<u>CHAPTER-I</u> INTRODUCTION

Women's empowerment is one of the most significant issues for upholding stature of rural women in Bangladesh. Women's empowerment involves improving decision-making, control over income, awareness about personal rights and freedom, improving position in the family, and in general the confidence of rural women in their abilities. Women are subjected to oppression by man in our country for many years. This oppression is a common experience for every woman in the traditional rural society of Bangladesh and highlights the importance of fostering women's empowerment to remove gender inequality both within the family unit and in society. By developing personal independence among these women, they will gain confidence in their own capability for governing their lives and thereby develop the strength to stand strong in the face of subsequent oppression. To achieve sustainable development in the rural society empowerment of women must be needed (Afzal et al., 2009). Shefner-Rogers et al. (2009) stated that women's empowerment is the construction of a route to foster women's ability to be self-reliant and to improve internal power. Promoting the participation of rural women in income generating activities is one important route toward encouraging independence and facilitating empowerment.

Women are the half of total population of Bangladesh. They contribute a great role in the economic development of this country. They not only work in household but also do many valuable works which help economic development of the country. Women in company with men are the main actors in feeding the world. Throughout the world rural or farm women are involved extensively in agricultural operations. Women are the most important part of human resources who need attention for their development. There is a close relationship between the status of women and the socio-economic development of any country. The prosperity and growth of a nation depends on the status and development of its women as they not only constitute nearly half of the population, but also positively influence the growth of remaining half of the population. A number of research studies have proved their participation in various agricultural activities having complementary roles, sharing agriculture related activities with their male counterpart (Oyesola, 2004). Women's participation in agricultural activities is higher than that of men (Prakash, 2003., Tacio, 2003). Women actively participate in a range of activities related to crop production and livestock management. Rural Women remain busy from dawn to dusk in various agricultural activities and livestock management.

Livestock is the most important means through which rural women are able to contribute meaningfully to the cash needs for themselves & their family members with very less amount of capital.

The 21st century is the century of being positively changed along with surroundings. In this modern technology-based world, it will be very hard to find anyone even a woman who wastes her time. Everybody utilizes own time properly. Women are no longer left behind. They can also successfully do their job. One example is dairy sector. With their hard work, responsibilities, efficiency and most of all the affection & love to the animals make them successful. Bahrma*et al*,(1978) emphasized on the importance of the dairying in rural areas as it contributed substantially to their economy by creating employment opportunities for rural women. Chauhan et al, (1994) reported that despite lower proportion and level of education, women contributed a larger share of labor in agriculture and dairying. Their contribution to total house hold income was assessed to be 32%, though their share as high as 65% to the farm household income. The study further concludes that the formally educated women have a tendency to dislike the dairy business;

they preferred to take up those tasks which are comparatively lighter, clean and less risky. Women being important resource person for dairy production, it becomes necessary to educate them on scientific lines as stated above. .

In compliance with great contributions of women in the dairy sector, government planners, policy makers & administrators are trying to take necessary steps to include women in the development process to achieve the goal. Now it is transparent that the female farmers can play an important role & would get far greater opportunities to organize themselves as functional group for livestock development. In the production of large livestock animals like cattle & buffalo, both men & women are integrated together in the rearing & management of these aspects. Similarly, Govt. & several NGOs are also trying to organize & establish rural women as an active income generating group to increase the overall productivity of livestock in the country.

Without the involvement of our almost half of the people we cannot improve our economic condition of family as well as the country. So, women participation in all works, especially in farming must be increased.

1.1: Objectives of the study:-

- To study the role of women in dairy farm production activities.
- Changes in women's socio-economic position, e.g., social participation, daily income, information seeking behavior, managerial assistance, ability to co-ordinate activity, leadership ability, self-confidence, market orientation etc.
- To suggest certain measures to improve role of women in agricultural activities.

<u>CHAPTER-II</u> MATERIALS & METHODS

The focus of this chapter is to illustrate the selection area, selection of samples, period of data collection, preparation of survey schedule to collect data & their reliability etc.

2.1. Selection of study area:-

For fulfilling the objectives, four unions namely Shakpura, Amuchia, Kadurkhil,& Boalkhali sadar upazilla in Chattogram district are considered for this study. The reasons for selecting this area as study area are given bellow:

- This area is well served by roads and rickshaw services
- Women play a significant role in animal health care, management as their husbands are busy in other business.

2.2. Selection of samples:-

A number of families were selected from the target population randomly fulfilling the following conditions:-

- The women who were married,
- Having minimum one milch cow,
- Age minimum 18 years,
- Who are living with spouse and other closely related persons e.g., mother-in law.

Five Farm families from each selected places were selected using simple random sampling technique without replacement from the target population. Thus, the total number of samples for the study was 20 women.

2.3. Preparation of survey schedule:-

A survey schedule was prepared to record the desired information from the dairy cow owners. Firstly, a preliminary survey schedule was designed for recording desired information in conformity with the objectives of the study. After preparing a draft schedule, it was however, pretested in the areas. The survey schedule was then modified and rearranged according to the experience gathered in the preliminary field survey. Finally, a set of interview schedules was prepared for recording the necessary information for the study.

2.4. Method of data collection:-

The data was collected by following the prepared questionnaire and also considering the different factors among which survey cost & financial accounting are important.

Data collection was done through the direct interviews of the selected farmers. The questions were asked in a very simple manner with explanation where necessary. The answers of the respondents were directly recorded in the interview schedule which is given in the appendix.

2.5.<u>Period of data collection:</u>

The data was collected during the period of $03\02\2021$ to $30\03\2021$ through an appropriate questionnaire.

CHAPTER-III

RESULTS & DISCUSSION

The aim of this chapter is to deal with distribution of demographic, socio-economic and decision-making patterns of the respondents and involvement of women in different sectors of dairy cattle management and production.

3.1. Demographic & socio-economic status of the respondents:

This section discusses the demographic, socio-economic characteristics such as age, religion, family position, size and type of family, education, occupation, land holdings of the respondents.

3.1.1. Age: In this sector mainly the women around 20-40 years are mostly involved. Women of other ages are also involved, but less in number. For this, three age groups are considered-

a.<20 years b.20-40 years c.>40 years

3.1.2. Religion: As it is seen in the previous that Hindus are much more involved in traditional dairying for their religious feelings, but now-a -days, Muslim and other families also largely involved in dairy sector along with them. So, for my study, two groups are taken into account-

a.Muslim b.Hindu

3.1.3. Family position: In decision making role of women slightly varies with the variation of their family position. Here three groups are considered:

a.Housewife

b.Daughter-in-law

c.Mother-in-law

3.1.4: Size of family: It is seen that the large families are mostly involved in rural dairy farming. Here two groups are taken:

a.Family member 5 or below

b.Family member above 5

3.1.5: Type of family: It also varies in decision making sector. Now-a-days, besides with joint families the nuclear families are also involved in dairy farming. For this, two groups are constructed:

a.Nuclear family b.Joint family

3.1.6: Educational status: In our country, the dairy sector is a potential business sector and the educational status of the women is also important which is divided into three groups-

a.Illiterate b.Primary c.Secondary **3.1.7: Occupation:** According to the variation of occupation: a.Labor b.Business c.Agriculture d.Service holder e.Others **3.1.8: Land holdings:** Land holdings are mainly involved in the variation of farm size i.e., the number of cattle. The flock size is also a parameter which causes the variation of role of women. In this study the group are-

a.<1 acre b.1-2 acre c.2-4 acre d.>4 acres

3.1.9: Types of houses: Four groups of houses are considered for this study-

a.Mud Built b.Brick Built c.Mixed d.Others

The table below represents the Demographic & socio-economic status of the respondents:

Table:3.1 Distribution of respondents by demographic and socio-economic characteristics-

Demographic & socioeconomic variables	Frequency	Percentage(%)
1. Age	9	22
<20 years	27	23
20-40 years	4	67
>40 years	4	10
2. Religion		
Islam	28	70
Hindu	12	30
3. Family position		
Housewife	30	75
Daughter-in-law	6	15
Mother-in law	4	10
4. Size of family		
Family member ≤5	34	85
Family member>5	6	15
5. Type of family		
Nuclear	34	85
Joint	6	15
6. Educational status		
Illiterate	18	45
Primary	16	40
Secondary	6	15
7. Occupation of spouse		
Labor	6	15
Business	8	20
Agriculture	16	40
Service holders	6	15
Others	4	10
8. Land holdings		
<1 acre	8	20
1-2 acre	24	60

2-4 acre >4 acre	6 2	15 5
9. Types of houses		
Mud Built	20	50
Brick Built	6	15
Mixed	14	35

From the collected data it was observed that mostly housewives (75%) contribute in dairying but most of them (67%) were middle age (20 - 40yr). Their predominant religion was Islam (70%) and mostly depends on agriculture (40%) and some were small businessman (20%). They were mostly illiterate (45%) and poor having mud-built house (50%) or mixed (35%) type house with joint family size(15%). They had low to medium experience in dairy activities.

3.2: Frequency of farm women involved in feeding activities

The feeding practice is one of most important tasks in dairy farming to care properly, because it is directly related to the profitability of the farm. From the very beginning women were involved in feeding practice, and now it is more organized.

The percentage of involvement of women in decision making in terms of feeding is given below in table-3.2

SI. No		Decision-making pattern									No	
	Activities/ Tasks	Farm only	women	Spo	use only	Join	ntly	Labor		response		
		f	(%)	f	(%)	f	(%)	f	(%)	f	(%)	
	Green fodder to be fed or not.	14	35	18	45	8	20	-	-	-	-	
2.	Green fodder to be purchased or home made	12	30	24	60	8	10	-	-	-	-	
3.	Quantity of green fodder are to be fed	16	40	18	45	6	15	-	-	-	-	
4.	Concentrate to be fed or not	8	20	20	50	12	30	-	-	-	-	
5.	What concentrate to be fed	8	20	20	50	12	30	-	-	-	-	
6.	Quantity of concentrate to be fed	12	30	24	60	4	10	-	-	-	-	
7.	Mineral mixture to be fed or not	4	10	18	45	8	20	-	-	10	25	
8.	Time of feeding	16	40	18	45	6	15	-	-	-	-	
9.	Frequency of feeding	14	35	16	40	10	25	-	-	-	-	
10.	Silage or hay making	4	10	12	30	6	15	-	-	18	45	
11.	Chopping of fodder	12	30	20	50	4	10	-	-	4	10	
12.	Method of storage of straw	6	15	26	65	8	20	-	-	-	-	
13.	Treatment of straw or use of UMB	4	10	12	30	4	10	-	-	20	50	
	Overall average	,	25		45		20			1	0	

Table: 3.2: Distribution of women involved in decision making of feeding:

From the table it is seen that women are mostly involved in decision making relating to green fodder (35%), time of feeding (40%), frequency of feeding (35%) and less involved in decision making relating to concentrate (20%), silage or hay making (10%), storage of straw (15%), treatment of straw with molasses (6.66%). Hence the involvement of women (25%) (Overall average) is less than man (45%), but increased from previous day.

3.3: Frequency of farm women involved in health care activities

For better production it is important to look after the cattle properly i.e., take health care. But it is seen that the farmers are not very much aware of taking health of their animals. Women do care more than man, but it should be increased & improved.

The percentage of involvement of women in decision making on health care is given in table-3.3.

SI. No.		Decision-making pattern									
		Farm women only		Spouse only		Jointly		Labor		No response	
		f	(%)	f	(%)	f	(%)	f	(%)	f	(%)
1.	Vaccination to be done or not	8	20	22	55	6	15	-	-	4	10
2.	Maintaining of vaccination schedule	16	40	14	35	8	20	-	-	4	10
3.	Treatment of sick animals	6	15	18	45	10	25	-	-	6	15
4.	Regular deworming	18	55	12	30	4	10	-	-	4	10
	Overall average	35		40		15				10	

Table: 3.3: Distribution of Women involved in decision making on health care:

From the table it is very positive that, now the farmers are aware of their animals in the study area. Only 10% were not responding about vaccination and regular deworming. Here women were mostly involved in maintaining vaccination schedule (40%) than man (35%). But in case of treating sick animal men were more respondent (45%) than women (15%).

3.4: Frequency of women involved in daily routine works in the farm

In dairy farm, women are mostly involved in the common works such as hygiene maintaining, watering, milking etc.

The involvement of the respondents in these works is given in table 3.4.

SI. No.	Activities/ Tasks	Decision-making pattern									
		Farm women only		Spouse only		Jointly		Labor		No response	
		f	(%)	f	(%)	f	(%)	f	(%)	f	(%)
1.	Hygiene maintaining	18	45	10	25	4	20	-	-	4	10
2.	Watering in the farm	12	30	18	45	10	25	-	-	-	-
3.	Milking	18	45	10	25	12	30	-	-	-	-
4.	Selling of milk & other dairy product	12	30	22	55	10	25	-	-	-	-
5.	Manure disposal	6	15	16	40	12	30	-	-	6	15
6.	Vaccination	12	30	18	45	6	15	-	-	4	10
	Overall average	30		40		25				5	

Table 3.4: Involved of women in terms of the following terms:

The table shows that the women were mostly involved in hygiene maintaining (45%) and in milking (45%). Hence the spouses were mostly involved in selling of milk and milk products (55%) and in vaccination (45%).

In the study area it has been seen that the women remain busy mostly in the activities within the door, they also participate in the outdoor farm activities. For this, the work like selling of milk and milk products, vaccination etc. their participation is less than man. But it will be wrong to say that they were lag behind in these works. Their participation is also good and day by day it is increasing.

In the next page, I tried to represents the graphical representation of table 3.4 as

- Figure: 3.4.1-Column chart: Comparative distribution of the respondents in various daily works in dairy farm
- Figure: 3.4.2-Pie chart: Participation of women in various daily works in dairy farm

These charts have been made based upon the figures found on table3.4.

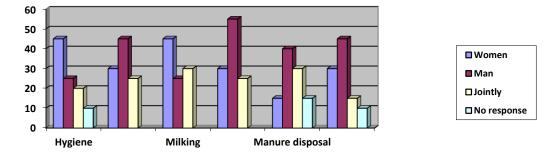


Figure:3.4.1: Comparative distribution of the respondents in various daily works in dairy farm

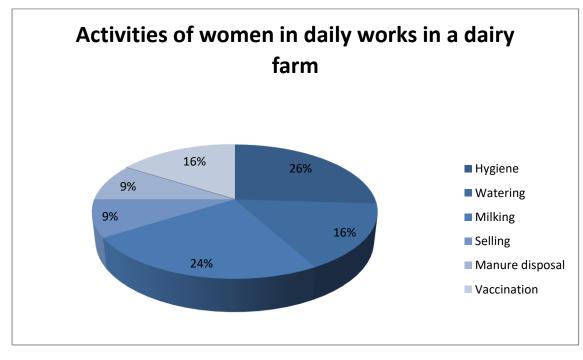


Figure: 3.4.2: Participation of women(in percentage) in various daily works in dairy farm

CHAPTER-IV

CONCLUSION

The participation of female in livestock sector is very high. Maintenance of dairy cattle management and production rural farm women perform a large part of work. Rural women traditionally play a very important role in raising livestock specially dairying. Dairying is nearly always a part of mixed farming systems in Bangladesh. It has a direct impact on income generation, poverty alleviation and availability of animal protein. However, the household job they perform is unpaid and the traditional extension service does not make much contribution to raise their skills. Women were mostly involved in hygiene maintaining (45%), in milking (45%), maintaining vaccination schedule (40%) in their dairy farm.

But now it is a matter of fact that the women are conscious about their role in family matters. Here it is seen that women have greater participation in hygiene maintaining & milking of dairy cow along with their spouses. In other household sectors e.g., feeding, manure disposal, milk selling, watering they have great contributions. As the matters like marketing, the decisions are mostly taken by the husbands. Men are mostly involved in outdoor activities and they remain busier in those work. For this they are not highly involved in this sector, except commercial dairy farming.

LIMITATIONS

By the comments of the respondents of this study the following limitations are found at the farm level -

- Shortage of feeds and fodder
- The breeds of cattle are not available
- Lack of veterinary health care
- Lack of marketing information
- Shortage of vaccine
- Lack of fund
- Lack of transportation

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BIOGRAPHY

I am Pronab Das. I passed Secondary School Certificate examination in 2013 and Higher Secondary Certificate examination in 2015. Now I am an intern veterinarian under the Faculty of Veterinary Medicine in Chittagong Veterinary and Animal Sciences University. In the future I would like to work as a veterinary practitioner and do research on clinical animal diseases.