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No. 681 Summer 1995

A New Look at Farm Business Organization

Dale C. Dahl

While Minnesota farm numbers decreased in recent decades, the business organization of those remaining has changed, reflecting the complexities of modern agriculture. Earlier University researchers reported ninety farm corporations in Minnesota in 1958-9. By 1992, nearly two thousand farm business corporations were located in all but one of the state's 87 counties (see Figure 1).

The most common forms of farm business organization remain the sole proprietorship, the partnership, and the corporation. But over the past third-century, other legal forms have been applied in agricultural settings. For example, the general partnership has been supplemented by the use of the limited partnership. The standard "C" corporation now has a subchapter "S" variation commonly employed in farm situations. Other business types have become part of current agricultural discussion: joint ventures, limited liability companies, and limited liability partnerships.

In this article, I summarize features of various legal forms of business organization used in agriculture and present recent data regarding economic characteristics of some of these farm business types.

Traditional Forms

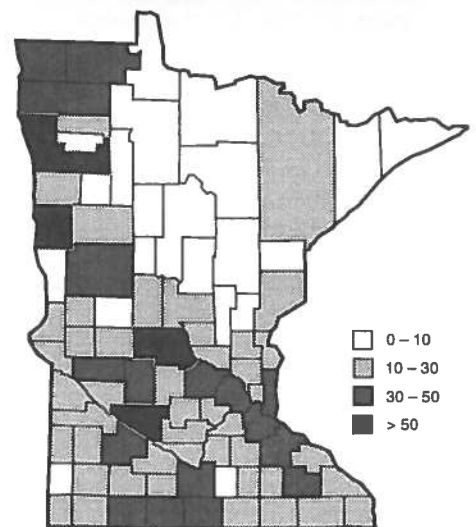
Several factors influence a farmer's selection of one type of business organization over another. These include simplicity, continuity, liability of owners, tax consequences, estate transfer concerns, and acquisition of capital. The **sole proprietorship** has always been and is likely to remain the

most common form of farm business organization in Minnesota, because it is the most simple to understand and use. In effect, an individual merely declares him/herself as a business. The person owns, funds, and operates the business, records its income and expenses, and accepts liability for any problems. The business income tax return is a part of the owner's personal income tax return.

A principal disadvantage of the sole proprietorship is that the ability to raise capital is limited to the reputation and net worth of the owner. Also, the business goes out of existence or becomes legally incapacitated upon the owner's death. There is no continuity.

(See *Farm Business* page 2)

Figure 1. Number of Farm Business Corporations by County, 1992



The Geography of Minnesota Crops

Jeffrey Apland and Yongsung Cho

As part of our development of an agricultural sector model for the state, we conducted a statistical analysis of county-level crop data. Location is important for sector modeling in two fundamental ways. First, spatial differences in supply and demand, along with transportation costs, ultimately determine the pattern and volume of trade and prices. Second, differences in crop mix and crop yields are important in characterizing the

production capacities and alternatives of farms in various regions.

In this report the focus is on the second rationale: We measure production levels by comparing counties according to the proportion of cropland devoted to a particular crop. This gives us an indicator of the intensity of production. We measure productivity by average crop yields over a five-year period. Although our analysis actually

(See *Geography* page 5)

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Partnerships

The **general partnership** is an organization of two or more persons who operate as co-owners. The partners contribute to the business, share in its management, and divide any profit. Partnerships are usually created by written contract among the partners, but they can be legally recognized even without a written agreement.

Partnerships are separate legal entities that can contract in their own name, hold title to assets as a partnership, sue or be sued. A partnership must file an income tax return each year, but this return is for informational purposes only. The real income or losses of the partnership are "passed through" to each individual partner's income tax return.

In a partnership, each partner may be liable for any and all debts of the partnership. This means that no owner-partner can separate his or her own individual assets from those of the partnership. Liability is not limited to the business.

Another disadvantage of this form is the limited life of a partnership. If any partner dies, is incapacitated, or voluntarily leaves the partnership, the entire partnership could be dissolved. Any time a new partner joins, the old partnership is dissolved and a new partnership needs to be created. As with sole proprietorships, the ability and opportunities to raise capital rest solely on the financial resources of the partners.

The advantages of this form of organization are its simplicity in creation and the democratic methods it offers in operation. It allows, for example, one partner to contribute cash, one to contribute technical know-how, yet another to contribute manual work. All three can share equally their profits and management of the partnership.

A **limited partnership** is a partnership with one class of general partners and another class of limited partners. The defining characteristic of this form is that the limited (or silent) partner is not liable as a general partner unless he or she actually takes part in the control or management of the business. The limited partner is an investor rather than an active partner, and is liable only to the extent of the investment.

In farming, two somewhat distinct types of limited partnerships have arisen. **Family, or closely-held, limited partnerships** serve a number of objectives. Parents contemplating retirement may wish to maintain their investment in a farm business, but limit their liability and be free of management concerns. To accomplish this, the parents can be limited partners in a business where younger family members are the general partners.

Acquisition of debt capital for a family or closely-held limited partnership is not much different than for a sole proprietorship. The lender may favor the former if there is an expanded equity capital base.

Large-scale limited partnerships in agriculture provide tax shelters for the limited partners and generate tax shelters and profits for the general partner, commonly a corporation. The general partner normally provides only a small portion of the equity capital. In return for organizing and managing the partnership, the general partner normally gets an initial lump-sum management fee and a continuing management fee based upon the gross income of the business.

The **joint venture** is another variation of the partnership, usually more narrow in function and duration than a partnership. The law of partnership applies to joint ventures. The primary purpose of this form of organization is to share the risks and profits of a specific business undertaking.

Corporations

Three fundamental characteristics distinguish corporations from proprietorships and partnerships: (1) the way they are owned and managed, (2) their perpetual life, and (3) their status as legal entities separate from their owners and managers.

Corporations issue ownership shares in the form of common stock. The owners of this stock vote to elect a board of directors who manage the corporation for the shareholders. The corporation is not dissolved on the death of the owner.

A corporation is a separate legal entity that can own property, sue and be sued, contract to buy and sell, and be fined — all in its own name. The owners usually cannot be made to pay any debts of the corporation. Their liability is limited to the amount of money they have paid or promised to pay into the corporation.

There are two different types of corporations - the *regular* (subchapter C) and the *hybrid* (subchapter S). The major difference between the two is that the subchapter S corporation pays no income taxes. Rather, income from the business is allocated to stockholders who then report this income on their personal income tax returns. In contrast, subchapter C corporations pay a business income tax, and any after-tax dividends paid by the corporation must be reported by stockholders on their personal income tax reports.

Concern over this "double taxation" is a major reason some farmers and ranchers organize as subchapter S corporations rather than subchapter C corporations.

To do so, the farm corporation must meet several requirements. (1) It cannot have more than 35 shareholders. (2) It may have only one class of stock. (3) It cannot have partnerships or other corporations as stockholders. (4) It may not receive more than 20 percent of its gross receipts from interest, dividends, rents, royalties, annuities, and gains from sales or exchanges of securities.

In agriculture, these restrictions usually mean that only family or closely-held farm businesses can achieve subchapter S status.

Federal income tax rules for subchapter S corporations are similar to regulations governing partnerships and sole proprietors. However, corporations may provide certain employee benefits that are tax-deductible. Accident and health insurance, group life insurance, and certain expenditures for recreation facilities all qualify. However, these benefits may be taxable to the employees and subsequently to the shareholders.

There is greater continuity for businesses organized under subchapter S than for sole proprietorships or partnerships. Upon death of shareholders, their shares of the corporation are transferred to the heirs and the subchapter S election is maintained.

Surveys suggest that the major reason farms incorporate is for estate planning. The corporate form allows for the transfer of shares of stock either by sale or gift. This is much easier than transferring assets by deed.

A chief advantage of the corporate form is the limited liability afforded the owners. Limited liability is a legal privilege bestowed by the state; this privilege may be withheld in the exercise of the state's police powers.

New Business Forms

Minnesota adopted a **limited liability company (LLC)** statute in 1992 to provide another business organization option. The owners of a LLC are called "members," with (theoretically) no personal liability for the obligations of the LLC. However, like a partnership, a properly constituted LLC will be treated as a pass-through entity for federal income tax purposes. No federal tax, and, presumably, no state tax, will be imposed on the LLC itself. The members include any income or loss on their own tax returns.

The affairs and conduct of the LLC business are governed by an *operating agreement* among its members. Ownership is represented by *membership interests*. Management of an LLC may be vested in the members in proportion to their membership interests; however, the operating agreement may provide for the selection of managers by the members. The managers do not have to be members, but, like members, they have no personal liabilities for the obligations of the LLC.

The LLC may be dissolved on the occurrence of certain events such as expiration of a period fixed in the operating agreement, unanimous written consent of the members, or the withdrawal of a member.

In 1994, Minnesota created the **limited liability partnership (LLP)**, similar to a general partnership except that the partners benefit from a corporate-like liability shield. A Minnesota LLP is classified as a partnership for federal tax purposes.

LLPs constitute a revolution in the law of partnerships. Until now, the hallmark of a general partnership has

always been the partners' automatic liability for all of the partnership's debts. Liability exists merely on account of their status as a partner, not because the partner has personally done anything to create or guarantee the obligation. Minnesota's LLP amendments provide a simple way for general partners to escape this "vicarious" liability. A general partnership can obtain LLP status merely by filing an annual registration with the secretary of state.

LLP status is available both to newly-formed and previously-existing general partnerships. General partnerships may wish to consider registering as an LLP or convert to an LLC. Because these forms are new, it is wise to proceed carefully in adopting either of them. Selection of a legal form of business by owners of farms or agribusinesses is complex and involves consideration of possible legal liabilities, tax consequences, and operational management.

Most individual farmers nevertheless may decide to continue as sole proprietors. In many situations, alternatives to this basic business form are evaluated only when transfer of the farm to a new generation is necessary. While parent-child partnerships are a frequently-used and time-tested vehicle, new alternative forms are now available that may be advantageous. Some of the features of these alternative forms are listed in Table 1. Each situation is sufficiently unique to call for the counsel of an attorney and tax advisor.

Who's Doing What?

The Census of Agriculture lists five categories of farm business organization in its statistical compilations: sole proprietorships, partnerships (includes limited partnerships), family corpora-

tions, other corporations, and other forms (such as cooperatives, estates, trusts, institutional entities).

As indicated in Figure 2, nearly 86 percent of all farms in the nation were organized as sole proprietorships in 1992. Close to ten percent of U.S. farms are partnerships, followed in relative rank by farm family corporations at 3.3 percent. Non-family corporations account for less than one-half of one percent of the nation's farms and only 1.3 percent of agricultural acreages. In general, sole proprietorships have fewer acres per farm than partnerships, and partnerships are smaller in size than corporations.

Minnesota's number and size proportions are similar to the national averages, but non-family corporations and other legal forms are less important, perhaps due to the existence of the state's corporate farm law (which prohibits certain corporate, and limited liability entities from owning farm land or engaging in farm production). California tends to have partnerships that account for a disproportionately large amount of their state's farm land. Most Midwest states are similar to the U.S. and Minnesota percentages.

In Minnesota, the *proportions* of farms identified as sole proprietorship and partnership have remained stable from 1982 to 1992 even though the absolute number of farms has decreased substantially (see Table 2). Sole proprietorships have made up around 88 percent of the state's farms even though total farm numbers declined by more than twenty percent in this ten-year period. A slight decline in the importance of partnerships during the decade is offset by a relative increase in farm corporations. It should be stressed that only family

Table 1. Selected Features of Alternative Farm Business Organizations

Organizational Type	Is Owner Liable for...		Continuity of Business...		Is Business Income...		May Owners Be Other Special Business Forms?	Simple to Form and Use?†
	Debt?	Business Tort?	Life	Management	Taxed?	Passed to Owner?		
Sole Proprietorship	Yes	Yes	Owner	Owner	No	Yes	No	Yes
Partnerships								
General	Yes	Yes	Any Owner	Owners	No	Yes	Yes	Yes
Limited	Yes	Maybe*	Any Owner	Maybe*	No	Yes	Yes	No
Limited Liability	Maybe*	No	Any Owner	Owners	No	Yes	Yes	Yes
Limited Liability Company	Maybe*	No	Any Owner	Owners	No	Yes	Yes	No
Corporation								
Subchapter "C"	Maybe*	No	Perpetual	Possible	Yes	No	Yes	No
Subchapter "S"	Maybe*	No	Perpetual	Possible	No	Yes	No	No

*"Limited" (or silent) partners who participate in management may lose limited liability status.

†Lenders often require owners to pledge personal assets.

and closely-held (so-called "authorized") corporations are permitted to own land and engage in farming in this state.

Average net cash returns are over two and one-half times larger for partnerships than for sole proprietorships (see Table 3). Farm family corporations in 1992 had nearly twice the net income

of partnerships, but non-family corporations recorded almost ten times the average net return of proprietorships. Off-farm income has become much more important. As a result fewer sole proprietors identify farming as their principal occupation. Farms with other types of business

organization tend to specialize in farming.

From other census data (not shown here), we find that sole proprietorships are the most predominant form of business organization for farms with livestock as their primary product. Partnerships are more common for dairy farms, and family corporations are of relatively greater importance for field crop farms.

Figure 2. 1992 Farms by Business Organization, Relative Number and Acreage Size, Selected States and U.S.

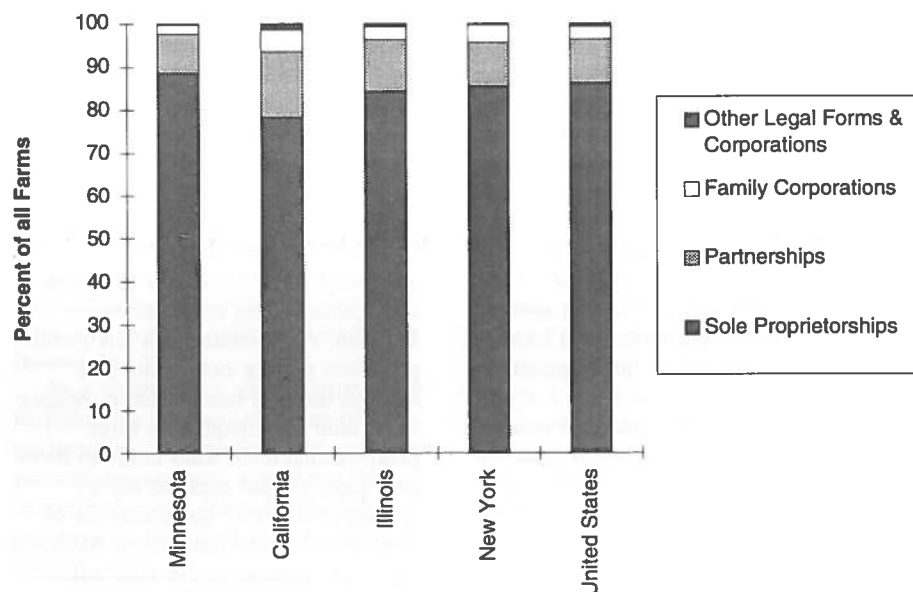


Table 2. Types of Business Organization for Minnesota Farms: 1992 and 1982

Type of Organization	1992		1982	
	Farms	Acres	Farms	Acres
Sole proprietorships	66,068	20,436,733	83,010	22,347,520
Partnerships	6,800	3,543,208	9,530	3,863,490
Corporations (family and other)	1,982	1,614,789	1,582	1,397,552
Other legal forms	229	72,214	260	99,894
Total	75,079	25,666,944	94,382	27,708,456

(Source: 1992 Census of Agriculture)

Table 3. Selected Economic Characteristics of Minnesota Farms by Type of Organization, 1992

Characteristics	Sole Proprietorship	Partnership	Family Corporation	Other Corporation	Other Legal Forms
Average Net Cash Returns (\$)	\$12,894	\$33,881	\$65,582	\$121,011	\$11,866
Average Farm Size (acres)	309	521	843	492	315
Average Market Value of Land & Bldgs (thousand \$)	278.8	471.2	863.8	601.8	346.1
Full Ownership as Percent of Farm Operation (%)	52.4	40.9	36.2	66.7	69.0
Operators by Principal Occupation as Farmer (%)	66.5	78.3	83.5	58.6	56.3
Average Age of Operator (year)	49.5	50.5	49.8	47.9	56.3

(Source: Derived from 1992 Census of Agriculture)

Summary

Several alternatives are available for newly-formed or changed farm businesses. In addition to the popular sole proprietorship form, there are three types of partnerships, two types of corporations, and a new limited liability company. The simple sole proprietorship continues to be Minnesota farmers' organizational favorite, but the number and importance of partnerships and corporations have grown in the past three decades.

The quest for new capital, ease of operation, and limited liability has fueled the development of new forms of doing business. Whether or not an existing farm business should change its organizational structure depends upon the objectives of its owners and on the tax implications of adjustment.

Additional Suggested Reading

Kenneth H. Thomas and Michael D. Boehlje, *Farm Business Arrangements: Which One for You?* NC Regional Ext. Pub. 50, 1991 (Available from Minnesota Extension Service).

Kenneth Thomas, Robert Luening and Ralph Hepp, *Planning Your General Farm Partnership Arrangement*, NC Regional Ext. Pub. 224, 1991 (Available from Iowa Extension Service).

Neil Harl, *The Farm Corporation: What It Is, How It Works, How It Is Taxed*, NC Regional Ext. Pub. 11, 1991 (Available from Minnesota Extension Service).

covers eight different commodities, we focus here only on corn, soybeans and wheat.

Statewide Trends in Production and Productivity

Before examining the county patterns, a brief overview of crop acreages and yields on a statewide basis is in order. Figure 1 shows total harvested acres of corn for grain, soybeans and wheat for 1969 through 1993. Over this 25-year period, there is no statistically-significant trend in corn acreage. Harvested area fluctuated around an average of 5.7 million acres. Over the same time span, however, soybean acreage has trended upward at a rate of about 92 thousand acres per year. Wheat shows yet another pattern. Although total area has increased since

1969, the figure shows a clear, steep upward trend to a peak of 4.1 million acres in 1976, followed by a more gradual downward trend since that time. Wheat area has declined at a statistically-significant rate of just under 59 thousand acres per year, when measured since 1976.

State average yields for corn, soybeans and wheat are shown in Figure 2. While yields fluctuate widely from year to year, there is a statistically-significant upward trend for all three crops: For corn, 1.4 bushels per acre per year; for soybeans, 0.4 bushels per year; for wheat, 0.4 bushels per year.

Changes in crop yields from year to year result primarily from changes in weather and in economic conditions. While the data on production practices and input levels needed to explain yields more exactly are not available, trends such as those exhibited here are often associated with technological change, such as improvement in seed varieties.

Figure 1. Total Harvested Acres, Minnesota, 1969-93

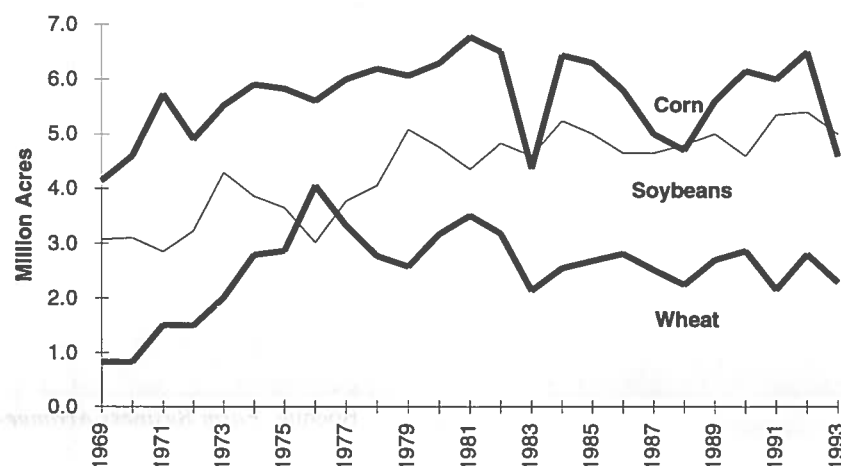
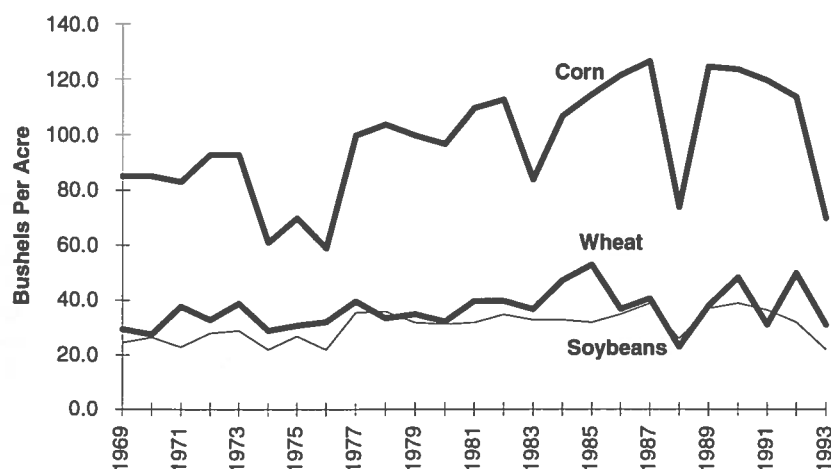


Figure 2. State Average Yields, Minnesota, 1969-93



County Patterns

To portray regional patterns in crop production and productivity in Minnesota, we used a statistical procedure called *cluster analysis*. This procedure first measures differences between counties and then assigns counties to categories that minimize variation within categories.

For each crop, two variables were computed at the county level — (1) harvested area for that crop as a percent of total harvested crop area and (2) five-year average yield for that crop.

The former is an indicator of intensity of production of a particular crop. It allows counties of different sizes with different areas of tillable land to be compared. Crop yield is an indicator of relative productivity. A five-year average yield eliminates vagaries in the data that may be attributed to weather patterns in particular years.

Cluster analysis combines counties into a designated number of groups (clusters) so that group members are similar with respect to one or more attributes. In our analysis, we used four clusters, but analysts could select any number for their work.

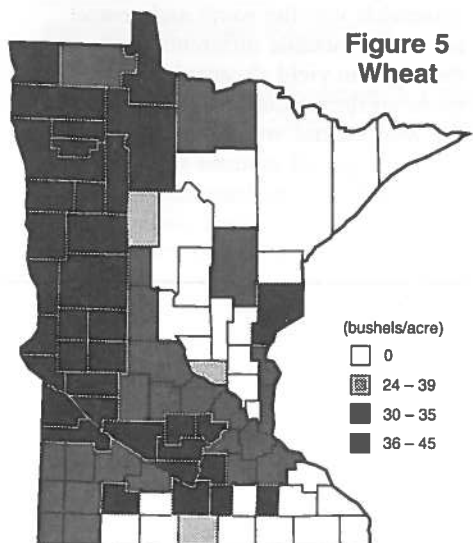
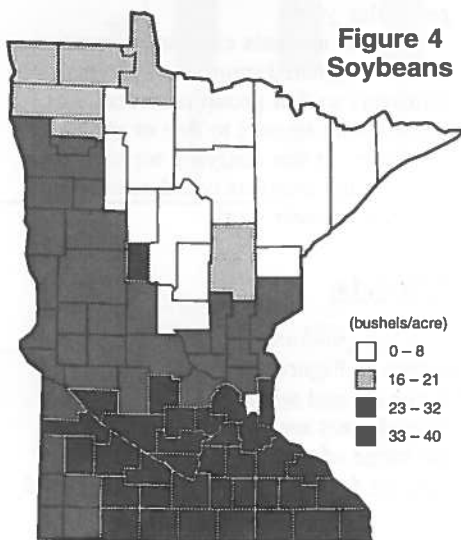
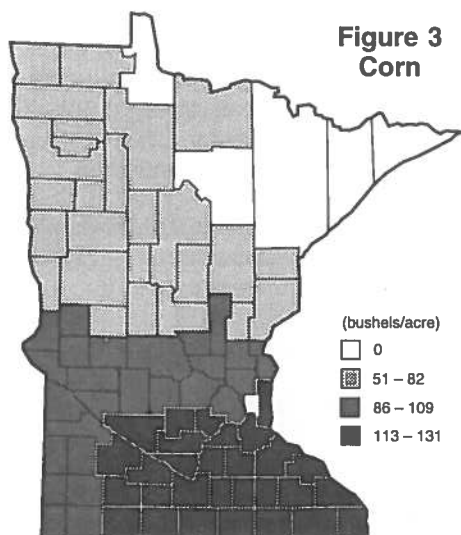
Yields

Crop productivity patterns are shown in Figures 3, 4 and 5 for corn, soybeans and wheat. In the maps, the four clusters are shaded according to the range of yields, with the darkest shading for the highest yield group and white for the lowest.

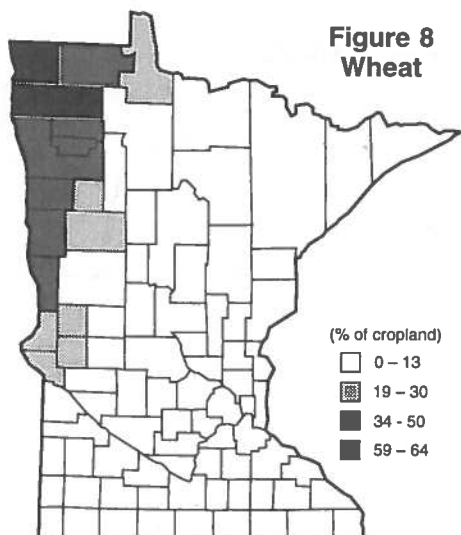
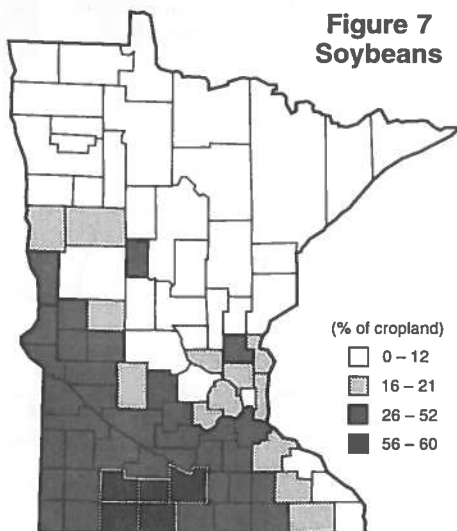
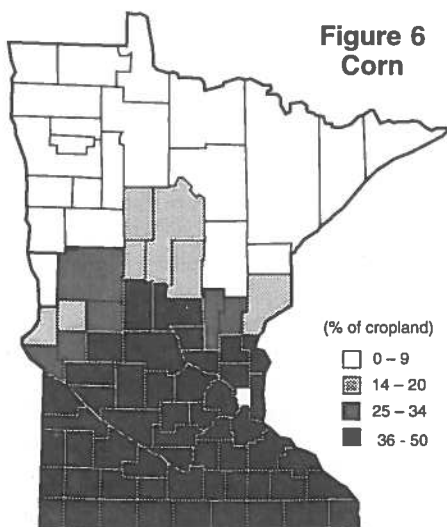
Clusters for corn and soybeans show similar patterns, with highest yields in the south central and south-eastern parts of the state, fading somewhat into the south and central areas. The notable difference is the way the soybean yield clusters blend to more northern counties, particularly in the west central and northwest.

The regional patterns in wheat productivity are perhaps more difficult to interpret. The highest yield cluster is in the heart of the wheat-producing part of the state. Patterns in the other three clusters are less distinct, with southern counties appearing in all four groups. This result has less to do with relative productivity than with the marginal role of wheat in the south. Production likely occurs here on marginal land with less efficient management practices.

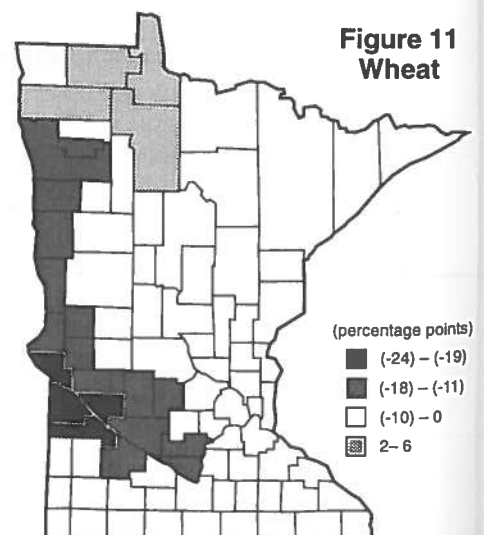
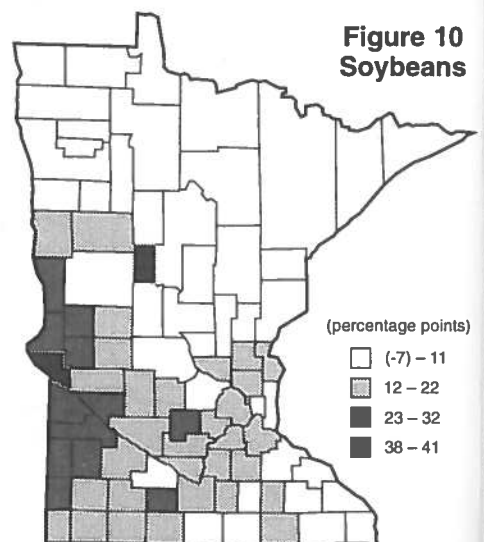
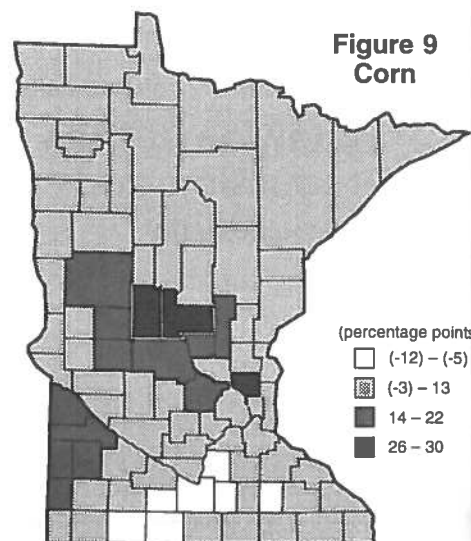
Figures 3-5. Average 1989-93 Yield



Figures 6-8. Crop Coverage, 1991



Figures 9-11. Change in Crop Coverage 1976-91



Coverage

Figures 6, 7 and 8 show the clusters of counties grouped by "coverage" — the relative size of corn, soybeans and wheat plantings, compared to total crop area. Data for 1991 were used.

The most intensive corn production follows the pattern of highest yields quite closely. The highest cluster includes counties with 36% to 50% of cropland in corn. All southern Minnesota counties are in this group, which spreads north into the central part of the state as well.

Five southern counties form the top group in soybean production with 56% to 60% of cropland. Again, the intensity of production follows the pattern seen in yields, with a notable exception. Despite their appearance in the highest yielding clusters,

southeastern counties bordering the river are grouped with mostly northern counties having the least acreage of soybeans. In the southeast, crop mixes tend to be corn and hay, rather than corn and soybeans. Following the yield patterns, however, relatively high levels of soybean production continue northward along the western side of the state.

As Figure 8 shows, wheat production in 1991 was highly concentrated in the northwest — all counties in the top two clusters are in that area. Wheat coverage fades as we move south.

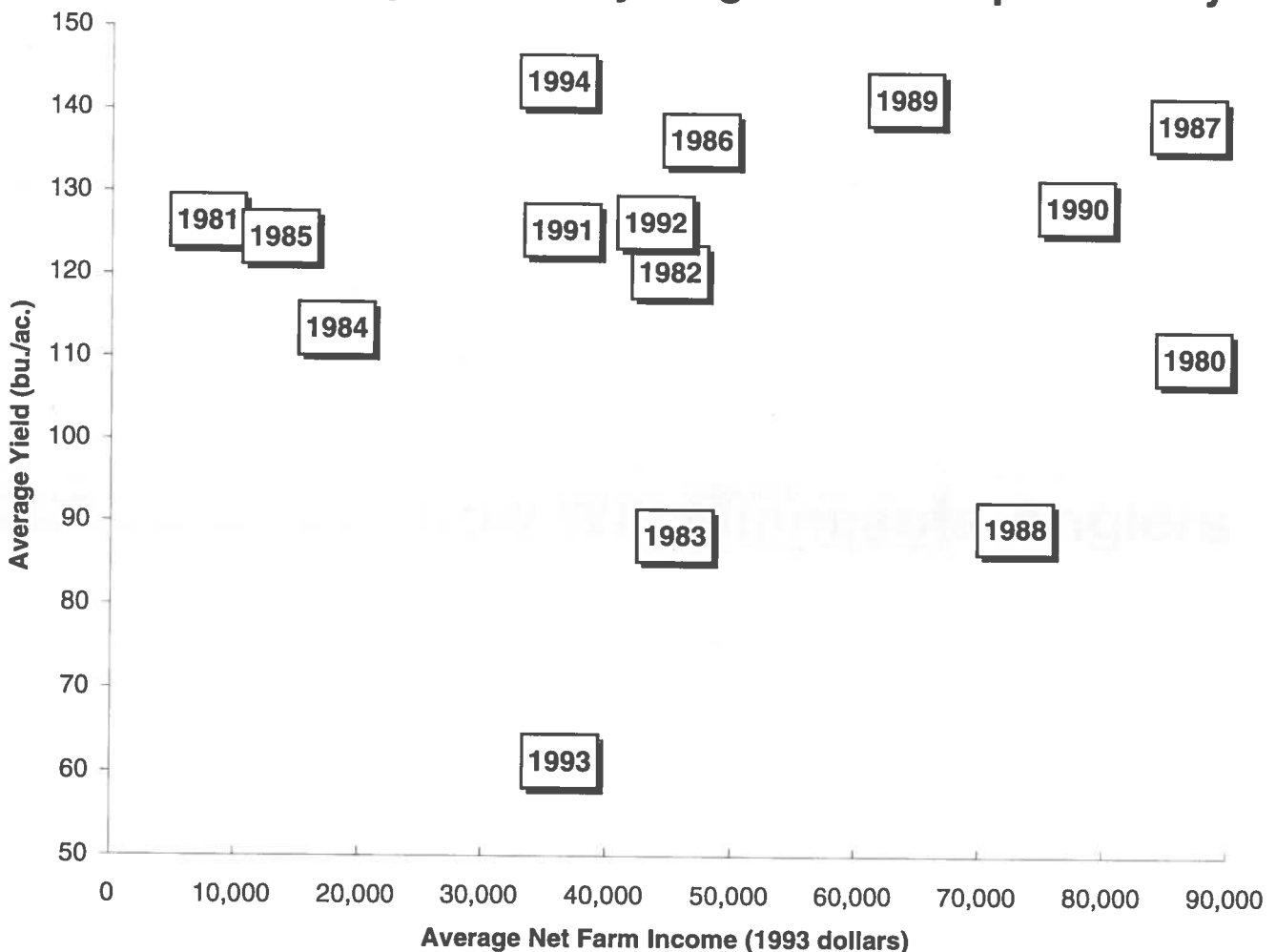
clusters in these maps show the change from 1976 to 1991 in crop area as a percent of total cropland. So, for example, if a county's wheat coverage went from 37% in 1976 to 30% in 1991, we show it as a decrease of 7 percentage points and color it white in Figure 11.

The largest percentage increases in corn acreage are seen primarily in central and southwestern counties. Figure 10 shows relatively large increases in soybean acreage in the west central and southwest production areas. Some of the expansion of soybeans in the west central and northwest appears to have occurred at the expense of wheat. Figure 11 shows declining areas of wheat land concentrated along the western border of the state.

Changes in Coverage

Changes in patterns of production are shown in Figures 9, 10 and 11. The

Does the corn crop tell us anything about farm profitability?



We often see crop yields used to suggest farm financial health. The implication is that high yields result in strong sector performance. Data from actual farm records compiled by the Southwestern Minnesota Farm Business Management Association suggest a different conclusion. Note especially the evidence from 1993 and 1994. A 150% increase in average corn yields resulted in exactly the same net average income for member farmers.

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