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# Women in Agriculture: A Summary of the 1990 Research Project and Recommendations for Extension

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**Women In Agriculture:  
A Summary of the 1990 Research Project  
and Recommendations For Extension**

**by,**

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and  
Dr. Douglas Franklin\***

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**ABSTRACT:** This report documents the findings of the 1990 Women In Agriculture survey and personal interviews that were conducted during the summer of 1990. The overall goal of the research project was to collect primary data on women living on farms and ranches in South Dakota. The specific objectives of the project were to determine if there was a variation in participation based on the size of the operation, age of the woman or stage in the lifecycle, geographical location, types of production enterprises and off-farm employment status of the women. The final section of this report makes recommendations for future study and summarizes the perceived needs of farm and ranch women.

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## TABLE OF CONTENTS

	Page
INTRODUCTION . . . . .	1
SECTION ONE: RESEARCH RESULTS . . . . .	3
General Characteristics of Women On Farms and Ranches . . . . .	3
General Characteristics . . . . .	4
Farm and Ranch Characteristics . . . . .	6
Farm Task Participation and Farm Decision Making . . . . .	9
Off-Farm Employment . . . . .	13
Legal Arrangements For The Operation . . . . .	15
Success . . . . .	15
Participation/Decision Making As Affected By Selected Variables . . . . .	16
Barriers To Participation . . . . .	31
SECTION TWO: RESULTS AND RECOMMENDATIONS . . . . .	34
Conclusions . . . . .	37
Recommendations . . . . .	38

## LIST OF TABLES AND FIGURES

### TABLES

	Page
Table 1. General characteristics of South Dakota women . . . . .	5
Table 2. Responses to distance to town of greater than 2,000 people . . . . .	8
Table 3. Farm task participation . . . . .	10
Table 4. Who makes the final decision . . . . .	11
Table 5. Time adjustments after becoming employed off the farm . . . . .	14
Table 6. Reasons for having an off-farm job . . . . .	14
Table 7. On farm task participation based on type of business organization . . . . .	18
Table 8. Decision making style based on type of business organization . . . . .	18
Table 9. Farm task participation based on off-farm employment status . . . . .	20
Table 10. Decision making style based on off-farm employment status . . . . .	20
Table 11. Farm task participation based on geographic region. . . . .	22
Table 12. Decision making style based on geographic region . . . . .	22
Table 13. On farm task participation based on crop and enterprise mixture . . . . .	26
Table 14. Decision making style based on crop and enterprise mixture . . . . .	26
Table 15. On-farm task participation based on stage in life-cycle . . . . .	28
Table 16. Decision making style based on stage in life-cycle . . . . .	28
Table 17. On-farm task participation based on the size of operation . . . . .	30
Table 18. Decision making style based on the size of the operation . . . . .	30

### FIGURES

Figure 1. Geographic regions of South Dakota . . . . .	23
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WOMEN IN AGRICULTURE:  
A SUMMARY OF THE 1990 RESEARCH PROJECT AND  
RECOMMENDATIONS FOR EXTENSION.

INTRODUCTION

American agriculture has become one of the most competitive industries in the nation. Due to the nature of supply and demand for agricultural products, producers are required to closely examine the costs of their inputs, use effective marketing skills and closely plan their operation to reduce costs and widen the margin. Producers have sought to improve their financial status by changing the way they manage their operation or by making changes within their family lives to live within the current farm income (farm is used as a generic term referring to both farm and ranch operations).

Historically, farming has provided a "good" life for those who chose agricultural production as a career. Farming and ranching provided not only a steady income, but provided a way of life considered by many in society as one of the best places to raise a family and to live. Producers were able to provide for their families both financially and emotionally.

Farm management has become increasingly complex, due to changing technology. Management choices include: seed variety, choice and use of chemicals, machinery sizing and implement selection, marketing techniques and monetary factors such as debt load and selection of lenders. 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 decisions on 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.

A review of literature indicated that women are currently more involved in regular farm task participation and decision making and are choosing to work off the farm more compared to ten years ago. The numbers of women working off the farm has grown from 30 percent in 1981 (Rosenfeld and Jones) to approximately 45 percent in 1989 (Janssen, et al.). A review of historical literature indicated that women have always been involved in farm task participation and decision making, there was a clearer division of labor in the past than was indicated in current literature.

The overall goal of the 1990 research project was to gain a better understanding of women living on farms and ranches in South Dakota. The primary objectives of the research project were to determine if a variation existed among different geographic regions, types of enterprises produced, business organization, off-farm employment status, and stage in the life cycle. (A description of each of these categories is included in the second section of this report.)

This report is divided into two primary sections. The first section summarizes the survey data collected and the personal interview responses. Included in this section is an analyzation of the results based on the key independent variables and a summary of perceived "barriers to participation". The second section analyzes the results and recommends programming to meet the

needs of rural women.

## SECTION ONE: RESEARCH RESULTS

An overview of the responses to the 1990 South Dakota Farm Woman's Survey and specific characteristics of the respondents are examined in this section. First, this section will provide demographic information of those individuals responding to the survey are provided. Secondly, it will examine the relationship between participation in farm related tasks and decisions based on the woman's age, geographic location, primary production enterprises produced on the operation, business organization, and size of the operation. The last portion will summarize perceived barriers to participation in farm tasks and decision making.

The source of information for the analysis was the 1990 South Dakota State University Farm Woman Survey. The survey was mailed to 1,000 women during the summer of 1990. There were 314 (31 percent) surveys returned, and of that number 287 (29 percent) were acceptable for use in the analysis. The analysis in this section is based on those responses.

### General Characteristics of Women On Farms and Ranches

The goal of this section is to describe the women, the farm operation they live on, their role in decision making and farm tasks, and off-farm employment. This section reports the responses of those women answering the question and the percentage of respondents performing various tasks. The frequencies that are reported in this section reflect only those individuals that responded to the question. Some women felt that the questions were "too personal" in nature and chose not to answer the question. Where applicable, the percentage of those individuals not responding to the question will be noted.



## General Characteristics

The general characteristics of women living on farms and ranches in South Dakota is summarized in Table 1. The women responding to the survey averaged 49 years of age. The majority of the women had a high school education, grew up on a farm and most of the operations had been in the family between 26 and 40 years.

In addition to those characteristics, approximately 96.5 percent of the respondents indicated they were married, 2.8 percent were widowed and 0.6 percent were either divorced, separated or had never married.

When asked if they considered themselves to be a main operator in the operation (main operator was defined as the person that makes day-to-day decisions about running the whole operation), 4.4 percent said they considered themselves to be the main operator. The majority of the respondents, 68.7 percent, felt that they were a joint operator in the operation. Approximately 18.9 percent of the respondents felt that they were a farm wife with no input into farm decisions.

The survey asked how many years the respondent had been living and/or working on a farm or ranch. The responses ranged from 2 to 72 years. Approximately, 24 percent of the respondents had either "lived or worked" for 25 or less years on a farm or ranch, 53 percent between 26 and 50 years, and 23 percent had "lived or worked" longer than 51 years on a farm or ranch.

The respondents were asked how many of their children were currently involved in managing the farm or ranch operation. The majority of the respondents said that none of their children were involved in the operation (59.3 percent). This was followed by 26.3 percent that said one of their children participated, 10.4 percent had two children participating and the

Table -1 General Characteristics of South Dakota Women in percentages<sup>a</sup>.

<u>Characteristic</u>	<u>Response</u>
Total Respondents	287
Age (years)	
Youngest	20
Oldest	72
Mean	48.85
Age (%)	
20-30 years	4.9%
31-40 years	23.2%
41-50 years	23.8%
51-60 years	30.2%
61-72 years	17.9%
Education (%)	
1-8th grade	2.4%
9-11th grade	1.8%
12th or H.S. equivalent	33.9%
Vocational School	10.5%
Some College	32.5%
Bachelors Degree	14.4%
Masters Degree	2.4%
Professional Degree	2.1%
Where They Grew Up: (%)	
Ranch	9.4%
Farm	54.4%
Rural Community	18.8%
Farm/Ranch	5.2%
Other	12.2%
Years Operation Has Been in Family: (%)	
Less than 15 years	10.5%
16-25 years	13.8
26-40 years	24.0%
41-55 years	18.0%
56-70 years	12.4%
71-85 years	12.3%
86-116 years	9.0%
Employed Off-farm:	
Yes	49.5%
No	50.5%

<sup>a</sup>Column percentages sum to 100 percent for each question and represent the distribution for those women answering the question. Approximately one to two percent of the respondents did not answer the question.

balance (4.1 percent) had more than two children participating in the management of the operation.

The respondents stated that the farm or ranch operation had been "in the family" from 2 to 116 years. The largest category (5.6 percent) was for 18 years. Approximately 4 percent of the responses stated the operation had been in the family either 30, 40, 50, 60 or 70 years.

#### **Farm and Ranch Characteristics**

Individuals were asked to provide general information about the farm or ranch they are currently involved in. They were also asked about landownership, types of enterprises produced and marketed, and business organization.

Respondents were asked how many acres were leased, rented or titled in their name alone, with another individual or did not have their name on the lease or title. Approximately 17 percent of the respondents said that the land was owned in their name only and the number of acres ranged from 40 to 6400 acres. Approximately 20 percent said that the land was owned by their husband. The largest percentage fell into the category of "owned in both our names" with 60 percent responding in this category. When asked if the title was in the respondent's name along with someone else, 7 percent responded. Approximately 6 percent said that the title was not in their name.

Respondents were asked about those acres that were rented or leased from another individual and whether or not the lease or rental agreement was in their name. Approximately 3.5 percent of the respondents said that the agreement was "solely in their name" and the number of acres in that agreement ranged from 2 to 10,300 acres. The majority of the respondents said that the agreement was in only their husband's name (22 percent), 20 percent of the

respondents said that the agreement was in both their name and their husband's and 5 percent said that the agreement did not have their name on the title. The balance of the respondents indicated it was in their name and someone else other than their spouse.

The respondents were then questioned about the types of crops and livestock produced on their operation. They were asked to report the number of acres of crops and number of animal units that were produced and marketed. They were also asked to designate the amount of their total gross income derived from producing either crops or livestock. Approximately 12.5 percent said they received none of their gross income from crops. This is due to operations that defined themselves as primarily livestock producing and the crops that are grown are fed entirely to the livestock. Approximately 12 percent of the respondents said that 50 percent of their income was derived from crop production. The balance of the respondents indicated a ranged from one, or a small portion of gross income is derived from crop production, to 100 percent, where all of the gross income is derived from crop production.

The responses to the amount of gross income derived from livestock production ranged from zero to 100 percent. A response of zero percent indicated that none of their gross farm income was derived from livestock and a response of 100 percent meant that all of their income is derived from livestock production. The largest percentage (12.5 percent) of the respondents stated they received none of their gross income from livestock production. The second largest percentage was 10.8 percent where the respondents said that 60 percent of their income is derived from livestock production.

The respondents were also asked about the distance, one way, to a town of greater than 2,000 people. It was felt that a town of this size would

provide the farm and family with at least a few services and opportunities for off-farm employment. Table 2 summarizes the responses to the distance to town.

Table 2 Responses to distance to a town of greater than 2,000 people in percentages.

Distance	Percentage
10 miles or less	16
11 to 20 miles	18
21 to 30 miles	20
31 to 40 miles	13
41 to 50 miles	13
51 to 70 miles	11
Greater than 70 miles	9

Source: 1990 Farm Women Survey

The respondents were asked about the number of generations currently working on the operation and who made the majority of the decisions. The majority (54.6 percent) of the respondents stated that there was only one generation living on the farm. This was followed by two generations, with 39.2 percent, and 6.2 percent had three generations living on the operation. The majority of the decisions were made by the respondent's generation, 92 percent. This was followed by 4.6 percent that said the decisions were made by the subsequent generation and the balance reported that the decisions were made by the previous generation.

The respondents were asked about their farm's type of business organization. This question did not ask whether or not it was a legal arrangement, but only their perception of the organization. The majority of the respondents, 67.9 percent, stated that the business was a single

proprietorship. This was followed by 23.2 percent responding that the farm was a partnership, 7.5 percent stated it was a family held corporation, and the balance (1.4 percent) indicated they were either unsure of the business organization or the organization fell into a different category.

#### **Farm Task Participation and Farm Decision Making**

Respondents were asked questions about their role in the operation, in labor participation and decision making. Table 3 summarizes the responses of the individuals in each category in the area of labor participation. The categories were divided by whether the duty was done regularly, occasionally, or never by the respondent or whether the task was not done on the operation. Table 4 summarizes the responses of who makes the final decision on the operation. The categories were divided by whether the respondent usually makes the final decision, someone else makes the decision, the decision is a joint decision or the respondent did not know who made the final decision.

When regular and occasional duties are combined, women participate more in support related and livestock related tasks compared to crop related tasks. The respondents indicated that they are heavily involved in "doing household tasks and paying household bills", "doing yard and garden work", "caring for children", "running farm errands" and "farm book keeping".

Women are heavily involved in management as evidenced by percentage responding for joint decision. This is particularly evident in those decisions that involve a change in the operation such as purchasing or renting land, the future plans for the operation, allocation of money to the farm or family, and when to retire from farming.

The respondents were asked about who, outside of the family, helped make decisions concerning the operation. Approximately 31 percent of the

Table 3. Farm task participation in percentages.

Type of Farm Task	Regular	Occasional	Never	Not Done
Plowing, disking, etc.	15.8	25.8	47.3	11.1
Applying chemicals	3.3	10.5	69.1	17.1
Making equipment repairs	4.3	29.3	56.2	10.1
Field work w/o machinery	16.2	44.2	24.1	15.5
Harvesting crops	24.4	43.6	24.0	8.0
Caring for farm animals	40.6	42.0	11.7	5.7
Feeding livestock	32.2	40.6	18.8	8.3
Milking dairy cows	9.4	4.5	22.6	63.5
Animal health care	29.5	33.8	25.5	11.2
Animal husbandry	35.1	30.8	20.3	13.8
Running farm errands	63.8	33.0	1.4	1.8
Marketing farm products	10.6	38.0	38.0	13.5
Farm book keeping	71.3	17.4	8.5	2.8
Paying household bills	90.0	8.2	1.1	.7
Supervising family labor	27.0	35.0	21.2	16.8
Supervising hired labor	9.9	27.7	30.3	32.1
Doing household tasks	98.3	1.0	.7	0
Caring for a garden	74.3	13.6	2.1	10
Doing yard work	87.0	12.6	.4	0
Caring for children	67.3	11.9	4.2	16.5
Working in an in-home bus.	14.2	13.1	16.1	56.6
In-home farm business	7.0	11.0	25.4	56.6
Making household repairs	35.8	53.9	8.5	1.8

Source: South Dakota Farm Woman Survey, 1990

Table 4. Who makes the final decision in percentages.

Decision	1	2	3	4
Whether to buy or sell land	1.4	11.6	84.2	2.8
Whether to rent/lease land	1.1	18.5	79.0	1.4
Buy major farm equipment	1.1	26.8	70.0	2.1
Rent/lease farm equipment	1.4	33.0	59.1	6.5
Produce a new enterprise	1.1	33.9	61.3	3.6
When to sell products	1.8	48.0	48.0	2.2
Try a new production practice	1.1	44.9	48.5	5.5
Respondent takes off-farm job	28.7	4.0	58.8	8.5
When farm bills are paid	33.7	21.4	44.9	0
When to retire from farming	4.3	12.5	72.9	10.4
Future plans for operation	3.2	14.6	79.4	2.8
Improve farming practices	4.6	29.5	59.4	6.4
When family bills are paid	56.0	5.3	38.7	0
Purchase household appliances	28.1	1.8	70.1	0
When to make household repairs	30.4	5.4	64.3	0
Improve house vs. business	9.0	7.2	81.0	2.9
Allocate money to family	21.0	8.2	70.5	.4
Whether to borrow money	3.3	17.0	77.9	1.8

Source: South Dakota Farm Woman Survey, 1990

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



respondents said that someone else helped make some of the decisions and 68 percent said that no one else helped make decisions. When asked who provided assistance when decisions were made, the majority responded that it was a male relative.

The respondents were asked about the future of the operation should something happen to either their husband or themselves. Approximately 46 percent said that they could probably run the operation should something happen to their husbands and 43 percent said they could probably not run the operation.

When asked about the future of the operation if something should happen to the respondent, approximately 59 percent said the operation would definitely continue, 29 percent said it would probably continue, 5 percent said they didn't know about the future, and 6 percent said that it would not continue without their participation.

The respondents were asked about their perception of their role in the operation. The question was phrased such that each subsequent category built upon all the preceding categories. For instance, if a respondent said phrase five best described their role, then phrases one through four also described the role. The largest portion of the respondents said that their role was that of "A woman who shares equal work, responsibilities, or decision making on all aspects of the farm operation" (30.6 percent). The second largest category was the role "A woman whose main responsibilities are book keeping, information gathering, and financial decision making, but whose husband is the primary operator" (29.9 percent). Approximately 18 percent of the respondents said their role was that of "A women whose main farm activities involve running errands and traditional house making chores". Approximately 1.8 percent of the

respondents said that their role was "A woman who manages the farm largely by herself".

Respondents were asked about the level of responsibility and the constraints that inhibit their participation in the operation. Approximately, 80.9 percent stated that they had the "right amount" of responsibility for their operation, 9.4 percent stated that they had too little responsibility, and 4 percent stated that they had too much responsibility. The respondents were asked what constrained their participation in the operation. The largest constraint was "family preference" (19.6 percent), this was followed by "physical limitations" (19.3 percent), "experience" (15.2 percent), "small children" (12.6 percent), "off-farm employment" (9.8 percent) and "size of operation" (5.9 percent).

#### Off-Farm Employment

Respondents were asked questions about off-farm employment, time adjustment's due to off-farm employment and reasons why they chose to work off the farm. Approximately 49.5 percent of the women responding said they were currently working off the farm and 71.9 percent of the respondents stated that they had held a job for pay off the farm sometime in their life. The average salary earned by respondents currently working off the farm was 10,156 dollars. The salaries earned in 1989 ranged from 300 to 42,000 dollars.

The respondents were also asked about the time adjustments and reasons for seeking employment off the farm. Tables 5 and 6 summarize the time adjustments and reasons for seeking off-farm employment. The greatest decrease in time, after becoming employed off the farm, occurs in time for self. "Being with spouse", "doing housework", and "spending time with children" only slightly decreased after becoming employed off-farm.

Table 5 Time adjustments after becoming employed off the farm in percentages<sup>a</sup>.

	Slightly Decreased	Greatly Decreased	Stayed The Same
Being with spouse.	42.2	27.7	30.1
Doing community and volunteer activities.	31.3	36.8	31.9
Doing farm/ranch labor.	39.1	32.9	28.0
Doing housework.	45.6	16.9	37.5
Spending time with children.	42.0	19.6	38.5
Doing book work for farm.	20.9	17.1	62.0
Time for myself.	26.5	53.1	20.4
Caring for children.	41.6	13.1	45.3

Source: South Dakota Farm Woman Survey, 1990

<sup>a</sup> Totals represent only those individuals responding to the question.

Table 6 Reasons for having an off-farm job in numbers of individuals responding<sup>b</sup>.

Reason	Number of Responses
Provide basic family necessities.	63
Having greater financial security.	39
Keeping up and using my skills.	47
Accomplishing something important to me.	42
Meeting basic farm expenses.	27
To have money for myself.	47
Working with other people.	35
Get out of house, see people.	47
Need the money.	61

Source: South Dakota Farm Woman Survey, 1990

<sup>b</sup> The total number of individuals responding to each reason ranged from 137-166.

When questioned about the reasons for having off-farm employment the greatest reasons was to "provide for family necessities" and because "they need the money". Other reasons for off-farm employment were for more personal satisfaction such as "accomplishing something important to me", "to have money for myself", and "to get out of the house, and see people".

If the respondents were currently not working off the farm, they were asked if they planned to start looking for a job during the next year. The majority of the respondents stated that they were currently not seeking employment off the farm (94.7 percent) and the balance (5.3 percent) stated that they intended to begin seeking employment during the next 12 months. The respondents were also asked if their husbands were employed off the farm. Approximately 38 percent stated that their husbands were employed off the farm.

#### Legal Arrangements For The Operation

The respondents were also questioned about the legal arrangement for the farm operation. Approximately 81.2 percent stated that their operation was not under a formal partnership or corporation. Of the percentage of farms reporting it was under a legal arrangement, approximately 65.3 percent stated it was a partnership and 34.7 percent stated it was a family corporation. In the majority of the partnerships (69.7 percent), the respondent owned 50 percent of the operation. Approximately 6 percent of all respondents said they owned 90 percent or greater of the operation.

#### Success

The last section of the survey asked general questions about the success of the operation and the forces that limit participation on the farm. When asked if they perceived the operation as being successful (successful was

defined as the quality of life is adequate, the farm provides a "good" income, etc.), 83.8 percent of the respondents said it was successful.

#### Participation/Decision Making As Affected By Selected Variables

This portion of the report examines the responses to farm task and decision making based on age, geographic location, primary enterprises, business organization and size of the operation. This section examines the responses based the identified key independent variables.

The responses were based only on those individuals that responded to the independent variable. For example, if a respondent did not respond to the question about the county their farm resides in, then their responses to farm task participation and decision making based on geographic area was not included in the analysis. This holds true for each of the other key independent variables.

The responses have been compiled into tables and grouped into participation in farm task and decision making for each key independent variable. This section presents the tables and explains how the independent and dependent variables were grouped to meet the objectives of the research.

Respondents were given four choices in the each of the two categories (farm task participation and decision making). In farm task participation they were asked to indicate whether the duty was a regular duty, an occasional duty, they never perform the duty or that the duty was not done on their operation. In decision making they were asked to indicate who makes the final decision. The choices available for this question were: I usually make the decision, someone else makes the decision, the decision is a joint decision, or they don't know who makes the final decision.

Farm task participation was grouped into three categories: crop

production related tasks, livestock production related tasks and farm supporting tasks.

Decision making pertains directly to the farm operation. These include buying, selling, renting or leasing land, purchasing farm equipment and inputs, when farm bills are paid, borrowing money, etc.

Each of the following tables are grouped into farm task participation and decision by each of the independent variables. An explanation of how each of the independent variables was chosen is included in this section.

Tables 7 and 8, summarize the farm task participation and decision making style, based on the type of business organization. Respondents were given a choice of four types of farm business organizations. They were: sole proprietor, partnership, family corporation and other. Respondents were asked to choose which best described their operation. Based on their choice, a two-way table was developed to group the respondents.

Survey respondents were asked to classify their operations, which may have led 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 organization is the number of people involved in either decision making or farm task participation.

When regular duty and occasional duty are combined, crop related tasks show mixed results. Participation in field work with machinery was stable 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 increases.

The majority of the livestock related tasks showed a lower level in participation in a partnership compared to a single proprietorship or family

Table 7 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 piggling, 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: 50 Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

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

Table 8 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: 50 Farm Women 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

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 decisions solely in the single proprietorship organization. This may be due to the number 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.

Tables 9 and Table 10, respectively, summarize the farm task participation and decision making style, based on off-farm employment status. Those responding "not employed" are currently not employed off the farm. Those responding "employed" are currently employed off the farm.

In general, there is a shifting from participation in tasks from a regular duty to an occasional duty in a number of the categories when employment status is compared. This was expected due to the time constraints placed on the woman.

Off-farm employment does not preclude participation in farm related tasks. The woman is still highly involved in all areas of farm related tasks. In four of the livestock related tasks (#6, 7, 9, and 10), increases in participation were found when regular and occasional duties are combined. This may be due in part to the types of enterprises on the operation or the family's perception of her off-farm job. The family may perceive the



Table 9 Farm task participation based on off-farm employment status, in percentages.

20

Role	----- Off-farm Employment Status -----							
	Not Employed				Employed			
	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	17	25	48	10	10	31	45	13
2. Applying crop chemicals	3	12	70	15	2	7	72	20
3. Making farm equipment repairs	3	27	60	10	3	29	57	11
4. Field work without machinery	17	49	18	17	14	46	24	16
5. Harvesting, including truck driving	28	41	25	7	19	49	22	10
6. Taking care of farm animals	37	42	13	8	40	44	13	3
7. Feeding livestock	25	41	22	12	34	44	18	4
8. Milking dairy cows	11	4	25	60	7	4	21	67
9. Animal health care, including vaccinating, etc.	25	33	27	15	27	36	30	7
10. Caring for animals during pigging, lambing, etc.	34	25	20	21	30	39	22	8
11. Running farm errands	71	23	4	3	49	50	0	1
12. Marketing products	13	44	30	13	9	26	46	19
13. Bookkeeping, maintaining records, paying bills	72	16	9	4	64	23	9	4
14. Supervising hired labor	14	29	30	26	4	25	32	40

Source: SD Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

1 = Regular duty

2 = Occasional duty

3 = Never done

4 = Not done on the operation.

Table 10 Decision making style based on off-farm employment status, in percentages.

	----- Off-farm Employment Status -----							
	Not Employed				Employed			
	1	2	3	4	1	2	3	4
1. Buy or sell land	2	12	85	2	1	15	81	4
2. Rent/lease more or less land	2	19	79	1	1	22	75	2
3. Buy major farm equipment	2	26	70	2	1	29	68	3
4. Rent/lease equipment	3	29	59	9	1	36	57	6
5. Produce new crop/livestock	1	32	64	3	2	37	57	4
6. When to sell products	3	45	50	2	2	54	42	3
7. Try new production practice	2	49	47	3	1	48	44	7
8. Future plans for operation	4	11	83	3	4	19	75	3
9. Seek new information	1	29	64	5	6	33	53	8
10. Borrow money	5	14	79	2	2	22	74	2

Source: SD Farm Women 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

employment as a "luxury" and thus may insist that she participate, at least in part, in more farm related tasks.

There is a decrease in combined participation in marketing products and supervising hired labor. This, again, may be due to the time required to perform each of these tasks. Farm record keeping becomes more of an occasional duty for employed women compared to not employed women.

Joint decision making is high for women whether they are employed off the farm or not employed off the farm. Decision making patterns are often established early in a relationship and the woman may be consulted in much the same fashion after she becomes employed off the farm.

There is an increase in the number of women indicating the "someone else" makes the decision in "when to sell products", "future plans for the operation" and "borrowing money". Instead of the decision being a joint decision, the farm woman may be suggesting that her husband makes the decision and she is less involved in those areas of decision making.

Tables 11 and 12, respectively, summarize the farm tasks participation and decision making style based on geographic region. The geographic region for this study was defined similar to an earlier study done by Janssen, et al, 1990. The Janssen study defined geographic region based on total number of acres operated and the percentage of total acres devoted to crop production. In eastern South Dakota the average farm size is 820 acres with 63 percent of total acres devoted to cropland. In central South Dakota the average farm size is 2225 acres with 40 percent of total acres devoted to cropland. In western South Dakota the average farm size is 3,121 acres with 19 percent of total acres devoted to cropland. Based on these assumptions, the state was divided into three sections as seen in Figure 1.

Table 11 Farm task participation based on geographic<sup>a</sup> region, in percentages.

Role	Geographic Region											
	Central				East				West			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	16	30	46	8	14	21	50	13	12	31	44	13
2. Applying crop chemicals	1	13	76	10	3	6	75	16	6	16	50	28
3. Making farm equipment repairs	5	29	58	8	2	26	60	12	8	35	48	9
4. Field work without machinery	11	44	31	14	23	50	16	10	8	33	32	27
5. Harvesting, including truck driving	29	38	28	5	23	45	23	9	22	48	21	10
6. Taking care of farm animals	43	35	18	4	35	44	12	9	50	45	3	2
7. Feeding livestock	35	32	27	6	28	42	19	12	38	48	9	5
8. Milking dairy cows	12	1	23	64	6	6	24	63	13	5	19	63
9. Animal health care, including vaccinating, etc.	35	28	30	7	23	32	29	16	38	44	14	5
10. Caring for animals during pigging, lambing, etc.	40	29	20	10	27	29	24	20	45	36	12	6
11. Running farm errands	69	25	5	1	59	38	0	3	68	32	0	0
12. Marketing products	13	38	38	11	8	33	43	16	14	48	27	11
13. Bookkeeping, maintaining records, paying bills	81	10	6	2	62	24	10	4	78	14	6	2
14. Supervising hired labor	9	27	33	31	8	27	29	35	14	30	30	27

Source: SD Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

<sup>a</sup>Geographic regions is based on total acres and percent of total acres in cropland. (See Figure 1)1 = Regular duty      3 = Never done  
2 = Occasional duty      4 = Not done on the operationTable 12 Decision making style based on geographic<sup>a</sup> region, in percentages.

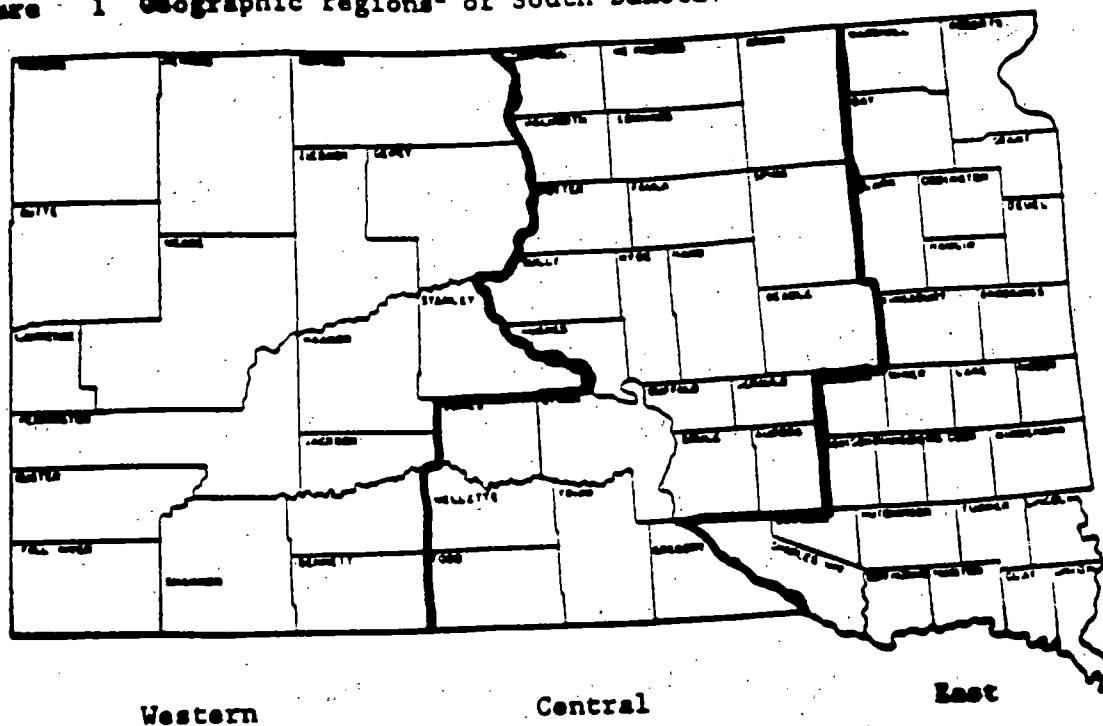
Decision	Geographic Region											
	Central				East				West			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Buy or sell land	0	7	92	1	0	12	84	4	6	15	76	3
2. Rent/lease more or less land	0	14	86	0	0	20	78	2	5	20	74	2
3. Buy major farm equipment	0	26	73	1	0	27	70	2	5	26	58	11
4. Rent/lease equipment	0	37	62	1	1	33	58	8	5	25	67	3
5. Produce new crop/livestock	0	31	65	4	0	40	56	4	5	25	67	3
6. When to sell products	1	51	46	1	0	52	45	2	6	34	56	3
7. Try new production practice	0	45	49	6	1	50	44	5	3	33	58	6
8. Futures plans for operation	2	15	80	2	1	16	79	3	8	9	80	3
9. Seek new information	2	28	67	2	3	33	59	7	11	27	52	11
10. Borrow money	3	18	80	0	2	17	80	2	8	17	72	3

Source: SD Farm Women Survey, 1990

Percentages are based on only those individuals responding to each question.

<sup>a</sup>Geographic region is based on total acres and percent of total acres in cropland. (See Figure 1)1 = I usually make the decision  
2 = Someone else makes the decision  
3 = Joint decision  
4 = Don't know

Figure 1 Geographic regions\* of South Dakota.



- \* - Major regions are based on averaged farm size and cropland acres.
- In Eastern South Dakota the average farm size is 820 acres with 63 percent of the total acres in cropland.
- In Central South Dakota the average farm size is 2225 acres with 40 percent of the total acres in cropland.
- In Western South Dakota the average farm size is 3121 acres with 19 percent of the total acres in cropland.

This information was obtained from Janssen, et al., 1989.

Tables 11 and 12 reflect the differences in the types of farm found in South Dakota. The respondents residing in western South Dakota, which is predominantly livestock oriented, participate in a larger percentage of the livestock related tasks when regular and occasional duties are combined. Women residing in eastern South Dakota participated more in field work without machinery compared to women both in central and western region. This may be due to crops grown predominantly in the east, such as soybeans, which require more hand weeding compared to small grains or corn.

Western South Dakota women participate more in "supervising hired labor" when regular and occasional duties are combined, compared to the other two categories. This may be due to the large ranches in the west and the amount of hired labor compared to east and central areas.

The decision making patterns based on geographic location is highly a joint decision in each category. Women living in eastern South Dakota participate more in joint decision making in the crop related decisions compared to west and central. This is due to the percentage of total land that is tilled compared to central and western South Dakota. This may be contrasted to the level of participation in livestock related decision being dominated by western women compared to east and central. Women living in western South Dakota responded that they usually made the decision more often than women living in eastern or central South Dakota.

There appears to be some variation in farm task participation and decision making based on geographic location. This may be due to the enterprise mixtures found across the state and the types of labor required to by those enterprises.

Tables 13 and 14, respectively, summarize farm task participation and

decision making style based on crop and livestock enterprise mixture. Crop and livestock enterprise mixtures were defined by the percentage of gross farm income derived from each of the enterprises. Respondents that stated that they derived 50 percent or greater (see table definition) of their gross farm income from crop production were defined as a crop operation. If respondents stated that they derived greater than 50 percent of their gross farm income from livestock, they were defined as a livestock operation. If respondents stated that they received 50 percent of their gross farm income from crops and 50 percent from livestock they were defined as a crop and livestock enterprise. Those respondents that did not define the amount of gross farm income derived from each of the enterprises or indicated that the percentage of their gross farm income was less than 50 percent were not included in the analysis.

Participation in farms tasks appears to be similar when participation is divided into crop and livestock operations and when regular and occasional duties are combined. Women continue to be more involved in livestock related tasks but their participation in crop related activities is similar when crop and livestock are compared.

In the mixed operations, women participate more in milking cows and supervising hired labor, compared to the other two categories. This may be due to a division of labor on operations where crops and livestock are produced. The women may be responsible for helping with livestock tasks, especially during busy times such as harvest and planting.

Women participate highly in joint decision making in each of the types of operations. Those individuals that indicated their operation was a mixture of crops and livestock indicated that "someone else" makes the decision a

Table 13 On-farm task participation based on crop and livestock enterprise mixture<sup>a</sup>, in percentages.

Role	Crop/Livestock Enterprise Mixture											
	Crops & Livestock				Crops				Livestock			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	8	33	58	0	19	24	48	9	15	31	43	10
2. Applying crop chemicals	0	17	83	0	4	7	80	9	4	12	63	21
3. Making farm equipment repairs	0	33	67	0	0	29	62	10	3	31	53	12
4. Field work without machinery	17	42	42	0	15	53	15	17	18	44	24	13
5. Harvesting, including truck driving	8	50	42	0	31	33	31	6	25	46	20	9
6. Taking care of farm animals	46	38	15	0	26	43	17	15	45	49	5	1
7. Feeding livestock	31	54	15	0	14	35	31	20	36	50	12	2
8. Milking dairy cows	8	17	17	58	2	2	27	69	12	3	15	70
9. Animal health care, including vaccinating, etc.	31	31	23	15	17	25	38	21	36	43	15	6
10. Caring for animals during pigging, lambing, etc.	31	15	31	23	18	28	28	26	43	37	12	9
11. Running farm errands	77	23	0	0	63	31	2	4	68	31	1	0
12. Marketing products	0	42	58	0	8	43	36	13	10	41	36	12
13. Bookkeeping, maintaining records, paying bills	69	31	0	0	70	15	11	4	75	17	6	2
14. Supervising hired labor	17	17	33	33	10	35	25	29	12	31	26	31

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

<sup>a</sup>See Table 14 footnote (a) for crop/livestock enterprise mixture.

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

Table 14 Decision making style based on crop and livestock enterprise mixture<sup>a</sup>, in percentages.

Decision	Crop/Livestock Enterprise Mixture											
	Crops & Livestock				Crops				Livestock			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Buy or sell land	0	23	77	0	2	5	93	0	1	9	87	3
2. Rent/lease more or less land	0	31	69	0	2	11	87	0	0	18	81	1
3. Buy major farm equipment	0	67	33	0	2	17	81	0	0	23	75	2
4. Rent/lease equipment	0	67	33	0	2	26	70	2	1	32	60	7
5. Produce new crop/livestock	0	54	46	0	0	36	62	2	0	30	68	2
6. When to sell products	0	83	17	0	2	48	50	0	1	46	51	2
7. Try new production practice	0	67	33	0	2	42	54	2	0	46	48	6
8. Futures plans for operation	0	23	77	0	0	17	81	2	3	8	89	1
9. Seek new information	8	46	46	0	2	30	67	2	4	29	61	6
10. Borrow money	0	33	67	0	2	17	81	0	4	16	79	2

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

<sup>a</sup>Crop/livestock enterprise mixture is based on percent of gross farm income derived from production.  
Livestock = 50 percent or greater of gross farm income is derived from livestock production  
Crops = 50 percent or greater of gross farm income is derived from crop production  
Crops & livestock = 50 percent is derived from crops and 50 percent is derived from livestock

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

greater percent of the time compared to the other two categories. This may be due to the complexity of managing an operation with several enterprises and a greater need for assistance with marketing, feed formulation, etc.

Tables 15 and 16, summarize the farm task participation and decision making style based on stage in the life cycle. For the purpose of this study, the stage in the life cycle is defined by the age of the last child. According to the U.S. Department of Commerce, Bureau Of The Census, the average age of the mother is 28 years of age when the last child is born. The woman is 34 years of age when the last child starts to school full time. It was felt that when the last child entered school the woman's time requirement in the home would be reduced, affording greater time to participate in farm related activities. The youngest woman in the survey was 20 years of age, thus, the period between 20 and 34, inclusive, is termed the early years of the life cycle.

The middle years of the life cycle are defined between the ages of 35 and 55. At 55 years of age, the last child is old enough to assume, or at least partially assume responsibility for farm tasks and management decisions. This is based on the age of the child and assumes the child attends college.

The later years of the life cycle are defined as 55 years of age and older. During this stage, participation in farm related tasks and decision making are being relinquished to the next generation.

When regular duty and occasional duty are combined, the livestock related duties (#6-10) show a decrease as one moves across the table. Participation in livestock-related tasks is highest in the early stages and at it lowest in the later stages of the lifecycle. This may in part be due not to age, but to increased capitalization and mechanization of the operation over



Table 15 On-farm task participation based on stage in life-cycle<sup>a</sup>, in percentages.

Role	Stage in Life Cycle											
	Early				Middle				Late			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Plowing, disking, cultivating or planting	15	26	47	12	17	32	40	10	15	19	55	12
2. Applying crop chemicals	6	9	69	17	2	10	71	16	3	12	67	18
3. Making farm equipment repairs	6	26	66	3	2	37	51	10	6	23	58	13
4. Field work without machinery	11	46	26	17	19	52	15	15	14	36	34	16
5. Harvesting, including truck driving	17	54	23	6	29	46	16	9	22	38	32	7
6. Taking care of farm animals	60	40	0	0	44	43	9	4	32	42	18	9
7. Feeding livestock	54	43	3	0	34	43	16	6	24	37	26	13
8. Milking dairy cows	15	3	18	64	7	7	13	72	10	2	34	54
9. Animal health care, including vaccinating, etc.	49	43	9	0	36	34	21	9	17	31	35	17
10. Caring for animals during pigging, lambing, etc.	49	40	9	3	39	31	17	13	27	27	27	18
11. Running farm errands	80	20	0	0	66	34	1	0	57	36	3	4
12. Marketing products	20	23	43	14	12	45	33	10	6	35	42	16
13. Bookkeeping, maintaining records, paying bills	94	6	0	0	67	20	9	4	69	18	10	2
14. Supervising hired labor	2	37	23	34	8	32	28	33	13	21	35	31

Source: SD Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

<sup>a</sup>See Table 16 footnote (a) for stage in life-cycle definition.

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

Table 16 Decision making style based on stage in life-cycle<sup>a</sup>, in percentages.

Decision	Stage in Life Cycle											
	Early				Middle				Late			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Buy or sell land	0	14	83	3	1	14	82	3	2	9	87	2
2. Rent/lease more or less land	0	18	82	0	1	19	78	2	2	18	79	2
3. Buy major farm equipment	0	11	89	0	1	33	64	2	2	25	70	2
4. Rent/lease equipment	3	17	71	9	1	36	59	4	2	34	56	8
5. Produce new crop/livestock	0	23	74	3	1	30	66	2	2	41	52	5
6. When to sell products	0	40	57	3	2	48	47	2	2	50	47	2
7. Try new production practice	0	40	57	3	0	44	50	6	3	47	44	6
8. Futures plans for operation	3	11	86	0	2	15	80	3	4	16	77	3
9. Seek new information	11	14	69	6	4	28	62	6	3	35	54	7
10. Borrow money	6	9	83	3	2	17	80	1	3	20	74	2

Source: SD Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

<sup>a</sup>Stage in life-cycle is defined by age of the respondent:

Early = <35 years of age  
 Middle = 35-55 years of age  
 Late = >55 years of age

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

the course of time. As the farm becomes more mechanized, labor requirements decrease, and thus the womans' role decreases as well.

Crop related tasks (#1-5) show mixed results when regular and occasional duties are combined. Doing field work without machinery, doing field work with machinery and harvesting all showed increases moving from the early stage to the middle stage and decreases when moving from the middle stage to the later stage.

The support related farm tasks (#11 - 14) also showed mixed results. Farm book keeping was highest in the early stage and less in the middle and later stages. This may be due to the educational levels of women entering farming and ranching. This may also account for why she is performing more of the book keeping tasks.

Farm decision making is strongly a combined effort between the husband and wife. This is evident in each stage of the lifecycle. There is an increase in "someone else" making the decision in areas 5 through 10 as one moves through the lifecycle. This may be due to a shifting of responsibilities to a professional (marketing, livestock, crop, etc.) during the middle years of the lifecycle and to the next generation during the later years of the lifecycle.

Tables 17 and 18 summarize the farm task participation and decision making styles based on the size of the operation. The size of the operation is based on gross farm income. A small operation is defined as having a gross farm income of less than 50,000 dollars. A medium size operation has a gross farm income between 50,000 to 250,000 dollars and a large size operation is defined as having a gross farm income of greater than 250,000 dollars.

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

Table 17 On-farm task participation based on the size of operation<sup>a</sup>, 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 piggling, 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: 50 Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

<sup>a</sup>See Table 18 footnote (a) for size of operation definition.

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

Table 18 Decision making style based on the size of operation<sup>a</sup>, 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: 50 Farm Women Survey, 1990

Percentages are based on those individuals responding to the question.

<sup>a</sup>Size of operation is based on gross farm income:

Small = gross farm income &lt; \$50,000

Medium = gross farm income between \$50,000 and \$250,000

Large = gross farm income &gt; \$250,000

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

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, where 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", "borrowing money" and "buying and renting land".

Women's participation in farm tasks and decision making is not negatively related to size of the operation. Women continue to be consulted on farm decisions and participate in farm-related tasks.

#### Barriers To Participation

Women were asked on the survey to indicate reasons why they felt that their participation was limited on their operation. These responses were handwritten by the respondents on the back of the survey. These responses were grouped into technology related, business related, society related and family

related. This section will briefly summarize those comments.

Several women indicated that family members limited the amount of time they spent participating in farm tasks and decision making. Some of these reasons were due to their role as a housekeeper, cook and child care provider. Listed below are direct quotes from the survey.

*"I need more cooperation among all of us to get inside and yard work completed as well as meals prepared. Right now, it all still seems to fall on my shoulders although my children are old enough to help".*

*"I need more acceptance by other family members. Women on this operation are not readily accepted as equal laborers by my in-laws".*

*"I wish it was acceptable (by other family members) for me to learn how to run the machinery. I don't feel that I am strong enough to do the animal chores I do and would feel it might be easier for me to drive a tractor".*

*"I would help outside more if someone would come inside and help out with small children."*

The women also indicated that their perceived role in society also limited their participation in farm tasks and decision making. Some of these reasons related to their contact with government agencies, other reasons were related to the type of education they received early in their lives.

*"I have a hard time dealing with government agencies (USDA, ASCS, SCS) and feel that they discriminate against women".*

*"At a time when I wanted to learn more about agriculture, it wasn't acceptable for a woman to take agricultural classes. Maybe if I had gotten the opportunity I would be participating more."*

*"More recognition and respect for farm women by society".*

Women indicated that their current form of business organization limited their participation. Some of these reasons were related to the size of the operation and the numbers of family members participating in the decision making process.

*"We are involved in a father-son partnership and this limits my participation. It also creates problems, at times, between my husband and myself".*

*"If we operated a smaller ranch I know I could be more involved in all aspects, but the family partnership between my husband and his brother limits my participation."*

*"I had more influence in the decisions of the operation before we became a legal partnership. I want it to be a family operation like it was before".*

*"The corporation limits my participation and our progress on the operation. We have too many voting members that do not reside on the operation and this makes it difficult."*

There have been changes in technology and the lack of educational opportunities that have limited the woman's role on the operation. The role as an off-farm employee also places some constraints on the level of participation in farm tasks.

*"I would like to take additional college courses to better understand marketing and why prices fluctuate so much."*

*"If I was no longer employed off the farm I would have more time to be involved."*

*"I need a better understanding of general farm economics, marketing principles, etc. gained through classes might help me to participate more fully."*

*"I need more educational opportunities so that I can be more informed."*

The women indicated that there were components of the family, society, agricultural technology, and the business organization that limited their participation in farm tasks and decision making. Some of their comments indicate that the woman's perceived role (and the families perceived role of her) as a housekeeper, child care provider and cook place time constraints on her level of participation. The numbers of family members involved in decision making, often times, excludes her participation from the decision making process. The women also

indicated the need for further educational opportunities so that they might feel better equipped to help in the decision making process.

## SECTION TWO: RESULTS AND RECOMMENDATIONS

This section of the report summarizes the results of the research project. Included in this section are recommendations for programming based on the results of the project.

When the aggregate sample results were analyzed, it was found that women participate highly in farm tasks that can be categorized as labor intensive tasks which require more physical labor than mechanical labor compared to mechanically intensive tasks. These tasks included performing field work without machinery, caring for farm animals, feeding livestock and animal health care. Women also performed farm support related tasks such as running farm errands, marketing farm products and farm book keeping. The respondents also indicated that performing farm tasks did not relieve them from household related tasks such as cleaning, cooking, caring for children, doing yard work and paying household bills.

Analysis of the data also indicated that women are highly involved in joint decision making on their farm or ranch operation. The highest joint decision making occurred in making land and equipment changes on the operation, when to retire from farming, future plans for the operation, allocation of money to family living and whether to borrow money.

The women were asked to indicate what they considered to be their role on the operation. The majority of the respondents indicated that they considered themselves to share equally in the work, responsibilities and decision making on all aspects of the farm or ranch operation.

The respondents were asked to indicate what they believed were barriers to their participation on the farm or ranch. The responses were grouped into

technology related, business related, societal related and family related. The respondents indicated that the family's perception of her role as a housekeeper, cook and child care provider inhibited fuller participation. The respondents indicated that society's view of the role of women created barriers when they dealt with government agencies and took non-traditional classes at school (or were not permitted to take those classes). Changes in technology and the farm business also have created barriers to participation. These barriers included lack of access to educational opportunities to upgrade their skills, off-farm employment, and an increase in the complexity of farm financial management.

Almost half of the women responding to the survey indicated that they were currently employed off the farm. In general, there was a shifting of farm task duties from regular to occasional duties. It was found, however, that there was an increase in participation in some livestock related tasks among women working off the farm compared to women not working off the farm. The respondents also indicated that their employment status did not inhibit their participation in farm decision making.

When the types of business organizations were analyzed, there were mixed results when occasional and regular duties were combined. The type of business organization did not affect the level of participation in performing field work with machinery but did affect performing fieldwork without machinery. There was a decrease in performing livestock chores on partnership organizations compared to single proprietorship or corporation. In addition women were highly involved in farm book keeping in all types of business organizations.

When different geographic regions of South Dakota were analyzed, there were differences in participation in farm tasks due mainly to the types of production enterprises in different areas of the state. There is higher participation in



livestock related tasks in western South Dakota compared to eastern. In contrast, there occurs a higher participation in performing field work without machinery in eastern South Dakota compared to the other two regions. When decision making styles were analyzed, it was found that women residing in western South Dakota responded that they usually made the decision more often than women living in eastern or central South Dakota.

When types of enterprises, crop or livestock, were compared, women participated more in livestock related tasks compared to crop related tasks. In mixed operations (operations that had both crops and livestock), women indicated they participated more in milking cows and supervising hired labor compared to the other two categories.

When stage in the lifecycle were compared, it was found that there was a difference among the respondents. Participation in livestock related tasks and farm book keeping is highest in the early stage compared to the middle or later stages of the lifecycle. Stage in the lifecycle did not have an effect on the level of participation in decision making. Decision making remains a joint task throughout the lifecycle.

There was no indication that size of operation had a negative impact on the level of participation in farm related tasks. None of the crop, livestock or support related tasks showed a continual decrease, when regular and occasional duties were combined as the size of operation increased. The majority of the decisions were made jointly but participation was highest in medium size operations.

When size of operation, types of production enterprises, geographical location, off-farm employment status and stage in the lifecycle were analyzed, there was some variation noted among each of the independent variables. Research

discovered that women were highly involved, to some capacity, in farm task participation. The data indicated that women participate highly in making decisions that directly involve the farm or ranch operation.

### Conclusions

The South Dakota Farm Women research project was needed to assess the current needs of this portion of South Dakota's farm economy. The project built upon the current understanding and sought to qualify those contributions. Literature pointed to a growing awareness of the woman's role in the decision making process as well as the overall management of the farm. This project documents the role of South Dakota farm women, assesses some of the barriers to participation and identifies current needs.

It can be concluded that South Dakota farm women are more actively involved in the daily operation of the farm than was previously thought. The role of women includes participation in farm tasks as well as the overall management of the farming operation.

The percentage of women either currently employed or seeking off-farm employment continues to increase. This increase is creating a strain for women living on farms in South Dakota. Women are concerned about their multiple roles and are looking for sources of information to better prepare them to fill those roles.

The study points to a management "team" as opposed to a primary operator approach to farm management. In the past, programming has been directed toward the primary operator and has neglected half of the management team. By strengthening the whole team, the farm will be better equipped to handle day-to-day problems.

It can be concluded that these programs need to be audience specific. The data indicates that women need to be provided programs directed at their specific

needs. Those needs include their role as a farm laborer, participant in farm decision making, their role as a nurturer for the family, and their role as an employee off the farm.

### Recommendations

The 1990 South Dakota Farm Women study was the first study in South Dakota that was devoted to understanding the role of women in farm task participation and decision making. The study has provided a basis from which future studies can be conducted in the area of family farming. The project has shown that there is a need for further research as well as a need for programming directed at this specialized audience.

The data and personal interviews have shown that women currently living on farms and ranches in South Dakota need educational opportunities to enhance their role on the farm or ranch. Educational opportunities should provide information on family and farm management and off-farm employment opportunities.

Family management educational opportunities should include family communication, intergenerational family farming, and managing a family business. Farm management educational opportunities should include farm financial management, marketing, book keeping, and animal husbandry. With a large percentage of women working off the farm there also is a need for educational opportunities to enhance their marketability as an employee.

## REFERENCE LIST

- 1990 South Dakota Farm Woman Survey. South Dakota State University, Economics Department.
- Godwin, Deborah D. "Farm Wives' Preferences, Time Allocation, and Off-Farm Employment Status", Home Economic Research Journal, Vol. 17, No. 1, September 1988.
- Janssen, Larry, Virginia Clark, Ron Stover, Bernita Quoss, Peggy Schlecter, "Successful Farming In South Dakota: Technical Research Report". June 1990.
- Rosenfeld, Rachel and Calvin Jones, "American Farm Women: Findings from a National Survey". National Opinion Research Center, Report #130,
- Ross, Peggy J. "A Commentary On Research On American Farm Women", Agriculture and Human Values, Vol. 2, No. 1, Winter 1985.