

# The Roles of Women in Dairy Farming in Cagayan

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**Abstract:** *This study assessed the roles women play in dairy farming. It was limited to the women farmers and wives of the farmers who availed of carabao dispersal from the Philippine Carabao Center (PCC). The descriptive – correlational design was used in the study which looked how related are the profile variables to the roles the respondents perform in livestock farming. A questionnaire was the main instrument used in the study. It elicited data on the specific work the respondents perform in farming and at home; the number of hours they spend in performing their roles in the farm and at home; the perceived economic contribution of the respondents when they perform their work in the farm; and the problems they met in performing their roles in the farm. This study found out that women perform the following roles in the farm: cutting the fodder, herding and pasturing, milking and milk processing, feeding, looking into the health of the animal, palpating, artificial insemination, finding a herd partner, and assisting in the giving birth process. These are being performed side by side with their other roles at home like household chores, taking care of children, budgeting, health care and going to a regular employment. The study revealed that the women perceived the performance of their roles to be economically helpful as they increase their family net income. Also, they identified lack of training and lack of time to be the problems they meet in performing their roles in the farm and at home. It is recommended in the study that a training program must be given to the respondents to address their problems met in the performance of their dual roles. Furthermore, it was recommended that results of the study must be disseminated to give importance and pride to the women who perform their roles in farming while doing their roles as a mother at home and as an employee in a certain job.*

**Keywords:** *Women, roles, livestock farming*

## Introduction

Women's involvement in farming is undeniable. Micro studies reveal that women undertake wide range of activities in farm from preparation to harvesting.

Over the last 25 years, the roles of women in agriculture have become a familiar and well – developed subject. Broadly speaking, early studies legitimized the idea of women as productive partners in agriculture, discovering and documenting the various roles played by the women as farmers, farm wives and agricultural professionals and recounting the stories of successful women in these roles. Discoveries show that women farm, on their own in some cases, or as partners in the work of family farms, performing essential household production tasks, as well as tending gardens, livestock, and assisting in the fields as needed. In many cultures women are the farmers, on whom the families and communities depend for food production. Moreover, women often help support family farm operations or their households through paid farm work for others, or through off – farm and non - farm business (Agricultural Online Access, 1998)

Livestock management offers tremendous opportunities for improving household incomes through women's participation. In fact, in some areas in Pakistan, livestock rearing is largely a women's job. They take responsibility for cutting fodder, cleaning sheds, milking the dairy animals, processing dairy products and looking after the health of the herd.

However, the roles of the women in farming are often under estimated as the society looks at the activity as a “Man's Domain”. Unless women are properly trained in livestock farming, they will never be recognized as a contributory factor in successful livestock farming.

According to the Agricultural Knowledge Science and Technology in Africa (2002) The proportion of women in agricultural production and post – harvest activities ranges from 20 – 70% . Their involvement is increasing in many developing countries, particularly with the development of export – oriented irrigated farming which is associated with a growing demand for female labor including migrant workers.

In an article entitled Women in Livestock Farming from *The Dawn* (Dec.2007), a Pakistan newspaper, the author said extension agencies admit that women, as heads of household and manager of livestock, have great potential as agents of change in farming communities. They can boost animal production if properly trained and motivated. In order to increase the per animal production, it is imperative that rural women should be counseled to follow best practices for livestock health and production particularly feeding, breeding, housing and disease control measures.

He further claimed that any effort for alleviation of poverty without active participation of women is destined to fail. Unless women are allowed to exploit their potential, the rural scene will remain unchanged. Though women are an integral part of the country's economy, their share in economic benefits, opportunities and access to resources is not commensurate with their efforts.

This study was conceptualized with the thought that like other women in the different parts of the world, the women in Cagayan also assume roles in livestock farming. It then aims to identify the roles of women in this venture.

This study was limited to dairy (carabao) farming and it only include the women and wives of dairy farmers in Cagayan who were given a carabao dispersal by the Philippine Carabao Center. As such, the researcher obtained records from the Philippine Carabao Center for them to track the farmers who were given the dispersals.

This study is expected to empower the women involved in dairy farming and in agriculture in general. With the recognition of their contributions in dairy farming and with the programs or interventions that could be offered to them to address their difficulties in this venture, their skills will be improved and their potentials will be fully maximized hence, giving them a sense of self fulfilment, respect and pride.

### **Research Methodology**

#### **Research Design**

The descriptive – correlational design method was used in this study. As defined by Lardizabal, descriptive research method is a method that presents the status of an organization, a place, an individual or anything. Moreover a study is correlational when it aims to determine how two sets of variables are related to one another. This design was used to describe profile of the respondents as to age, educational attainment. The design involves finding the extent the above variables are correlated to the roles they perform in Livestock farming.

#### **Respondents**

The respondents of the study were the women dairy farmers and wives of dairy farmers who availed of dairy dispersal from the Philippine Carabao Center. Purposive sampling was employed and the list of those who were given dispersal was accessed from the office of the Philippine Carabao Center at Namabalan, Tuguegarao City.

#### **Data Gathering Tools**

The primary tool used in this research was the questionnaire. It consisted of questions that aimed to gather data regarding the profile of the respondents, the roles they perform in livestock farming, the number of hours spent in performing their roles, perceived economic contribution, and problems met by the respondents in performing their roles.

#### **Data Gathering Procedures:**

Before the conduct of the study, the researchers first presented the proposal to a panel from the office of research and development in the university which suggested some ideas for improvement. After the proposal has been approved, the researchers coordinated with the Philippine Carabao Center and requested for the list of farmers who were given a carabao dispersal. After finalizing the questionnaire, the researchers started to conduct of the study. Before floating the questionnaires, the researchers sought for the permission from the municipal mayor and the barangay captains where the respondents live. They also talked to the livestock coordinator of every barangay to explain what the research is all about and to translate some items in the questionnaire. The data gathered through the questionnaire were then analysed using the appropriate statistical tools.

#### **Data Analysis**

The frequency count, percentage distribution and weighted mean were used in determining the profile of the respondents and the roles they play in livestock farming. The same tools were used in determining the number of hours spent by the respondents in performing their tasks in livestock farming and in doing other tasks like household chores or going to a regular employment.

The Chi –square was used to find for the relationship between the profile respondents and the roles they assume in livestock farming. On the other hand, the t- Test was used to find the difference between the time spent of the respondents in livestock farming and in doing other roles like household chores or going to a regular employment.

### **RESULTS AND DISCUSSION**

#### **Table 1. Age of Respondents**

Table 1 shows the age of the respondents in the study. It further shows that majority of the respondents fall on the age of 41-50(38.65%), followed by 51-60 years old (31.88%); 61-70 years old (14.49%); 31 – 40 years old (11.59%); and 20-30 years old (3.38%). As reflected on the table, respondents in the study are middle – aged dominated. According to Human Psychology, the

middle – age is the period of self-actualization. It is the age where a person is in the process of full maturation and development in terms of emotions and thinking process. In this study, it is then assumed that majority of the respondents are already mature enough to accept and assume their roles in livestock farming.

Age	Frequency	Percentage
20-30	7	3.38%
31-40	24	11.59%
41-50	80	38.65%
51-60	66	31.88%
61-70	30	14.49%
<b>Total</b>	<b>207</b>	<b>100%</b>

**Table 2. Educational Attainment of Respondents**

Table 2 shows the educational attainment of the respondents. It can be deduced from the table that majority of the wives of the livestock farmers in the study are college level (37.20%) followed by respondents who are high school graduate (20.27%); elementary graduate (13.04); College graduate (12.08%); high school level (11.11%); elementary level (5.31%) and no formal education (.48%). The data show that all the respondents except one received formal schooling. As an agricultural country, the Philippine curriculum usually includes subjects that develop orientation and awareness among Filipino students regarding crop farming and animal farming. These subjects are usually introduced during elementary and high school years. The data reflect that majority of the respondents received high school and elementary education, which means that they have been exposed to agricultural topics and activities. These experiences from school may have helped them accept and perform their roles in livestock farming.

Educational Attainment	Frequency	Percentage
1. College Graduate	25	12.08%
2. College Level	77	37.20%
3. High School Graduate	43	20.77%
4. High School Level	23	11.11%
5. Elementary Graduate	27	13.04%
6. Elementary Level	11	5.31%
7. None	1	0.48%
<b>Total</b>	<b>207</b>	<b>100%</b>

**Table 3. Roles Performed by Respondents in Livestock Farming**

The table below shows the roles performed by the respondents in livestock farming and the average number of hours they spent in a day in performing them. The table further reflects that most of the respondents perform the role of an assistant (51.21%) when the animal gives birth; They also said that most of them (44.44%) perform Fecal Collection; 34.78% of the respondents cleans the stable; 26.5% cuts the fodder; 25.12% do milking and milk processing; 23.19% feeds the animal; 20.77% go to the field to herd and pasture the animal; 19.32% finds a herd's partner; 5.31% performs vitamin supplementation, bringing the animal to a veterinarian and Artificial Insemination; 3.38% does palpating and 1.45% deworms the animal.

The table reflects that evidently, women perform all the identified roles in livestock farming in this study with varying number of hours. As shown on the table, the respondents identified “feeding the animal” as being given the most number of hours spent in a day (3.8 hours) while “finding the herd partner” (.02) as having the least number of hours spent in a day.

These findings are congruent to the findings of Arshad et. Al (2013) in their research Women’s Participation in Livestock Farming Activities where milk processing, collection of manure and caring of animals, cleaning of animal sheds, watering, making feed concentrates and feeding of livestock were the main activities performed by women in livestock farming.

Roles	Frequency	Percentage	No. of Hours Spent	Average Hours
1. Cutting the Fodder	55	26.57%	94.5	1.7
2. Herding and Pasturing	43	20.77%	63.5	1.5
3. Milking and milk processing	52	25.12%	110	2.1
4. Feeding the animal	48	23.19%	184	3.8
5. Looking After the Health of the Herd				
5.1 Cleaning the Stable	72	34.78%	86	1.2
5.2 Deworming	3	1.45%	7.5	2.5
5.3 Vitamin Supplementation	11	5.31%	25	2.3
5.4 Fecal Collection	92	44.44%	53	0.6
5.5 Bringing to a Vet	11	5.31%	12	1.1
6. Palpating	7	3.38%	15	2.1
7. Artificial Insemination	11	5.31%	22	2.0
8. Finding a Herd Partner	40	19.32%	9	0.2
9. Assisting in Giving Birth	106	51.21%	188	1.8
10. Others	0	0%	0	0

**Table 4. Other Roles Performed.**

Table 4 reflects the other roles performed by the respondents aside from the roles they assume in livestock farming. The table reflects that the respondents do all other works like household chores, taking care of the children, budgeting, healthcare and going to a regular employment. This means that the respondents do dual or multiple roles in a day.

Other Roles	Number of Hours	Mean
1. Household Chores		
1.1 Cleaning the house and surroundings	317.5	1.53
1.2 Washing clothes	242.5	1.17
1.3 Cooking	179	0.86

1.4 Keeping closets	154.5	0.75
2. Taking care of children	319	1.54
3. Budgeting	107.5	0.52
4. Health care	209.5	1.01
5. Going to a regular work (employment)	232	<b>Note: only 29 respondents go to regular work</b>

**Table 5. Economic Contribution in Dairy Farming**

Table 5 shows the perceived economic contribution of the respondents to their family. As seen on the table majority of the respondents (103) looks at their roles as helpful in increasing the net income of the family. Seventy – nine (79) looks at their roles important since they give free labor cost; twenty five (25) thinks they reduce labor cost in livestock farming. This can be attested Tusawar Ahmad (2014) in his study on The Role of Rural Women in Livestock Management :Socio-economic Evidences from Diverse Geographical Locations of Punjab (Pakistan) where he said “ Enabling women to adapt the best practices at grass- root level will benefit them not only to raise their income but to the entire nation as well.

Economic Contribution	Frequency	Percentage
1. Reduce Cost Labor	25	12.07
2. Free Labor Source	79	38.16
3. Increase Net Income	103	49.76
<b>Total</b>	<b>207</b>	<b>100</b>

**Table 6. Chi – square Analysis on the Relationship Between Profile Variables and the Roles in Dairy Farming.**

Table 6 reflects the relationship between the Profile variables and the roles of the respondents in livestock farming. As seen in the table, the educational attainment of the respondents has no relationship with the performance of the respondents with these roles. This means that the education received by the respondents does determine the roles they perform in livestock farming. On the other hand, the age of the respondents affect the roles they assume in livestock farming. Meaning young mothers, middle – aged mothers or senior mothers have different roles in livestock farming.

Profile Variable	x-value	df	Critical value	Decision
Age	55.52	32	46.19	significant
Educational Attainment	48.79	48	65.17	Not significant

**Table 7. T – test Analysis on the Difference Between the Number of hours spent in Dairy Farming and the Number of Hours Spent in Doing Household Chores**

Table 7 shows the difference between the number of hours spent by the respondents in performing their household chores and the number of hours they spend in performing their roles in livestock farming. The table shows that there is a significant

difference between the time spent by the respondents in performing these dual roles. However, standard deviation computation shows that the difference between the two is not very far, which means the respondents almost give the same number of hours to both of these roles.

Variable	Mean	SD	t-value	df	Critical value	Decision
No. of hours spent in doing household chores	8.57 hours	2.012			1.645	Significant
No. of hours spent in doing roles in Dairy Farming	4.20 hours	1.682				

**Table 8. Problems met by the Respondents in in Performing their dual Roles**

Table 8 reflects the problems met by the respondents in doing their household roles. Since the problem was an open – ended question, the respondents were required to write their answers. Most of the respondents (73 %) consider their lack of training in the roles they assume in livestock farming as a problem and the lack of time they spend in doing both their roles as a mother and their role as a famer.

Problems met in performing their roles	Frequency	Percentage
1. Lack of Training	151	73
2. Lack of time	56	27
<b>Total</b>	<b>207</b>	<b>100</b>

### Conclusions and recommendations

Women really do play roles in livestock farming. They give time in performing their roles in livestock farming as much as they do their household chores and other jobs. Because of their performance of dual roles, they believed that they are of great help to the family. However, they find their lack of training and lack of time to be preventing factors for them to perform properly in the roles they perform as farmers and as mothers at home.

The following recommendations are offered:

1. Results of this study must be furnished to the agency concerned and must be disseminated to the respondents and respondents' husbands to give importance and pride to the women who perform roles in livestock farming.
2. A training program must be designed to address the concerns and problems of the respondents in the study specifically on the following topics:
  - a. Processing of Dairy products
  - b. Artificial insemination
  - c. Forage production
  - d. Animal Health Care

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