GETTING STARTED IN FARMING: CHARACTERISTICS OF BEGINNING FARMERS IN NORTH DAKOTA

GARY V. COLE AND JEROME E. JOHNSON

People entering farming and the number of farms in the United States have declined for nearly half a century with average farm size increasing 2.6 times in the past 43 years. North Dakota farm numbers have declined from a total of 80,000 in 1935 to 40,000 in 1980. The largest 50,000 farms in the U.S. today account for less than 2 percent of all farms but produce one-third of all farm sales. The high capital requirements for farming, along with strong demands for labor in the nonfarm economy, contributed to a reduction in the number of U.S. farms from 6.8 million in 1935 to 2.7 million in 1978 (1:117-120). However, agriculture continues to be one of America's largest industries with 500 million tillable acres of land and $600 billion in assets (4:3-6).

Barriers limiting entry into farming affect the present and future structure of agriculture. Coffman (1:117-120) suggests five barriers facing beginning farmers:

1. High capital requirements for specialized machinery and equipment.
2. The large size required for new units to be viable farms.
3. Rapid appreciation of land values.
4. Potential operating losses for beginning farmers.
5. Intense competition by nonfarm investors for available farmland.

Although there are no legal barriers to farm entry, the economic ones include increasing costs of resources and narrowing of profit margins. Farming continues to change, with less manual labor input and more management and capital intensive technological inputs. Parents, friends, and relatives can help overcome the economic barriers of farm entry. Barriers to entry have attracted attention in recent years, with farming costs rising sharply and farm numbers declining dramatically. The purpose of this study was to identify characteristics of successful beginning farmers in North Dakota. A conceptualized model of farmers getting started and becoming established in farming is presented in Figure 1. We assumed that most farm operators are in the "getting started" phase during the first four years. Obviously the actual time periods vary greatly among operators, and some will require more than four years while others will make the transition in fewer years.

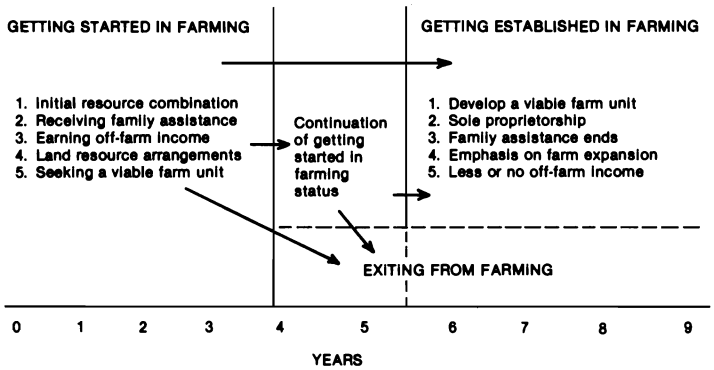

Figure 1. A Conceptualized Model of Farmers Getting Started and Established in Farming

A main concern of operators during the first years of farming is to obtain enough income to keep the farm going. Buying household and "luxury" items is secondary in priority. Most starting farmers engage in off-farm employment and receive some family assistance in the form of labor, machinery, or housing. Off-farm employment provides needed income to keep many farms going during years of limited cash flow. Also, the type of resource control a starting farmer has affects whether he will be successful or will exit from farming.

Farm operators must overcome the obstacles of entry and of getting started to enter the "getting established" stage (Figure 1). This requires a farm unit with sufficient resources to produce enough income for farm operating expenses, household needs, taxes, and repayment of the farm debt. Most established farmers are sole proprietors and receive no family assistance. Then off-farm income is less important and farm improvement or expansion is the farmer's major concern.

Information for this study was obtained from personal interviews with 138 starting farmers in the western

Cole is former research assistant and Johnson is professor, Department of Agricultural Economics.

and west and east central farming areas of North Dakota, during the months of August and September 1979 (2). The operators had been farming from one to seven years. These farm operators generously provided the data for this study, and their help is sincerely appreciated. Six major topics were emphasized in the interview: general background, farm characteristics, off-farm income, farm enterprises, financial data, and family assistance.

General Characteristics

Most beginning farmers come from a farm, with only 2 percent being raised in town. However, those raised in town often had farm experience since their fathers lived in town while farming.

All farm operators and farm wives had at least a high school education. Most improved their education before pursuing farming as a career. The majority of beginning farmers had either achieved a college degree or had attended college. About 34 percent of the farm operators had earned a college degree while another third attended college without receiving a degree. Nine percent attended vocational school, and one-fifth did not continue their education beyond high school.

Farm wives had educational levels comparable to that of their husbands, with 28 percent receiving a college degree and 35 percent attending college without receiving a degree. High school education was the highest level achieved by approximately a fourth of the wives, with 14 percent attending nursing or vocational schools.

Attitudes of beginning farmers towards farming as an occupation were studied (Table 1). Satisfaction towards farming was measured in three ways: 1) as a way of life, 2) means of income, and 3) investment. A scale from one to five was developed with one being very negative, three being neutral, and five being very positive. Results indicate beginning farm operators were more satisfied with farming as a way of life and as an investment than they were toward farming as a source of income. The life-style associated with farming continues to be ranked high among farmers and may still be a major reason for entering the farm occupation. Nearly 70 percent of the operators had a very positive attitude of five when rating farming as a way of life. Wives also rated farming highly as a way of life with 62 percent rating it very positive and one-fourth rating it positive.

Attitudes about farming as a way to earn income were most frequently rated neutral (43 percent) by farm operators, with 26 percent responding positive. Satisfaction with farming as a source of income was rated neutral by 47 percent of the farm wives, while one-fourth gave it a positive rating.

Attitudes toward farming as an investment were rated high, with 67 percent of the farm operators rating it either positive or very positive. Farm wives' ratings of farming as an investment were similar to the husbands. The attitudes of less satisfaction with farming as an income indicate that many farmers are not entering farming for the financial status, but rather for associated life-style and investment.

Table 1. Beginning Farmer Attitudes Toward Farming: Three Satisfaction Items Rated, 1979*

	Satisfaction Rating					
Attitude Toward Farming as a:	1 Very Negative	2 Negative	3 Neutral	4 Positive	5 Very Positive	TOTAL
	percent					
Way of Life						
Husbands	0	1	2	27	70	100
Wives	1	1	12	24	62	100
Means of Income						
Husbands	7	16	43	26	8	100
Wives	8	13	47	24	8	100
Means of Investment						
Husbands	4	9	20	35	32	100
Wives	1	5	18	38	38	100

*Rated by 138 beginning farmers and 79 farm wives.

Farm Arrangements

Studied were the types of resource control, methods and tactics used to enter farming, and farm management. These items can be important in the success or failure of a farm operation.

Entry methods used by beginning operators were defined as the first step towards developing a farm operation. The large investments needed to enter farming discourage initial purchases of a farm operation, so people interested in farming search for various methods to overcome the high investment requirements. Several arrangements were used by beginning farmers to get started in farming (Table 2). The initial entry methods are presented in the first column. First change is for the second type of ownership or control of a farm. Second change was defined as any variation made from the first two types of control in the farm operation.

Father/son operating agreements were most common among starting farm operators with 43 percent using this method. This agreement allows a starting farm operator to work with his father and learn from his experiences. Renting from parents (16 percent) and working for wages at home (16 percent) were tied as the second most frequent method used to enter farming. Entering farming through arrangements with parents or other relatives is an important aspect for 85 percent of the operators. Renting from nonrelatives accounted for 6.5 percent, and 6 percent of the operators interviewed bought a farm.

Once a farm operator has farmed a few years and possibly saved some money, he is ready to expand his farming activities. Since the father in many cases continues to farm, expansion occurs through acquisition of nonrelative's land, such as a neighbor. Renting from nonrelatives was the most frequent first change including one-third of the 100 operators. Father/son arrangements were second in frequency with 24 percent,

and 15 percent changed to renting from parents as their second step. Buying a farm, with its high capital investments, involved only 13 percent of the farmers.

Table 2. Resource Arrangements and Changes Used in "Getting Started" in Farming, 1979*

Method	At Start	1st Change	2nd Change
	percent		
Father/Son	43	24	10
Renting From Parents	16	15	7
Worked For Wages at Home	16	5	5
Rented From Relative	10	3	24
Rented From Nonrelative	7	34	17
Bought Farm On Own With Loan	6	13	37
Rented From Father-In-Law	1	5	—
Other	1	1	—
TOTAL	100	100	100

*Number of cases at start — 138, at first change — 100, at second change — 41.

Buying a farm was the most frequent second change with over one-third of the 41 operators responding in this manner (Table 2). This study found that entering farming through arrangements with parents or relatives is very important. Once a farm operator has entered farming, he begins to build his own operation or to take over the family farm. Renting from nonrelatives was the most popular first change used to begin establishing a viable farm operation. The most frequent second change taken by starting farmers was to purchase land.

Farm operators were classified by entry method to find the most frequent strategies used by each group to progress towards getting started. The percentages are only for those farmers who changed from their entry status. The 44 farmers who changed from their father/son operation had 34 percent renting land from a nonrelative and one-fourth renting land from their parents. Only 16 percent purchased land as their next step in getting started in farming. The figures indicate that one-half of the starting farmers who enter through a father/son agreement expand their operation by buying or renting from nonrelatives.

Beginning operators who changed from the entry status of renting from parents (n = 17) rapidly expanded into an operation of their own. Most farmers who started this way purchased land (65 percent) as their second step in the getting started process. This indicates that operators who entered farming by renting from parents moved faster into full ownership than those who started through a father/son operating agreement.

Working for wages at home was another method used to enter farming, with 22 making a change in their operation status. These farm operators most frequently moved into buying land as their second step in getting started in farming (59 percent). This method of entry also indicates rapid progress toward the purchase of land.

Those who began farming by renting from nonrelatives accounted for a small percentage of all farmers who changed their tenure (n = 8). However, one-half of these farmers entered into a father/son agreement, one-fourth rented from parents, and one-fourth bought land.

Thirteen farmers changed from renting from a relative to purchase of land (38 percent) while 31 percent entered a father/son agreement as their next step towards getting started.

Method of Farm Acquisition

Obtaining the required capital necessary to purchase a farm is difficult. Renting is a method which postpones large capital investments while still allowing getting started in expansion of their operation. Beginning farm operators most frequently acquired control of land to farm by renting, with 29 percent using this method. When land purchases were involved, 23 percent used a contract for deed. Federal Land Bank and Farmers Home Administration loans were acquired by 13 percent of the farmers, while commercial bank loans were obtained by 6 percent of the operators.

Family Assistance

Family assistance was classified into three groups: housing, machinery, and labor. Beginning farmers' cash outlays for operating costs were reduced by receiving family assistance through the free use of machinery or labor. This promotes greater investment and increases both farm income and net worth. Ross found three types of family assistance to be important to farmers (3:11): 1) access to land, 2) access to capital or opportunities to accumulate capital, and 3) managerial guidance and encouragement. Wyngarden (5:39) reported that free use of machinery was the more beneficial type of family aid, with any form of family assistance being critical in determining success of beginning farm operators.

Family assistance was received by 72 percent of the beginning farmers interviewed. Machinery use, the most common type of assistance, was received by 45 percent of the operators in the first year of farming. By year two, machinery assistance had decreased to a little over one-third of the farmers. Family assistance decreased as the beginning farmers became self-supporting and required less aid. The results show that machinery assistance declined to 28 percent in year three, and only one-fifth of the farmers received such assistance in year four.

Labor assistance was obtained by 23 percent of the beginning farmers in year one, 21 percent in year two, 13 percent in year three, and 9 percent in year four. This was usually a father's or relative's help in running the operation.

Housing assistance from parents can aid a starting farmer by reducing living costs. Living at home with free room and board was the most frequent with one-third receiving this help. About 3 percent received

Continued on page 21

observed in storage facilities, *S. sclerotiorum* was reported to decay tubers (1,8). Ramsey (8), however, states that *S. sclerotiorum* is weakly pathogenic to tubers and suggests rot would not likely occur.

LITERATURE CITED

1. Bisby, G. R. 1921. **Stem rot of sunflowers in Manitoba.** Sci. Agric. 2:58-61.
2. Borders, H. I. 1946. **Plant disease report, Homestead area, Dade County, Florida, fall and winter season 1945-46.** Plant Dis. Rep. 30:169-172.
3. Eddins, A. H. 1937. **Sclerotinia rot of Irish potatoes.** Phytopathology 27:100-103.
4. Kohn, L. M. 1979. **A monographic revision of the genus Sclerotinia.** Mycotaxon 9:365-444.
5. Nelson, B. D. 1981. **Souces of ascospore inoculum of** *Sclerotinia sclerotiorum* in North Dakota, p. 14. Proceedings Sunflower Forum and Research Workshop, Jan. 1981, Sunflower Association of America, Fargo, ND. 27 pp.
6. Partyka, R. E. and Mai, W. F. 1962. **Effects of environment and some chemicals on** *Sclerotinia sclerotiorium* **in laboratory and potato field.** Phytopathology 52:766-770.
7. Pethybridge, G. H. 1910. **Potato diseases in Ireland.** J. Dept. Agr. Tech. Instr. 10:241-256.
8. Ramsey, G. F. 1941. *Botrytis* **and** *Sclerotinia* **as potato tuber pathogens.** Phytopathology 31:439-448.
9. Wong, J. A. L., and Willetts, H. J. 1979. **Cytology of** *Sclerotinia sclerotiorum* and related species. J. Gen. Microbiol. 112:29-34.
10. Wong, A. L., and Willetts, H. J. 1975. **A taxonomic study of** *Sclerotinia sclerotiorum* **and related species: Mycelial Interactions.** J. Gen. Microbiol. 88:339-334.

Continued from page 8

reduced rental rates for housing. Other housing arrangements included free use of a building, a house rent free, or use of buildings for paying only insurance costs.

Off-Farm Employment

Starting farm operators often have excess labor but limited capital for investments. Many can capitalize on this situation with an off-farm job. Farm wives often obtain an off-farm job to generate family income. Off-farm employment was used by 60 percent of the starting farmers and 64 percent of the wives. The high percentage of operators and wives who worked off the farm indicates that most beginning farmers need supplementary income to start a farm operation. The income generated by the farm itself cannot support the large financial needs of starting a farm operation.

SUMMARY

Starting farm operators are using family help to aid them get started. Family assistance in the form of labor, machinery, and housing was frequently received by operators. Most farmers interviewed had entered farming through arrangements with parents by utilizing a father/son operation, then renting from a nonrelative, and purchasing land as the third step. Off-farm employment also was frequently used by starting farmers and wives to aid in generating income.

Beginning farmers were well educated with the majority having continued their education beyond high school. Most were satisfied with farming as a way of life and as an investment. However, fewer were satisfied with farming as a source of income, indicating long-term investments and life-style were more important to persons entering farming.

REFERENCES

1. Coffman, George, **Entry and Exit: Barriers and Incentives, Structure Issues of American Agriculture,** USDA Economics, Statistics, and Cooperative Service, Agricultural Economics Report 438:117-120, November, 1979.
2. Cole, Gary V. **Factors Influencing Successfully Getting Started in Farming in North Dakota,** Unpublished M.S. Thesis, North Dakota State University, Fargo, 1981.
3. Ross, William N., **Empirical Relationships Between Tenure and Economic Growth of Farms in Central Kansas, 1940 to 1962,** Unpublished Ph.D. Dissertation, Kansas State University, Manhattan, Kansas, 1970.
4. "Today's Young Farmer," editorial, **GTA Digest,** May-June 1978, pp. 3-6.
5. Wyngarden, Alan, **Financing Beginning Farmers: Lenders Views,** Unpublished M.S. Thesis, North Dakota State University, Fargo, 1979.