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ABSTRACT

Researchers explored farm women's economic contributions to the family farm--an economic contribution traditionally underestimated or ignored--employing use value production as an indicator of labor. Active labor, usually defined as commodity production, was broadened to include value production, or all activity contributing to making a living. Household and farm task performance was measured (controlling for time of season and size and type of operation), comparative labor inputs were investigated, and off-farm employment motives and earnings were explored. Questionnaires returned in 1983 by 88 farm families in the eastern half of North Dakota provided data. Women were found to contribute more labor to farm tasks in the fall, on smaller farms, and on livestock farms, contributing at least 40 hours a week on the average to farm tasks. Women also performed 30% of the household tasks which consumed 80 hours a week on the average. Nearly one in three women reported off-farm employment; non-farm expenses and maintaining their careers were major reasons given. Distance and lack of available employment were found to pose the most difficulties for farm women in off-farm employment. Tables and figures present survey data by farm size and type and illustrate off-farm employment; an appendix lists farm and household tasks used in the survey. A short list of references concludes the document. (LFL)

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An Evaluation of Use Value Production of
Farm Women in an Agricultural State

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AN EVALUATION OF USE VALUE PRODUCTION OF
FARM WOMEN IN AN AGRICULTURAL STATE

by
Richard W. Rathge and Cynthia L. Swenson

The economic contribution of farm women to the family farm has traditionally been underestimated and largely ignored. Ironically, this lingering oversight has occurred inspite of research contributions documenting farm women's extensive involvement in agricultural enterprises. For example, the time budget studies of the 1920s (e.g., Crawford 1927, Wilson 1929) promoted and supported by the 1925 Purnell Act¹, offered quantifiable evidence of farm women's labor input. More contemporary studies have outlined the diversity of farm women's tasks (Fassinger and Schwarzweiller 1984; Jones and Kosenfeld 1981), wives participation in farm management (Sawer 1973; Wickening and Bharadwaj 1967), and the resultant impact on American as well as foreign agriculture (Gasson 1980).

Recent investigations into the economic contributions of homemaking activities, a parallel body of knowledge, additionally substantiates the largely unrecognized yet valuable unpaid labor input of women to families and households. One facet of this research has been to estimate the dollar value of homemakers' activities (e.g., Murphy and Peskin 1981; Gauger and Walker 1973; Brody 1975). Calculations, typically based on replacement costs, indicate the financial worth of homemaking varies dramatically. Estimates for the early to mid 1970s ranged from \$4,000 to \$20,000 annually (Hefferan 1982). The pronounced variability in these figures, in part, reflects the wide spectrum of recognition given to roles homemakers perform. In spite of a general lack of consensus, however, these efforts are beginning to receive attention from legislators, lawmakers, and public officials. Nonetheless, farm women as well as other women in many parts of the country remain

victimized by discriminatory inheritance tax laws, undercompensated in divorce settlements, wrongful death or personal injury lawsuits, and unrecognized by creditors, social security adjustors and loan officers.

This paper attempts to extend our understanding of farm women's economic contributions to the family farm by exploring the conceptual definition of work. Conventional wisdom or neo-classical economics suggests "active labor" is confined to commodity production (i.e., the production of goods and services for exchange). We broaden this perspective by viewing value production (i.e., all activity which contributes to "making a living") as a more appropriate indicator of active labor. Thus, we include both income-earning and non income-earning labor in our calculations of the economic activity of farm women. This is accomplished by measuring farm women's household and farm task performance controlling for time of season and size and type of operation. We conclude our paper with a discussion of relevant policy implications.

Defining Active Labor

The definition of active labor hinges on the conceptualization of "economic activity." From an orthodox perspective, the roots of economic activity are found in capital growth and accumulation, particularly in relation to commodity production. Classical economists would emphasize that the relative value of commodity production rests in its exchange potential in the market. As a result, the market is the benchmark for determining what constitutes labor and in providing parameters for assessing its corresponding value. From this orthodox economic perspective, it follows that activities not directly tied to the market mainstream are peripheral and considered noneconomic (Beneria 1981). In brief, active labor is "commoditized" labor, that is activities which produce goods and services for exchange. Labor force

Participation, therefore, is measured in terms of its direct ties to the market. Thus, farm-based activities or homemaking tasks are defined as active labor only if they produce goods or services for exchange. This theoretical framework has woven its way into the national income accounting and labor force statistics network

This theoretical framework has numerous drawbacks. The most obvious and pertinent to the present discussion is how one differentiates between activities which produce a good or service for exchange from those that do not. For example, in farming does fieldwork, barn chores, or maintenance functions (e.g., machinery repair, household upkeep, food preparation) independently produce a good? Those in farming would, most likely, agree that it is all three in concert which produce the product. As Fassinger and Schwarzweller (1984) suggest, farming is a multifaceted economic organization which involves both farm labor inputs and hidden factors of production. However, historically only those who earned a wage or were labeled "unpaid farm worker" were viewed as economically active. Household chores, food preparation, child rearing and other important maintenance functions have not fallen within the definition of unpaid farm worker even though some fieldwork and machinery maintenance has. As a result, these tasks remain excluded from the category of "productive work." Since women and children most often perform this type of labor, their unpaid efforts are largely unrecognized.

It is argued that this rather narrow approach to viewing the economic system is misleading. Beneria, (1981) for example, suggests that the exclusion of non-commodity production distorts both the analysis of economic activity and labor force participation by undervaluing women's work. Her position is that both use and exchange values should be included in the definition of active labor.

Use value production can be defined as all non income-earning activity which contribute to the production of goods and services for the satisfaction of human needs. Its importance and underlying link to the economic system can best be seen by evaluating how people "make a living" as compared to the more restrictive notion of how people "earn a living." The latter notion taps the income-earning activities of households while the former investigates all aspects of "work." On the surface, the semantics seem to be cutting a fine line with regard to the definition of work yet, the two notions are distinctly different. This paradox reflects the intuitively integral relationship between commodity and non-commodity production juxtaposed with the currently inadequate indicators of active labor. It is important to note that use value production only encompasses work related tasks and does not include leisure or recreational activity. Admittedly, there are difficulties with ambiguity (e.g., cooking for recreation) but this problem is not confined to use value production. Similar contradictions arise in commodity production (e.g., hunting, handicrafts).

There are several benefits to using this broader definition of "active labor." First, it offers researchers a more realistic tool to investigate the economic contributions members make to their household or family's economic well-being. Second, this technique may help expose sexist misconceptions of women's labor activities and initiate a more responsible evaluation of their efforts. Third, this approach will provide a more appropriate indicator of the effects of changing technology on all workers including homemakers. Finally, a more accurate picture of the unemployed or underemployed derived from use value production statistics may improve our strategies for assisting these individuals (e.g., employment programs).

This paper takes advantage of the first of these benefits by re-evaluating North Dakota farm women's economic contribution to their family farms. We first examine both the diversity and time commitment of farm women to farm and household tasks. Secondly, we investigate the comparative labor inputs of farm women. Finally, we describe what motivates farm women to seek off-farm employment, what factors impinge on their ability or choice to work off the farm, and how the money they earn off the farm is spent.

Methods

Data was obtained from a random survey of farm households in the eastern half of North Dakota. The study was restricted to the eastern portion of the state to avoid the impact of rapid energy development (i.e., coal, oil, and natural gas exploration and extraction) which began during the mid 1970s. Mail questionnaires were sent to farm households in the spring of 1983. A telephone follow-up survey was conducted to assess nonresponse bias. It was found that nonrespondents were primarily single males, widowers, and the elderly. A total usable sample of 88 farm families was analyzed.

The questionnaire was divided into several sections. The first section included general information about the size and type of operation (i.e., acreage, crops, livestock). The next two sections detailed farm and household tasks. This portion of the questionnaire replicated the work done by Fassinger and Schwarzweller (1984). In brief, a list of 29 farm tasks and 21 household tasks were given and the respondent instructed to identify family members who "normally" did the corresponding task or "helped" in performing that task. The respondent was requested to also report the average number of hours per week each task took. In addition, aggregate measures of the average number of hours spent on farm and household tasks for each season (i.e., spring, summer, fall, winter) were included. Finally, a question was

asked to assess the proportion of farm and household labor each member contributed. The fourth section of the questionnaire gathered information concerning off-farm labor. Items focused on a) type and amount of off-farm labor, b) the main reason for off-farm labor, and c) what the money was spent on. A final section was dedicated to demographics (i.e., age, education, location).

Farm Types

Farms were classified according to their scale and type. First, scale of operation was divided into three groupings, large, medium and small. Large farms were defined as those with more than 2,000 acres (N=16). Medium sized farms were those with at least one section of land (540 acres) but less than 2,001 acres (N=42). The average farm in North Dakota had 1,104 acres in 1982. Small farms were defined as those with less than one section of land (N=30).

Farms were also dichotomized into livestock (N=41) and non-livestock (N=47) operations. A livestock operation contained at least one of the following: a) more than 20 head of beef, b) more than 80 head of hogs, c) more than 60 dairy cows, d) more than 50 poultry, or e) more than 20 head of other livestock (e.g., horses, sheep). All other farms were defined as non-livestock operations.

Measuring Use Value

Use value was quantified in two ways. First, we focused on the temporal dimension. Respondents were asked to report the number of hours a week they generally spent on 29 item specific farm tasks and 21 identified household tasks (see Appendix 1). We assumed that part of the difficulty in undervaluing unpaid farm and household work is that much of it is unrecognized or taken for granted. If this lack of recognition is internalized, it is

likely that a respondent would not include many activities in their general assessment of the contribution they offer to the family farm. Thus, we used the sum of hours spent on individual tasks as an indicator of their actual input into the farm. Correspondingly, we used their assessment of the average number of hours spent on farm and household tasks, respectively, as a measure of their perceived input into the family farm.

The second dimension we considered was that of comparative labor input. Since time is only meaningful in a comparative context, we attempted to evaluate labor contributions relative to other members of the household. This was accomplished in two ways. First, we asked what percent of farm and household tasks, respectively, were performed by members of the household. This would provide us with a general indicator of perceived labor contributions. One obvious difficulty is that this judgment was made based on one person's observations, thus, probably slanted according to his or her perspective. Second, we asked the respondent to indicate "who does" and "who normally helps" do each of the 29 farm and 21 household tasks. This part of the analysis replicated the work done by Fassinger and Schwarzweller 1984. In brief, farm task participation scores (FTP) and household task participation scores (HTP) were calculated by dividing the total number of tasks performed on the farm or in the household by the sum of the 29 and 21 item specific weighted responses, respectively, multiplied by a constant (100) to obtain a rate. The item specific responses were weighted as follows: 2 = normally does task; 1 = normally helps do task. The general formula for each score was:

$$\frac{\text{sum of 29 weighted responses}}{(\# \text{ items done on farm}) \times (\# \text{ of weights}=2)}$$

$$\frac{\text{sum of 21 weighted responses}}{(\# \text{ items done on farm}) \times (\# \text{ of weights}=2)}$$

A score of 100 can be interpreted as that person performing all of the tasks, while a score of 25 represents a contribution of only 25percent.

Findings

Time Dimension

Several interesting findings were revealed with respect to the amount of time farm women contributed to farm and household tasks. First, we investigated shifts in time demands which paralleled the seasons (i.e., spring, summer, fall, winter). Respondents were asked to indicate the average total number of hours per week they spent on farm tasks each season. As one might suspect, there was a marked difference in the number of hours women contributed to farm tasks depending upon the season of year. Winter months tended to demand less of farm women (i.e., an average of 7 to 13 hours per week) with respect to farm tasks compared to spring and fall (i.e., an average of 23 to 41 hours per week). In general, farm women spent twice to three times the number of hours in spring and fall on farm tasks than they did during the winter months (see Table 1).

Second, following the evidence provided by Fassinger and Schwarzweller (1984), we analyzed the impact of farm size on farm women's labor input. Size of operation tended to have a slight impact on the number of hours farm women spent on farm tasks. Table 1 indicates that women on medium sized farms, in general, contributed fewer hours to farm task, on the average, than did women on larger or smaller farms. Fall seemed to be the major exception to this observation.

It is interesting to note that the size of the farm seemed to have a much greater impact on the number of hours farm women spend on household tasks than farm tasks. As seen in Table 1, the larger the farm size, the more time farm women spent on household tasks on the average. This is particularly

TABLE 1. AVERAGE NUMBER OF HOURS SPENT BY FARM WOMEN ON FARM AS HOUSEHOLD TASKS BY SIZE OF FARM AND SEASON

		Size of Farm					
		Small (N=30)		Medium (N=42)		Large (N=16)	
		X	S.D.	X	S.D.	X	S.D.
Farm Tasks	Spring	28.4	31.4	23.5	20.8	29.3	31.5
	Summer	22.0	25.8	20.9	20.0	27.7	30.6
	Fall	31.4	27.0	34.6	23.6	41.2	30.8
	Winter	12.3	21.5	7.0	9.8	13.7	23.4
	General*	57.6	62.1	84.0	85.4	39.9	62.1
Household Tasks	Spring	36.9	24.6	42.3	22.6	46.9	30.2
	Summer	38.0	25.8	43.7	23.8	50.8	32.0
	Fall	37.7	25.1	41.3	21.0	49.5	32.6
	Winter	34.0	23.3	40.2	19.9	36.4	23.6
	General*	85.2	53.3	85.5	62.3	86.7	48.2
Combined Farm and Household Tasks	Spring	62.8	37.1	66.6	23.8	76.4	57.8
	Summer	57.8	35.0	65.4	26.7	77.8	58.1
	Fall	69.2	35.8	76.6	27.0	90.5	54.3
	Winter	46.1	35.4	47.0	21.8	50.2	44.5
	General*	157.4	103.8	173.8	102.9	133.5	89.5

*General is an accumulation of the hours reported for all item specific tasks.

notable since the amount of time farm women dedicated to household tasks fluctuated little over the different seasons.

In general, farm women's investment in farm and household tasks are in themselves equivalent to full-time employment. During the slowest farm season, winter, farm women spent an average of more than 40 hours a week on farm and household tasks (see Table 1). In contrast, during the more active fall months, farm women contributed an average of 69 to 91 hours a week on farm and household tasks depending on the size of their operation.

A third aspect related to the time dimension of farm women's labor we explored was the impact of recall. We assumed that farm women would be likely to underestimate their involvement in farm tasks when responding to global measures of time similar to those reported earlier. To assess this bias, we averaged the time farm women indicated they spent on each of the 29 item specific farm tasks listed in Appendix 1. The average time commitment of farm women to farm tasks according to this measure (noted as "general" in Table 1) was nearly twice that indicated by the global variable, regardless of season. The interesting exception was larger farms where the "general" measure was slightly lower than the global indicator for fall. The average time spent on household tasks, however, was consistently higher when using the "general" variable as opposed to the global season specific indicator. It is difficult to determine which portrays a more accurate picture of farm women's labor involvement. The discrepancy in these two indicators would seem to suggest that farm women respond to a much narrower definition of farm labor when reporting their overall involvement in their farm than they do when reporting item specific involvement.

A final temporal dimension we investigated was the impact the type of farming operation had on farm women's time demands. The type of farm

operation appears to be a more important contributor to differentials in farm women's time commitments to farm and household tasks than does size of operation. Women on livestock farms, for example, invested much more time in farm tasks, on the average, than did women on non-livestock farms (see Table 2). In contrast, women on non-livestock farms tend to spend slightly more time on household tasks on the average. In addition, seasonal shifts effected non-livestock farm women's time contribution to household tasks more markedly than livestock farm women. The extreme difference between the global measure of time and the general task specific accumulation indicator is still apparent.

Comparative Labor Input

The traditional stereotypic picture of gender specific roles emerge when comparing the labor inputs of household members to the farm. When we isolated farm labor contributions, men tended to provide the largest proportion of farm labor regardless of size or type of farming operation (see Table 3). It is interesting to note, however, that their contribution declined significantly as the size of the operation increased. Women and others (e.g., children, hired labor) tended to increase their labor contribution with the expanding size of the farm. In general, more than one in four women reported not contributing labor to their family farm. Ironically, half of these women cited performing at least two of the 29 farm tasks detailed in Appendix 1. It would appear that farm women's definition of farm labor input is narrowly defined.

The type of farm operation has a notable impact on women's on-farm labor. Only 14 percent of the women on livestock farms indicated they performed no farm labor while 20 percent on non-livestock farms made that claim (see Table 2). Twice as many livestock farm women reported conducting a

TABLE 2. AVERAGE NUMBER OF HOURS SPENT BY FARM WOMEN OF FARM AND HOUSEHOLD TASKS BY TYPE OF FARM AND SEASON

Season	Livestock Farm (N=41)		Non Livestock (N=47)		
	X	S.D.	X	S.D.	
Farm Tasks	Spring	32.5	25.7	19.6	25.3
	Summer	25.8	22.3	18.8	24.7
	Fall	41.1	26.2	28.6	24.3
	Winter	13.9	17.1	5.2	15.8
	General*	94.5	91.5	41.0	42.4
Household Tasks	Spring	39.0	25.4	44.1	23.6
	Summer	39.5	26.5	47.2	25.2
	Fall	39.8	25.9	43.6	23.1
	Winter	37.0	23.2	38.6	19.8
	General*	91.3	53.0	80.8	58.3
Combined Farm and Household Tasks	Spring	70.1	39.1	64.3	31.0
	Summer	64.6	40.3	66.2	31.7
	Fall	81.2	40.6	73.1	30.5
	Winter	49.5	32.5	44.9	28.7
	General*	190.1	111.9	134.2	79.4

General is an accumulation of the hours reported for all item-specific tasks.

TABLE 3. PERCENT OF FARM LABOR CONTRIBUTED BY MEMBERS OF THE HOUSEHOLD BY SIZE AND TYPE OF FARM OPERATION

		PERCENT OF FARM LABOR						
Household Member	None	Modest (1-9%)	Medium (10-44%)	Large (50% or more)	x	S.D.		
Small (N=30)	Wife	27.3	18.2	40.9	13.6	15.6	17.9	
	Husband	--	--	9.1	90.9	71.0	18.6	
	Other	40.0	--	55.0	5.0	14.4	16.4	
Medium (N=42)	Wife	7.7	28.2	59.0	5.1	16.0	16.2	
	Husband	5.2	--	25.6	69.2	63.9	26.6	
	Other	21.1	18.4	44.7	15.8	22.5	22.9	
Large (N=16)	Wife	28.6	28.6	35.7	7.1	10.5	14.1	
	Husband	7.1	--	42.9	50.0	47.6	23.7	
	Other	7.1	7.2	50.0	35.7	40.9	26.8	
Livestock (N=41)	Wife	13.9	11.1	66.7	8.3	18.4	14.9	
	Husband	--	--	16.2	83.8	67.0	19.6	
	Other	31.4	11.4	48.6	8.6	15.8	18.8	
Non Livestock (N=47)	Wife	20.5	38.5	33.3	7.7	11.6	17.0	
	Husband	7.9	--	31.6	60.5	59.1	28.9	
	Other	16.2	10.9	48.6	24.3	31.5	25.5	

medium amount of labor (i.e., between 10 percent and 50 percent) as did non-livestock farm women. Interestingly only 60 percent of the husbands on non-livestock farms reported doing the majority of farm labor compared to 84 percent on livestock farms.

Household labor was overwhelmingly performed by the wife (see Table 4). In only one instance was the husband credited with more than 30 percent of the household labor. It is noteworthy to point out that almost the majority of children and other household members were reported as non-contributors to household labor, regardless of size or type of farming operation.

A second dimension of labor input we investigated was the possible discrepancy in perceived labor input and actual labor contributions. We assumed farm women would undervalue their comparative farm labor input because of stereotyping and a general lack of recognition of the integral part they typically play in the farming enterprise. Using the methods employed by Fassinger and Schwarzweller (1984) we calculated both farm task participation scores (FTP) and household task participation scores (HTP) for farm women. These scores offer a comparative measure of farm women's labor by dividing the number of tasks she performed after adjusting for her effort in conducting these tasks (i.e., 2 points for doing the task and 1 point for helping), by the total number of tasks reported.

As seen in Table 5, the vast majority of the 29 farm tasks were reported as being done. Respondents on the small farms reported conducting an average of 25 of the 29 tasks while those on medium and larger farms reported an average of 27 tasks performed. It is interesting to note that no meaningful difference is found in the number of farm tasks performed by type of farm operation.

TABLE 4. PERCENT OF HOUSEHOLD LABOR CONTRIBUTED BY MEMBERS OF THE HOUSEHOLD BY SIZE AND TYPE OF FARM OPERATION

Household Member	PERCENT OF HOUSEHOLD LABOR				x	S.D.
	None	Modest (1-10%)	Medium (11-30%)	Large (Above 30%)		
Size of Farm						
Small (N=30)						
Wife	--	--	2.5	97.5	90.2	7.7
Husband	12.5	70.8	16.7	--	7.7	7.1
Other	58.3	37.5	4.2	--	2.5	4.6
Medium (N=42)						
Wife	--	--	--	100.0	84.9	13.9
Husband	10.3	59.0	28.1	--	10.3	11.2
Other	42.1	44.7	13.2	--	5.2	7.9
Large (N=16)						
Wife	--	--	--	100.0	92.6	6.5
Husband	23.1	69.2	7.7	--	5.8	5.9
Other	54.6	45.4	--	--	1.8	2.3
Type of Farm						
Livestock (N=41)						
Wife	--	--	--	100.0	86.5	10.1
Husband	8.1	64.9	27.0	--	9.9	8.8
Other	50.0	41.7	8.2	--	4.0	6.3
NonLivestock (N=47)						
Wife	--	--	2.5	97.5	89.1	12.7
Husband	18.0	64.1	17.9	2.6	7.5	9.8
Other	48.7	43.3	8.0	--	3.6	6.7

TABLE 5. AVERAGE NUMBER OF TASKS REPORTED, PERFORMED BY FARM WIFE, AND FARM WIFE'S FARM TASK PARTICIPATION SCORE BY SIZE AND TYPE OF FARM OPERATION

	Type and Size of Farm Operation	Farm Tasks Reported		Farm Task Performed By Farm Wife		Farm Wife Farm Task Participation Score (FTP)	
		X	S.D.	X	S.D.	X	S.D.
Size	Small (N=30)	25.4	4.6	12.3	10.5	30.0	22.7
	Medium (N=42)	27.3	2.6	13.8	10.1	30.1	19.3
	Large (N=16)	27.2	2.6	11.0	9.1	26.4	22.6
Type	Livestock	26.9	2.8	15.9	10.3	34.8	21.1
	Non Livestock	26.4	4.1	10.1	9.0	24.4	19.6

Farm women reported conducting slightly fewer than half of the farm tasks performed on their farm. Women on medium-sized farms did slightly more farm tasks (13.8) on the average while those on larger farms performed a bit fewer tasks (11.0) on the average. Nonetheless, farm women participated in more than 26 percent of the farm labor, on the average, according to the FTP scores; 30 percent for those on medium and small farms. This measure of farm labor participation is in stark contrast to the global measure obtained by asking the respondents what percent of farm labor women contributed. As seen in Table 3, the average contribution of farm women was half that indicated by the FTP score in Table 5; mean contribution scores of 10.5 percent to 16.0 percent compared to FTP scores of 26.4 to 30.1. Once again, it is difficult to determine which measure is a more accurate indicator. The discrepancy, however, does underscore the complex nature of assessing farm women's economic contribution to the farm and reinforces the potential significant underestimation of women's farm labor even among farm women themselves.

Similar to farm tasks, the vast majority (i.e., 19 to 21) of the household tasks were also reported as being done (see Table 6). In contrast to farm tasks, however, little variation in the number of household tasks performed was noted by size or type of farm operation. More than 16 of the 21 tasks were conducted by the farm wife, on the average. Women on small farms and non-livestock farms reported performing slightly fewer household tasks, on the average, than did their counterparts on medium and large farms or livestock farms.

It is noteworthy that the discrepancy between HTP scores reported in Table 5 and the average household contribution reported in Table 4 is much less than for farm tasks. In fact, in relative terms the difference is not significant. This suggests that respondents' conception of farm women's

TABLE 6. AVERAGE NUMBER OF HOUSEHOLD TASKS REPORTED, PERFORMED BY FARM WIFE, AND FARM WIFE'S HOUSEHOLD TASK PARTICIPATION SCORE (HTP) BY SIZE AND TYPE OF FARM OPERATION

	Type and Size of Farm Operation	Farm Tasks Reported		Farm Task Performed By Farm Wife		Farm Wife Farm Task Participation Score (FTP)	
		X	S.D.	X	S.D.	X	S.D.
Size	Small (N=30)	19.1	1.9	16.2	5.1	80.5	14.7
	Medium (N=42)	19.6	1.3	17.0	3.9	83.7	10.0
	Large (N=16)	19.5	2.3	17.4	3.3	85.4	10.0
Type	Livestock	19.6	1.2	17.6	3.2	84.1	11.5
	Non Livestock	19.2	2.1	16.1	4.9	81.8	12.0

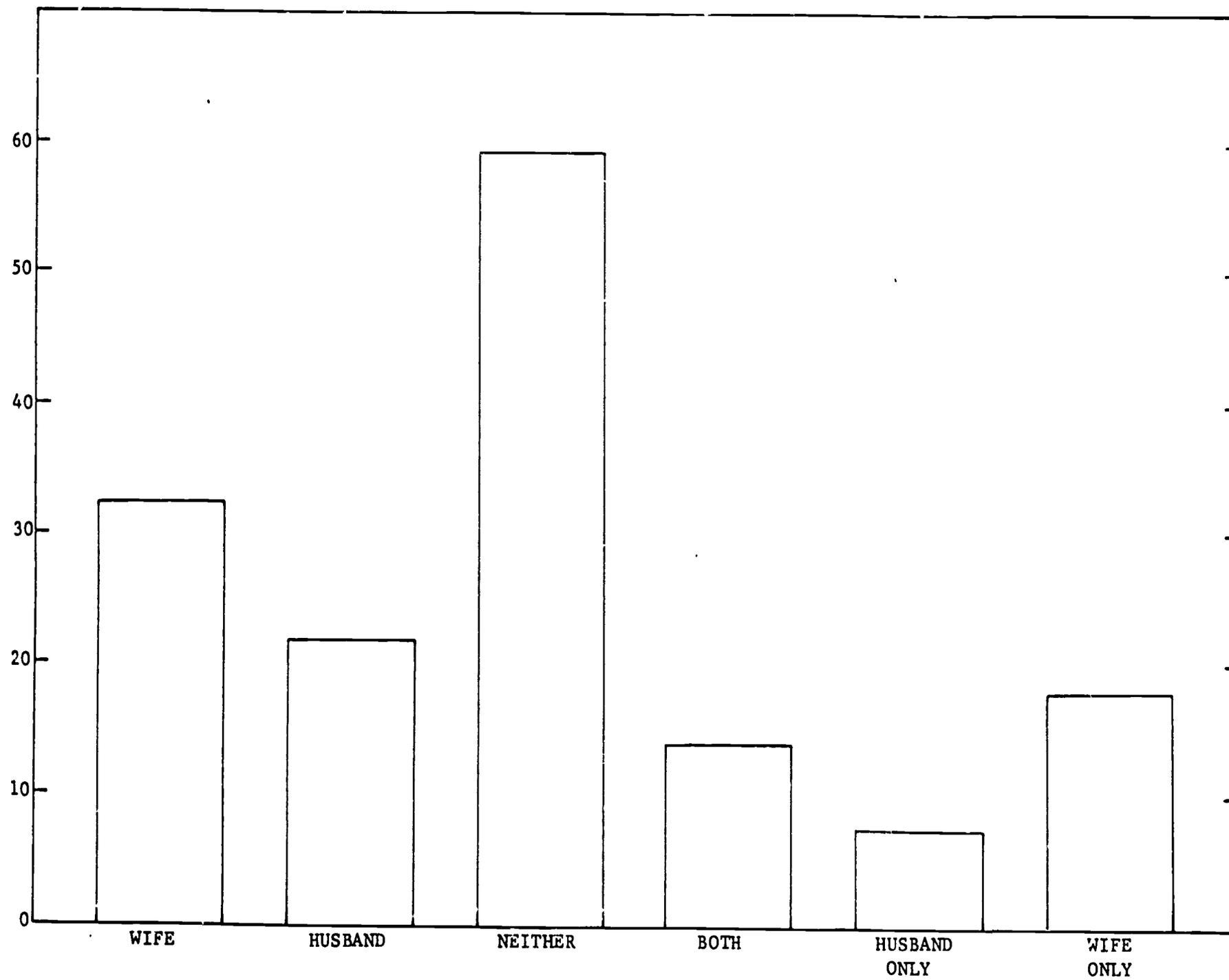
household labor is much more defined than is their corresponding farm labor contribution.

Off-Farm Labor

Nearly one in three farm wives reported off-farm employment (See Figure 1). An additional 12 percent indicated they were looking for off-farm employment. A slightly smaller proportion of farm husbands (22 percent) reported both on and off-farm jobs. The majority of respondents (60 percent), however, indicated that neither husband or wife worked off the farm; only 14.3 percent of the farms had dual career spouses who worked part-time off the farm.

It is interesting to note that more than half of the farm women cited expenses as the major reason for their off-farm employment (See Figure 2). More notably, nonfarm expenses were mentioned more than twice as often (38.5 percent) as the precipitating cause for farm women's off-farm employment compared to farm expenses (17.9 percent). This is supported by the fact that 30 percent of the off-farm income farm women generated went to home expenses, on the average, compared to only 5 percent being spent on farm expenses. Additionally, nearly one in four farm women (23.1 percent) indicated they held off-farm jobs to maintain their careers.

Finally we investigated what factors posed the most difficulty for farm women in securing off-farm employment. Distance was mentioned by nearly half (46.3 percent) of the respondents (See Figure 3). This response was not surprising given the sparsely populated nature of North Dakota. A close correlate to distance was the lack of available employment, cited by more than one in four farm women as the major difficulty in securing employment. Wages were curiously not mentioned by farm women as a major obstacle in off-farm employment.



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FIGURE 1. OFF-FARM EMPLOYMENT

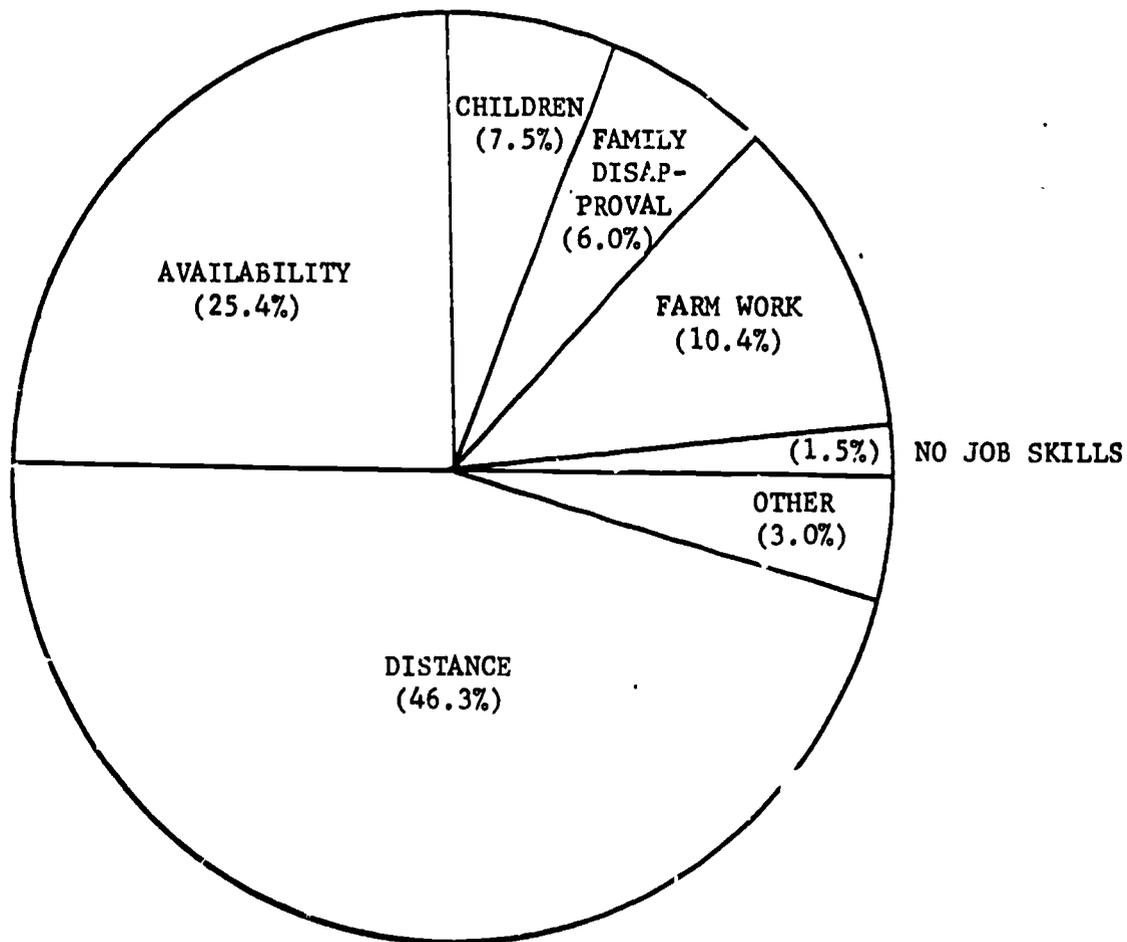


FIGURE 2. MAIN DIFFICULTY IN BEING EMPLOYED

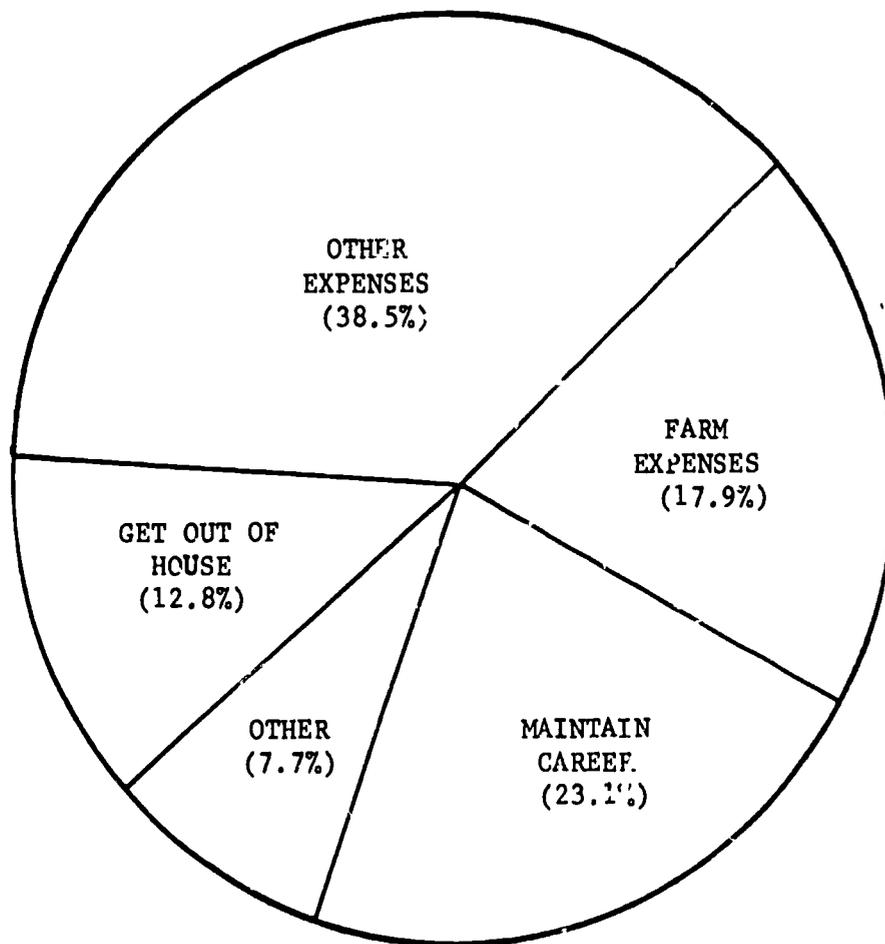


FIGURE 3. MAIN REASON FOR HAVING OFF-FARM EMPLOYMENT

Summary and Conclusions

We investigated in this article, the use value production of farm women in North Dakota. Use value production recognizes non-income earning activity (non-market production) as a vital component in the contribution to economic well-being. This is particularly relevant when investigating the economic input of women to their family farm since many do not earn a wage either on or off the farm, yet they serve an important economic role. We found this to be true in North Dakota as fewer than one in three farm women surveyed held off-farm jobs and the vast majority did not receive a farm wage. Nonetheless, they participated in more than 26 percent of the farm tasks performed on the farm and contributed at least 40 hours a week to farm-related tasks on the average. This effort was above their household chores which consumed twice that amount of time on the average. Moreover, farm women were left with the overwhelming burden, (i.e., more than 80 percent of the tasks) of the household.

It is unrealistic to continue excluding farm women's economic contribution to their farm. Inappropriate legislation (e.g., inheritance tax), regulations (e.g., credit ratings, social security benefits) and stereotypes continue to victimize farm women simply because labor statistics are tied to the market. Yet, non-market activity, as shown in this paper is a substantial component of the total labor involved in farming. If we are to more accurately assess labor force activity, and more justly compensate those involved in labor (e.g., divorce settlements, wrongful death benefits, social security) we need to broaden our conception of work. The utilization of use value production as an indicator of labor, we believe, is a positive first step.

APPENDIX

Appendix 1

FARM TASKS

- (1) Plan Cropping Schedule
- (2) Prepare Fields for Planting
- (3) Plant Small Grains
- (4) Plant Row Crops
- (5) Apply Fertilizer
- (6) Apply Chemicals
- (7) Cultivate Row Crops
- (8) Work Summer Fallow
- (9) Combine Small Grains
- (10) Haul Small Grains
- (11) Combine Row Crops
- (12) Haul Row Crops
- (13) Cut, Put Up Hay
- (14) Check Market Prices
- (15) Haul Grain to Elevator

HOUSEHOLD TASKS

- (1) Fix Breakfast
- (2) Cook Dinner
- (3) Cook Supper
- (4) Set Table
- (5) Wash Dishes
- (6) Grocery Shopping
- (7) Baking
- (8) Canning and Freezing
- (9) Clothing Care
- (10) Child Care
- (11) Child Transportation

FARM TASKS

- (16) Buy, Get Machine Parts
- (17) Buy Farm Equipment
- (18) Minor Machine Repairs
- (19) Major Machinery Overhaul
- (20) Fix Fence
- (21) Pay Farm Bills
- (22) Do Farm Bookkeeping
- (23) Feed Livestock
- (24) Do the Milking
- (25) Clean Milking Parlor
- (26) Clean Barns, Feeders
- (27) Care for Young Stock
- (28) Care of Poultry
- (29) Other Farm Tasks

HOUSEHOLD TASKS

- (12) Dust Furniture
- (13) Vacuuming, Floor Care
- (14) Wash Windows
- (15) Repair Small Appliances
- (16) Plumbing Work
- (17) Carpentry Repairs
- (18) Tend Vegetable Garden
- (19) Yard Work
- (20) Pay Household Bills
- (21) Other Household Task

1. The Purnell Act, which was passed by Congress in 1925, appropriated money to support research including rural home management studies. One objective of these studies was to investigate homemakers' use of time in order to offer suggestions which might promote efficient time management and increase the availability of leisure time.
2. Prior to 1900, the Departments of Commerce and Labor did not report unpaid work of family farm members. However, in 1910 a sensitivity to the important roles unpaid laborers performed, especially in an agricultural context, forced a redefinition of active labor. People working regularly at outdoor farm work (note the restriction to "outdoor") yet not receiving a wage were categorized as unpaid farm labor (Hill 1929). It is important to note that this definitional alteration produced a 144 percent increase in women agricultural laborers between 1900 and 1910 as reported by the Census Bureau. Distrusting of these figures which indicated that one in four farm laborers were women, the Department of Commerce again modified the definition to distinguish between farm laborers working on their own farm and those working off their farm. The end product of this slight alteration combined with a January rather than April enumeration date was a 45 percent reduction in the proportion of women farm laborers between 1910 and 1920. Nonetheless, nearly one in three farm laborers on home farms were women and, overall, one in five farm laborers were women (Truesdell 1926).

References

- Beneria, Louredes. 1981. "Conceptualizing the Labor Force: The Underestimation of Women's Economic Activities," *THE JOURNAL OF DEVELOPMENT STUDIES*. Vol. 17(3): 10-28.
- Brody, W.H. 1975. "Economic Value of a Housewife," Research and Statistics Note No. 9, U.S. Department of Health, Education, and Welfare, Social Security Administration.
- Crawford, Ina Z. 1927. "The Use of Time by Farm Women," University of Idaho Agricultural Experiment Station Bulletin No. 146, Moscow.
- Fassinger, Polly A. and Harry Schwarzweiler. 1984. "The Work of Farm Women: A Midwestern Study," in *RESEARCH IN RURAL SOCIOLOGY AND DEVELOPMENT*, by Harry Schwarzweiler (ed.) Vol. 1, Greenwich, CT: Jai Press.
- Gasson, Ruth. 1980. "Roles of Farm Women in England," *SOCIOLGIA RURALIS* 20(3): 165-180.
- Gauger, W. H. and K. E. Walker. 1980. "The Dollar Value of Household Work," New York State College of Human Ecology, Cornell University Information Bulletin No. 60, Ithaca.
- Hefferan, Colien. 1982. "What is a Homemaker's Job Worth? Too Many Answers," *JOURNAL OF HOME ECONOMICS* (Fall): 30-33.
- Hill, Joseph A. 1929. "Women in Gainful Occupations: 1870 to 1920," Census Monograph IX, Washington, D.C.: U.S. Government Printing Office.
- Jones, Calvin and Rachel A. Rosenfeld. 1981. "American Farm Women: Findings from a National Survey," NORC Report No. 130, Chicago: National Opinion Research Center.
- Murphy, M. and J. Peskin. 1981. "Women at Work in the Home," Paper presented at the American Statistical Association Meetings, Detroit.
- Sawer, Barbara. 1973. "Predictors of Farm Wife's Involvement in General Management and Adoption Decisions," *RURAL SOCIOLOGY* (Winter): 412-426.
- Truesdell, Leon E. 1926. "Farm Population of the United States," Census Monograph VI. Washington, D.C.: U.S. Government Printing Office.
- Walker, Kathryn and William G. Gauger. 1973. "Time and Its Dollar Value in Household Work," *FAMILY ECONOMICS REVIEW* (Fall): 8-13.
- Wilkening, Eugene and Lakshmi Bharadwaj. 1967. "Dimensions of Aspiration, Work Roles and Decision-Making of Farm Husbands and Wives in Wisconsin," *JOURNAL OF MARRIAGE AND FAMILY* 29 (November) 703-711.
- Wilson, Maud. 1929. "Use of Time by Oregon Farm Homemakers," Oregon State Agricultural College, Agricultural Experiment Station Bulletin No. 256, Corvallis.