits as LLCs and investor owned corporations. Governance of the overall cooperative is typically on a one member-one vote basis with the membership electing a board of directors. Other governance issues are defined in the
articles of incorporation and bylaws. Under the cooperative structure, the net surplus after fixed and operating expenses is allocated to the members in proportion to business volume. The cooperative board of directors may elect to return the surplus to the members as a cash distribution or retain a portion to meet future capital needs. The surplus can be held in a general fund not allocated to particular member. Alternatively, the cooperative may issue the members additional shares of stock to reflect the claim on the retained funds. Most cooperatives establish formal systems by which stock is redeemed periodically or upon exiting the cooperative.

Most agricultural producers are familiar with the governance and equity retirement systems used by agricultural cooperatives. The basic structure of a cooperative in which investment and benefits are proportional to usage is appropriate for machinery sharing. The cooperative corporation is therefore a very logical structure for a shared machinery venture.

Farm equipment cooperatives have been common in Europe and Canada for many years. These entities called “Cooperatives for the Utilization of Machinery Agricultural” (CUMA) have been very successful in reducing machinery costs and increasing smaller producers’ access to equipment. Some of these entities are structured to pool a set of equipment among the members. However many CUMAs are structured with equipment pools for specific pieces of equipment.

Most machinery cooperatives operate as closed cooperatives. After the initial formation, additional members are admitted only upon approval of the board of directors. In order to join an equipment pool a member is required to purchase a given number of investment shares which provides the equity investment for the equipment purchase. The member also signs a usage commitment for a specified period of time, usually 3 to 5 years. The time period typically matches the financing period for the equipment. As they use the equipment the members pay a fee at an agreed upon hourly or per/acre rate. The cooperative’s net income in excess of expenses is distributed to members in proportion to usage. The machinery cooperative may also be involved with training on machinery usage and maintenance. Some cooperatives also have mechanisms for sharing labor among participants.

Most machinery cooperatives provide provisions for exit when a member’s usage commitment expires, a time period typically linked with the financing and/or replacement cycle. Participants in an equipment pool may also vote whether to continue the pool at specified points in time. Exiting members are typically repaid their investment less the accumulated depreciation on the equipment they were sharing. Depending on the size and financial resources of the cooperative, the funds may be repaid over a period of time or with a time delay. Exit and entry from equipment pools at other times may be at the discretion of the board of directors and be dependent upon the interest of other participants in joining or transferring membership.

Most machinery cooperatives operate on a one member-one vote system. The membership elects a board of directors that sets operational policies. The cooperative may also establish committees to establish usage fees and policies for individual equipment pools. The cooperative may hire a manager to oversee the day-to-day operations and/or maintenance. A large cooperative may have employees overseeing
the individual equipment pools. Alternatively, a member in the pool may be selected to oversee scheduling and maintenance.

**Summary**
Machinery sharing arrangements have the potential to reduce equipment expense while providing access to larger, more efficient equipment. Machinery sharing ventures can be organized under a wide range of options ranging from informal agreements to membership in a machinery cooperative. Regardless of the structure the compatibility and commitment of the participants is a key factor for success. Producers considering machinery sharing arrangements should give careful considerations to operating procedures, cost allocation methods, decision making system and exit provisions. A small group of compatible producers may be share machinery through a simple agreement. Even in the simplest systems it is desirable to thoroughly discuss the arrangement and develop a written agreement.

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Organizing a machinery venture as a separate legal entity has liability advantages and provides a better structure for asset replacement and the long-term viability of the venture. The LLC structure is a flexible legal form that can be structured for a machinery sharing venture. The machinery cooperative structure is well suited for situations where not all of the participants need access to the same equipment, and when a larger number of participants are envisioned to be involved. The formal structure of a cooperative with well understood governance, dispute resolution and equity systems is also very helpful if the venture expands into additional equipment lines, or into labor sharing or joint purchase activities.