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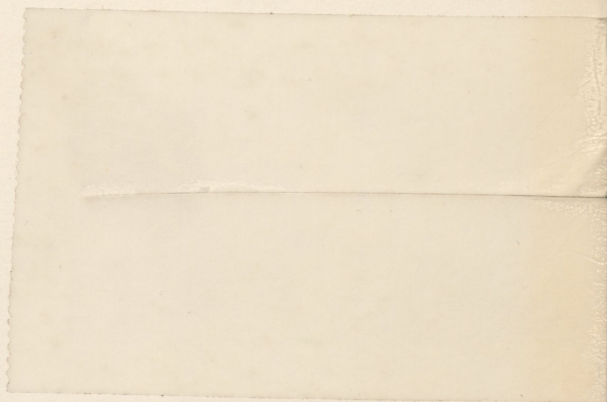
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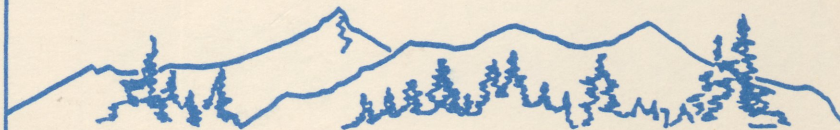
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The Effect of Size of Operation
and Business Organization On
The Woman's Role In Farm Task
Participation and Decision Making.

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In this paper, we investigate the womans' role in farm task participation and decision making based on the size of the farm operation and farm business organization. The results from the 1990 South Dakota Farm Woman survey are analyzed to determine the womans' role and suggests reasons for the variation.

Introduction

American agriculture has become one of the most competitive industries in the nation. Increases in technology have required farm managers to make a variety of choices and decisions that were previous unavailable or had little negative consequences of wrong choice. Farm management has become increasingly complex.

Farm families now share day to day in the management of the operation. Farm women have become more involved in areas of management that were formerly held by the primary manager. These areas may include marketing, book keeping, keeping livestock and crop production records, financial analysis and deciding cropping patterns.

Despite the interest in the changing economic roles of women in the United States, relatively little is known about the contemporary farm woman and her participation in agricultural production (Ross, 1985). Godwin found that three-fourths of today's externally employed farm women participate in a triad of roles: (a) paid employee off the farm, (b) farm producer, doing at least one farm task regularly, and (c) household producer, caring for children and home (Godwin, 1988).

Literature has pointed to a growing need to better understand the woman's role in agricultural production and management. Women have proven to be a vital link to the family and farm, yet the woman's contribution to the farm and family is only beginning to be studied and understood.

In 1990, South Dakota State University conducted a research project to better understand the woman's role in farm task participation and decision making. The overall objective of this research project was to gain an in-depth understanding of the woman's role in farm task participation and decision making on South Dakota farm and ranches. The specific objectives of the research project were determine if participation in farm tasks and decision making varied by geographic region, stage in the lifecycle, type of business, types of enterprises produced, and off-farm employment status.

This paper will examine the variation in farm task participation and decision making styles of farm women by size of the farm operation and business organization (single proprietorship, partnership, or family corporation). It was hypothesized that size of operation would have a negative impact on the level of participation and that as the complexity of the business organization increased, the woman's role would decrease.

Prior Studies

Research into the woman's role and involvement in agriculture and management is a relatively new topic. The majority of the research has been accomplished during the past ten years.

In 1988, Dr. Sharon Danes at the University of Minnesota conducted a survey to determine the characteristics of farm women and their role on the farm or ranch. The project found that women were heavily involved in both management and physical labor.

The study made two significant contributions to the study of women's participation in the farm. First, farm women employed off the farm are more involved in certain types of decisions than those farm women who are not employed off the farm. Second, the study concluded that there is an increased need for education opportunities for rural women to help them better use their resources (Dane, 1988).

In 1983, Salant profiled the role of farm resident women in the labor force, both on and off farm in the Sand-Clay Hills region of Mississippi and Tennessee. The study found that many women are not working because they want to, but rather out of economic necessity. The financial status of the farm household within the study were significantly improved as a result of the income and benefits contributed by women in 1980. Therefore, rural women are effected by changes in the rural economy, especially when they have access to off-farm jobs (Salant, 1983).

In 1988, Godwin examined farm wives' preference for use of time in household and farm tasks, their actual time spent in these tasks, and their external employment status. The study made three important contributions to the study of women's participation in agriculture; 1) the majority of wives preferred to spend about the same amount of time they were currently spending in all household and farm tasks, 2) while there were some differences in the preferences of farm wives who were employed off the farm and those who were full-time "farm-wives", the differences were only a matter of degree, and 3) age-related differences among women appear to be related to their feelings about their current allocation of time. This study makes an important contribution to the study of role strain that farm women experience in their role as a farm producer, paid employed off the farm and household producer (Godwin, 1988).

In 1979, Rosenthal and Jones, researchers for the National Opinion Research Center (NORC), conducted a nationwide survey of farm women and men. The study sought to explain the woman's involvement in, and attitudes toward, their own operations, agricultural organizations, labor market and the United States Department of Agriculture programs. The NORC report suggested, on the basis of expressed need from their findings, that special efforts be made to improve the transmission of information to farm women. This may include information programs directed specifically at farm women rather than at the farm population as a whole, to ensure that women are informed about the services and programs available to their operations (NORC, 1979).

A review of literature points to a growing interests in the woman's

participation in farm tasks and decision making. This paper will examine farm task participation and decision making styles of South Dakota farm women.

Methodology

The South Dakota branch of the Agricultural Statistical Service (SDASS) was contacted to obtain a list of women living on farms and ranches in South Dakota. The SDASS listed the farms and ranches by primary operator and would not be able to provide a list of women living on farms and ranches. It was felt that utilizing their services would not ensure that the survey would be received by the farm woman.

Several additional organizations were contacted to aid in gathering a pool of farm women names, 1) South Dakota Farmers Union, 2) South Dakota Farm Bureau, and 3) The South Dakota Cooperative Extension Service. The South Dakota Farmers Union provided a list of 2,000 names of farm women across the state from their roster. The South Dakota Farm Bureau and the Cooperative Extension Service provided information in their newsletter about the research project and requested that women volunteer to participate in the research project.

A total of 1,000 surveys were mailed to a stratified (by county) random sample of the farm and ranch women. Of the 1,000 mailed surveys, 314 were returned and 287 deemed useable. To accomplish the objectives, two way frequency tables were developed to allow comparisons. The dependent variables were age, off farm employment status, size of operation, types of enterprises produced and farm/ranch business organization. This paper will examine the results of two of those dependent variables, size and business organization.

Variation by Size of Operation

The size of the operation, for this study, was based on gross farm income as defined by the U.S. Department of Commerce, Bureau of the Census, 1987. The census bureau defines farm size in six separate categories. Similar to the census bureau, this study defined farm size based on gross farm income, but separated farm size into three categories. The categories were divided by grouping the census bureau first three categories into "small" size farms, the next two categories into one, "middle" size, and the last category into "large" size farms. A small operation was defined as having a gross farm income of less than 50,000 dollars. A medium size operation had a gross farm income between 50,000 and 250,000 dollars and a large size operation was defined as having a gross farm income of greater than 250,000 dollars.

Tables 1 and 2 summarize the decision making styles and farm task decisions based on the size of the operation. The farm tasks can be divided into crop related (the first 5 categories), livestock related (the next 5 categories) and support related (the balance of the categories). There is no indication that size has a negative impact on the level of participation in farm related tasks. In the livestock related tasks, there is an increase in participation when regular duty and occasional duty are combined, in "caring for farm animals", "feeding livestock" and "animal health care" moving from a small to a medium operation. Only "caring for animals during pigging, lambing, etc." shows a peak in medium size operations, compared to small and large. None of the crop, livestock or support related tasks shows a continual decrease, when regular duty and occasional

duty are combined, as the size of the operation increases.

The majority of farm decisions are made jointly in each size category. This trend is highest in medium size operation, when all categories are higher compared to small operations. This may be due to specialization of labor on the operation and the need for additional input when making a farm decision. There is an increase in "someone else" making the decision for large operations. Large operations would include family held corporations, and thus decision making is often left to stock holders. There may also be a greater need to seek the advice of a professional when considering a change in feeding styles, financing the operation, soil sampling, etc. Women on large operations are highly involved, in "future plans for the operation", "seeking new information" and "borrowing money".

Contrary to the hypothesis, women's participation in farm tasks and decision making is not negatively impacted by the size of the operation. Women continue to be consulted on farm decisions and participate in farm related tasks.

Business Organization

Business organization was defined by the respondent as being a single proprietorship, partnership, family held corporation or other. Survey respondents were asked to classify their operations, which may have lead to a bias, i.e. a woman may believe she is a full partner in the operation but it may be organized as a sole proprietorship. Generally, the differences between each of the business organizations is the number of people involved in either decision making or farm task participation.

Tables 3 and 4 summarize farm task participation and decision making based on business organization. When regular duty and occasional duty are combined, crop related tasks showed mixed results. Participation in field work with machinery showed a steady trend among each of the types of business organizations yet there was a decrease in field work without machinery across business organizations. This may be due to increased mechanization as business organization increased.

The majority of the livestock related tasks showed a decrease in participation in a partnership compared to a single proprietorship or family corporation. Milking dairy cows was the only livestock related task that showed a higher percentage participation compared to a single proprietorship and family corporation. This may be due to the labor requirements of livestock among the different business organizations. In support related tasks, women participate at the same rate in each of the categories when regular and occasional duties are combined.

Women are highly involved in joint decision making among each of the types of business organizations. Up to five percent of the women indicated that they make the decision solely in the single proprietorship organization. This may be due to the numbers of women who are currently managing the operation after the death of their spouse either for themselves or until another family member can return to the farm.

The type of business organization does not have an effect on farm task participation and decision making. Women are highly involved in the majority of

the farm tasks, at least occasionally, in each of the business types. As the farm business organization becomes more complex, women continue to play a part in joint decision making.

Conclusion

Women remain highly involved in farm task participation and decision making in each category of farm size and business organization. The level of participation in farm tasks is mixed when regular and occasional duties are combined in each farm size category. They participate in joint decision making in each category, therefore, size of the operation does not have an impact on participation in farm tasks or decision making.

Women are also involved in farm related tasks and decision making in each of the types of business organization. When regular and occasional duties are combined, livestock related tasks showed a decrease in participation in a partnership compared to a single proprietorship or family corporation. They participate steadily in support related tasks across each of the different business organizations. Women participate fully in joint decision making on the operation. Women are make the final decision two to five percent of the time on single proprietorships.

There continues to be a need for further research in the area of the womans' participation in farm tasks and decision making. Women continue to be a vital part of the farm management team and would benefit from programs designed to help them enhance those skills that they use daily on their farm or ranch.

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Table 1. Decision making style based on the size of operation^a, in percentages.

Decision	Size of Operation											
	Small				Medium				Large			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Buy or sell land	2	13	80	5	1	7	91	1	0	33	67	0
2. Rent/lease more or less land	2	19	76	3	1	15	84	0	0	38	62	0
3. Buy major farm equipment	2	26	68	4	1	24	74	1	0	43	57	0
4. Rent/lease equipment	2	35	54	10	1	28	67	4	5	52	43	0
5. Produce new crop/livestock	2	36	54	7	0	30	69	1	0	43	57	0
6. When to sell products	2	46	48	4	2	48	50	1	0	60	40	0
7. Try new production practice	2	45	43	9	0	42	55	3	0	60	40	0
8. Futures plans for operation	4	15	75	5	3	11	86	1	0	33	67	0
9. Seek new information	6	26	57	11	3	33	61	3	5	28	67	0
10. Borrow money	5	12	80	3	2	20	77	1	5	30	65	0

Source: SD Farm Woman Survey, 1990
 Percentages are based on those individuals responding to the question.

^aSize of operation is based on gross farm income:
 Small = gross farm income < \$50,000
 Medium = gross farm income between \$50,000 and \$250,000
 Large = gross farm income > \$250,000

1 = I usually make the decision
 2 = Someone else makes the decision
 3 = Joint decision
 4 = Don't know

Table 2. On-farm task participation based on the size of operation^a, in percentages.

Role	Size of Operation											
	Small				Medium				Large			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	17	19	50	14	14	34	43	9	19	14	62	5
2. Applying crop chemicals	4	11	62	23	2	9	75	13	5	15	75	5
3. Making farm equipment repairs	6	29	51	15	4	30	60	6	0	28	67	5
4. Field work without machinery	16	39	24	22	17	50	22	11	10	43	43	5
5. Harvesting, including truck driving	24	39	27	10	25	47	22	6	19	52	24	5
6. Taking care of farm animals	43	36	13	8	39	48	9	5	38	43	19	0
7. Feeding livestock	33	35	20	13	32	47	17	5	30	40	25	5
8. Milking dairy cows	11	4	23	61	8	4	21	68	10	10	30	50
9. Animal health care, including vaccinating, etc.	29	29	25	17	29	40	24	7	33	29	38	0
10. Caring for animals during pigging, lambing, etc.	36	27	22	15	36	34	16	14	24	38	33	5
11. Running farm errands	60	35	2	4	67	31	2	0	67	33	0	0
12. Marketing products	10	34	33	23	10	42	41	6	19	33	48	0
13. Bookkeeping, maintaining records, paying bills	74	14	7	5	68	22	8	2	71	10	19	0
14. Supervising hired labor	10	23	28	39	9	32	29	30	15	30	50	5

Source: SD Farm Woman Survey, 1990
 Percentages are based on those individuals responding to the question.

^aSee Table (1) footnote (a) for size of operation definition.

1 = Regular duty 3 = Never done
 2 = Occasional duty 4 = Not done on the operation

Table 3. Decision making style based on type of business organization, in percentages.

Decision	Type of Business Organization											
	Single				Partnership				Corporate			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Buy or sell land	2	8	85	4	0	18	81	0	0	24	76	0
2. Rent/lease more or less land	2	15	81	2	0	29	69	2	0	19	81	0
3. Buy major farm equipment	2	23	73	2	0	35	61	3	0	38	62	0
4. Rent/lease equipment	2	29	62	6	0	42	50	8	0	48	48	5
5. Produce new crop/livestock	2	32	62	4	0	41	54	5	0	33	67	0
6. When to sell products	3	49	46	3	0	49	49	2	0	52	48	0
7. Try new production practice	2	45	49	5	0	44	48	8	0	57	43	0
8. Futures plans for operation	5	12	80	3	0	18	80	2	0	24	76	0
9. Seek new information	4	30	61	5	8	28	58	6	5	38	52	5
10. Borrow money	5	15	80	1	0	22	75	3	0	25	70	5

Source: SD Farm Woman Survey, 1990
 Percentages are based on those individuals responding to the question.

- 1 = I usually make the decision
- 2 = Someone else makes the decision
- 3 = Joint decision
- 4 = Don't know

Table 4. On farm task participation based on type of business organization, in percentages.

Role	Type of Business Organization											
	Single				Partnership				Corporate			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	14	28	48	10	22	19	45	14	14	24	52	10
2. Applying crop chemicals	3	83	74	15	3	11	62	24	10	35	45	10
3. Making farm equipment repairs	5	27	59	9	3	32	49	16	5	38	52	5
4. Field work without machinery	15	47	23	14	22	38	22	19	10	40	30	20
5. Harvesting, including truck driving	24	41	27	8	25	46	17	11	24	57	19	0
6. Taking care of farm animals	44	42	10	5	35	40	17	8	33	57	5	5
7. Feeding livestock	34	42	17	7	31	33	25	11	19	62	14	5
8. Milking dairy cows	9	2	23	66	10	10	20	60	10	5	24	62
9. Animal health care, including vaccinating, etc.	32	33	24	11	21	37	30	13	33	33	29	5
10. Caring for animals during pigging, lambing, etc.	38	30	18	13	29	26	27	18	29	52	14	5
11. Running farm errands	65	32	2	2	62	35	0	3	76	24	0	0
12. Marketing products	13	35	40	12	3	47	29	21	5	43	48	5
13. Bookkeeping, maintaining records, paying bills	72	17	7	3	70	16	9	5	76	10	14	0
14. Supervising hired labor	6	29	31	34	15	23	34	29	33	38	19	10

Source: SD Farm Woman Survey, 1990
 Percentages are based on those individuals responding to the question.

- 1 = Regular duty
- 2 = Occasional duty
- 3 = Never done