**Chapter-I**

**INTRODUCTION**

It is believed that it was women who first started growing crops and domesticating animal and thereby initiated the art and science of farming (Swaminathan, 1985), while men went out for hunting in search of food. Women have played and continue to play, a key role in the conservation of basic life support systems such as land, water, food and shelter.

Women’s empowerment is one of the significant issues for upholding status 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 capabilities. In Bangladesh, rural women are largely deprived of autonomy as their lives are controlled by male governance in the patriarchal society. The women are subjected to aggressive behavior at the hands of their husbands and other male members of husband’s family. Due to long-standing traditions in rural Bangladesh society regarding the role of women, a husband will commonly seek to limit the autonomy of his wife in all regards and will not show affection or respect, in contrast to standards in many western cultures. Following the marriage, a woman enters her husband’s house and immediately takes on responsibility for all household work. Her most important duty, however, is to bare a male child. These women are not at liberty to express opinions in

front of their husbands or to make their own decisions and instead must obey any rules dictated by their husband or members of the husband’s family. Rebellion against the mandates of the husband can result in physical and mental and even threats of divorce. This oppression is a common experience for every woman in the traditional rural Bangladesh society and highlights the importance of fostering women’s empowerment to remove gender

inequality both within the family unit and in society. Because rural Bangladesh society seeks to suppress even female independent thought, if these women will successfully escape the patriarchal society, they must first be taught and encouraged in building a strong independent mindset. Only by establishing a new standard of personal independence will these women gain confidence in their own capacity for governing their lives and thereby develop the strength to stand strong in the face of subsequent oppression.

Additionally, gender equality and empowerment of women are vital to achieve sustainable improvement in the rural society (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

The women folk can easily be considered as backbone of any nation and better half of the men in almost all spheres of community development, of which Bangladesh is not an exception. Rural women, who constitute about 50 % of total rural population, play an active role in all spheres of economic life and contribute richly towards national income.

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 capital.

The 21st century is the century of being positively changed- me along with surroundings. In this modern technology based world, it will be very difficult to find anyone even a woman who wastes her time. Everybody utilize owns 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 there 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 accordance 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 **Millennium Goal**. Now it is cleared that the small holders 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 several Govt. & NGO’s are also trying to organize & establish rural women as an active income generating group & at the same time to increase the overall productivity of livestock in the country.

So last but not least that without the participation of our almost 50% of the people i.e. women we cannot improve our economic condition of family as well as the country. So, women participation in all works, especially in farming activities like dairy farming, poultry farming etc must be increased and now they should be the **visible one, not invisible one.**

**1.1:** **Objectives of the study:-**

* To study the role of farm women in relation to dairy animal production tasks.
* Changes in women’s socio-economic position, eg; 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 women role in agricultural activities.

**Chapter-II**

**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, five Villages namely Suchakradandi, Kelishahar, Ashiya, Jangalkhain & Ujirpur at **Patiya thana in Chittagong district** are considered for this study. The reasons for selecting this area as study area are given bellow:

* This areas 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 farm women who were married,
* Having minimum one milch cow,
* Age minimum 18 years,
* Who are living with spouse only other closely related persons eg; mother-in law, daughter-in-law in the village.

A multi-stage sampling scheme was followed for selecting the respondents for the sample from the target population. Six Farm families from each selected village were selected using simple random sampling technique without replacement from the target population. Thus the total number of primary units in the sample for the study was 30 farm 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. Period of data collection:**

The data was collected during the period of 05\10\2016 to 15\10\2016 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 farm 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-

1. <20 years
2. 20-40 years
3. >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-

1. Muslim
2. 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:

1. Housewife
2. Daughter-in-law
3. 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:

1. Family member 5 or below
2. Family member above 5

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

1. Nuclear family
2. 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-

1. Illiterate
2. Primary
3. Secondary

**3.1.7: Occupation:** With the variation of occupation if the spouse, the role of women is also varies in decision making sector. In this study, the group of occupation is grouped as-

1. Labour
2. Business
3. Agriculture
4. Service holder
5. 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-

* + - 1. <1 acre
      2. 1-2 acre
      3. 2-4 acre
      4. >4 acre

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

1. Kaccha
2. Pacca
3. Mixed
4. 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 & socio-economic characteristics** | **Frequency** | **Percentage (%)** |
| 1. **Age**   <20 years  20-40 years  >40 years | 3  24  3 | 10  80  10 |
| 1. **Religion**   Islam  Hindu | 24  6 | 80  20 |
| 1. **Family position**   Housewife  Daughter-in-law  Mother-in law | 25  3  2 | 83.33  10  6.66 |
| 1. **Size of family**   Family member ≤5  Family member >5 | 22  8 | 73.33  26.66 |
| 1. **Type of family**   Nuclear  Joint | 27  3 | 90  10 |
| 1. **Educational status**   Illiterate  Primary  Secondary | 13  12  5 | 43.33  40  16.66 |
| 1. **Occupation of spouse**   Labour  Business  Agriculture  Service holders  Others | 4  17  4  3  2 | 13.33  56.66  13.33  10  6.66 |
| 1. **Land holdings**   <1 acre  1-2 acre  2-4 acre  >4 acre | 6  17  6  1 | 20  56.66  20  3.33 |
| 1. **Types of house**   Kaccha  Pacca  Mixed | 15  7  8 | 50  23.33  26.66 |

From the collected data it was observed that mostly housewives (83.33%) contribute in dairying but most of them (80%) were middle age (20 -40yr). Their predominant religion was Islam (80%) and mostly were small businessman (56.66%), or depends on agriculture (13.33%). They were mostly illiterate (43.33%) and poor having kaccha (50%) or mixed (26.66%) type house with joint family size(10%).They had low to medium experience in dairy activities.

**3.2: Involvement of farm women in decision making in terms of feeding:**

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

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Activities/ Tasks** | **Decision-making pattern** | | | | | | | | **No response** | |
| **Farm women only** | | **Spouse only** | | **Jointly** | | **Labour** | |
| ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) |
| 1. 111 | Green fodder to be fed or not. | 11 | 36.66 | 13 | 43.33 | 6 | 20 | - | - | - | - |
| 2. | Green fodder to be purchased or home made | 7 | 23.33 | 19 | 63.33 | 4 | 13.33 | - | - | - | - |
| 3. | Quantity of green fodder are to be fed | 10 | 33.33 | 11 | 36.66 | 9 | 30 | - | - | - | - |
| 4. | Concentrate to be fed or not | 8 | 26.66 | 12 | 40 | 10 | 33.33 | - | - | - | - |
| 5. | what concentrate to be fed | 7 | 23.33 | 15 | 50 | 8 | 26.66 | - | - | - | - |
| 6. | Quantity of concentrate to be fed | 9 | 30 | 18 | 60 | 3 | 10 | - | - | - | - |
| 7. | Mineral mixture to be fed or not | 3 | 10 | 11 | 36.66 | 6 | 20 | - | - | 10 | 33.33 |
| 8. | Time of feeding | 12 | 40 | 13 | 43.33 | 5 | 16.66 | - | - | - | - |
| 9. | Frequency of feeding | 10 | 33.33 | 12 | 40 | 8 | 26.66 | - | - | - | - |
| 10. | Silage or hay making | 2 | 6.66 | 9 | 30 | 5 | 16.66 | - | - | 14 | 46.66 |
| 11. | Chopping of fodder | 11 | 36.66 | 15 | 50 | 2 | 6.66 | - | - | 2 | 6.66 |
| 12. | Method of storage of straw | 4 | 13.33 | 20 | 66.66 | 6 | 20 | - | - | - | - |
| 13. | Treatment of straw or use of UMB | 2 | 6.66 | 11 | 36.66 | 2 | 6.66 | - | - | 15 | 50 |
|  | **Overall average** | **24.61** | | **45.89** | | **18.97** | |  | | **10.51** | |

From the table it is seen that women are mostly involved in decision making relating to green fodder (36.66%), time of feeding (40%), frequency of feeding (33.33%) and less involved in decision making relating to concentrate (26.66%), silage or hay making (6.66%), storage of straw (13.33%), treatment of straw with molasses (6.66%). Hence the involvement of women (24.61%) (overall average) is less than man (45.89%), but increased from previous day.

**3.3: Involvement of farm women in decision making in terms of health care:**

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.

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Activities/ Tasks** | **Decision-making pattern** | | | | | | | | **No response** | |
| **Farm women only** | | **Spouse only** | | **Jointly** | | **Labour** | |
| ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) |
| **1.** | Vaccination to be done or not | 6 | 20 | 16 | 53.33 | 5 | 16.66 | - | - | 3 | 10 |
| **2.** | Maintaining of vaccination schedule | 12 | 40 | 10 | 33.33 | 6 | 20 | - | - | 2 | 6.66 |
| **3.** | Treatment of sick animals | 5 | 16.66 | 13 | 43.33 | 7 | 23.33 | - | - | 5 | 16.66 |
| **4.** | Regular deworming | 16 | 53.33 | 9 | 30 | 3 | 10 | - | - | 2 | 6.66 |
|  | **Overall average** | **32.49** | | **39.99** | | **17.49** | |  | | **9.99** | |

From the table it is very positive that, now the farmers are aware of their animals in the study area. Only 9.99% were not responding about vaccination and regular deworming. Here women were mostly involved in maintaining vaccination schedule (40%) than man (33.33%). But in case of treating sick animals man were more respondent (43.33%) than women (16.66%).

This chart represents the comparative involvement of all respondents in feeding, breeding, health care and management practices in dairy farm.

The participation of women was higher in health care (32.49%), than feeding (24.61%). Joint decision was also noticeable in all types of practices.

**3.4: Involvement of farm women in decision making in terms of daily routine works in a dairy 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.

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

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Activities/ Tasks** | **Decision-making pattern** | | | | | | | | **No respons**  **e** | |
| **Farm women only** | | **Spouse only** | | **Jointly** | | **Labour** | |
| ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) | ***f*** | (%) |
| **1.** | Hygiene maintaining | 14 | 46.66 | 8 | 26.66 | 6 | 20 | - | - | 2 | 6.66 |
| **2.** | Watering in the farm | 9 | 30 | 13 | 43.33 | 8 | 26.6 | - | - | - | - |
| **3.** | Milking | 13 | 43.33 | 8 | 26.66 | 9 | 30 | - | - | - | - |
| **4.** | Selling of milk & other dairy product | 5 | 16.66 | 17 | 56.66 | 8 | 26.6 | - | - | - | - |
| **5.** | Manure disposal | 5 | 16.66 | 12 | 40 | 9 | 30 | - | - | 4 | 13.33 |
| **6.** | Vaccination | 9 | 30 | 14 | 46.66 | 5 | 16.6 | - | - | 2 | 16.66 |
|  | **Overall average** | **30.51** | | **39.95** | | **24.96** | |  | | **4.41** | |

The table shows that the women were mostly involved in hygiene maintaining (46.66%) and in milking (43.33%). Hence the spouses were mostly involved in selling of milk and milk products (56.66%) and in vaccination (46.66%).

In the study area it has seen that the women were 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 table 4.4.

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

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

**Chapter-iV**

**Conclusion**

The process of development would be incomplete, unless the women folk are fully involved in it. Livestock is one of the most important sectors where the participation of female is high. In relation to the maintenance of dairy cattle management and production rural farm women perform a large part of work.

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. Rural women traditionally play a very important role in raising livestock specially dairying. However, the household job they perform is unpaid and the traditional extension service does not make much contribution to raise their skills.

But now it is a matter of fact that the women are conscious about their role in family matters as well as their family members too. Here it is seen that women has greater participation in health care & feeding of dairy cow along with their spouses. In other household sectors eg; milking, manure disposal, milk selling, watering they have great contributions. As the matters like marketing, the decisions are mostly taken by farm owner also collectively by the family. 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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**APPENDIX**

**INTERVIEW SCHEDULES**

**1. Owner’s name with address:**

a. Name of owner and his wife:

b. Address:

**2. Family position:**

a. House wife

b. Daughter- in –law

c. Mother-in-law

**3. Age group:**

a. Young (<20 years)

b. Middle (20-40 years)

c. Old (Above 40 years)

**4. Religion:**

a. Islam

b. Hindu

c. Others

**5. Educational status:**

a. Illiterate

b. Primary

c. Secondary

d. Higher secondary or above

e. Madrasa

**6. Occupation:**

a. Laborer

b. Business

c. Agriculture

e. Service holders

f. Others

**7. Type of house:**

a. Kaccha

b. Pacca

c. Mixed

d. Others

**8. Family type & size:**

**Family type Family size**

a. Nuclear a. 5 or below family number

b. Joint b. above 5 family number

**9. Land holding :**

a. < 1 acre

b. 1-2 acre

c. 2-4 acre

d. > 4 acre

**10. Hygiene is maintained by**

a. Husband

b. Wife

c. Labor

d. jointly

d. Others

**11. Watering is done by:**

a. Husband

b. Wife

c. Labor

d. jointly

**12. Milking is done by:**

a. Husband

b. Wife

c. Labor

d. jointly

**13. Vaccination is done by:**

a. Husband

b. Wife

c. Labor

d. jointly

**14. Manure disposal is done by:**

a. Husband

b. Wife

c. Labor

d. jointly

**15. Milk selling is done by:**

a. Husband

b. Wife

c. Labor

d. jointly

**16. Women involved in health care:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Activities/ Tasks** | **Decision-making pattern** | | | | **No response** |
| **Farm women only** | **Spouse only** | **Jointly** | **Labour** |
| (%) | (%) | (%) | (%) | (%) |
| **1.** | Vaccination to be done or not |  |  |  |  |  |
| **2.** | Maintaining of vaccination schedule |  |  |  |  |  |
| **3.** | Treatment of sick animals |  |  |  |  |  |
| **4.** | Regular deworming |  |  |  |  |  |

**17. Women involved in feeding management**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Activities/ Tasks** | **Decision-making pattern** | | | | **No response** |
| **Farm women only** | **Spouse only** | **Jointly** | **Labour** |
| (%) | (%) | (%) | (%) | (%) |
| 1. 11 | Concentrate to be fed or not. |  |  |  |  |  |
| 2. | What concentrates are to be fed |  |  |  |  |  |
| 3. | Quantity of concentrates are to be fed |  |  |  |  |  |
| 4. | Concentrate mixture to be homemade or purchased |  |  |  |  |  |
| 5. | Frequency of feeding |  |  |  |  |  |
| 6. | Green fodder to be fed or not |  |  |  |  |  |
| 7. | Green fodder to be purchased or home made |  |  |  |  |  |
| 8. | Quantity of green fodder to be fed |  |  |  |  |  |
| 9. | Quantity of crop residues are to given |  |  |  |  |  |
| 10. | Silage or hay making |  |  |  |  |  |
| 11. | Chaffing of fodder |  |  |  |  |  |
| 12. | Method of storage of straw |  |  |  |  |  |
| 13. | Treatment of straw or use of UMB |  |  |  |  |  |

**BIOGRAPHY**

I am Amina Tasmin, daughter of Mr. Abdul Malek and Mrs. Bilkis Mubarrah. I passed Secondary School Certificate examination in 2008 (G.P.A-5) followed by Higher Secondary Certificate examination in 2010 (G.PA-4.90). 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 in Bangladesh.