

Women Dairy Farmers and Decision Making Pattern in Sonitpur District of Assam

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INTRODUCTION

The women folk are considered the backbone of the nation and better half of the men in almost all spheres of community development. Rural women constitute about 50% of total rural population. They play a vital role in all spheres of economic life and contribute richly towards national income. Of the major rural enterprises, dairy enterprise has been regarded as an important instrument of economic and social change and supplement to the income and employment to rural women.

Livestock rearing is an important means of income generation in villages for all categories of farmers including small, marginal and even landless farmers in rural India. Milk production and processing of milk for product preparations play a vital role in India's agricultural economy. Dairying is an important means of livelihood to millions of rural poor farmers. The per capita availability of milk in our country has gone up from 112g in 1950-1951 to 218g today. But despite having 11.48 million cattle and 0.96 million buffalo population in north-eastern region, the per capita availability of milk in this region is only 77g against all India average of 218g.

In addition, the small and marginal farmers get cash by selling milk and milk products to purchase seeds, fertilizers etc. for crop production. The role of rural women in agriculture and livestock sector is always neglected. The rural women are denied their status as active producers in these sectors. They have less access to technology, credit, training etc. It is important to understand the role and contribution of farm women for future planning of extension services to fit their needs. Krishi Vigyan Kendras are playing a crucial role in catering the needs of farm women in rural India.

In rural India, cattle and buffalo rearing has been traditionally been a responsibility of farm women.

The government of India report indicates that 85 percent of rural women are engaged in livestock production (Viswanathan 1989). But in most instances, in spite being the major contributor in cattle and buffalo production, farm women have been left out from extension programmes of animal husbandry. In addition to this, the extension service work is a male dominated area where farm women have some hesitation to inquire regarding reproduction related problems. These might be the reasons for slow progress in this area. Various micro level studies highlight womens' significant role in dairy production (Jain and Verma 1992; Singh et al. 2005).

The study was conducted in Sonitpur district of Assam. The data were collected through a personal interview schedule in randomly selected 140 farm women from 14 villages of 7 developmental blocks of the district.

Contribution of farm women in dairy production activities was studied with respect to their percent involvement in decision making process. Involvement in decision making of an individual family member may not be of the same level for all activities of dairy production. In some cases, the farm women might take decision of their own, while in others they might not be involved at all. The involvement of farm women in decision making was studied under category of feeding, breeding, management, health care and processing of milk. The farm women were asked to indicate who was taking decision in each activity on a four point continuum *viz.* Decision taken by spouse alone (independent decision), spouse + house wife + other family members / friends/ relatives (collective decision), house wife + spouse (joint decision) and house wife alone (independent decision). In the event of the respondent not responding to an activity, no response was recorded. As can be seen the continuum was in ascending order with respect to the perceived level of involvement, the spouse

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being an independent decision maker at one end of the continuum and farm women being the independent decision maker at the other, the involvement of farm women gradually increase from one end of the continuum to the other.

RESULTS AND DISCUSSION

Feeding

Dairy animal feedings are normally performed by farm women except taking animals for grazing and chaffing the fodder, although farm women are also involved in these activities. The data presented in Table 1 revealed that farm women are involved in the decision making process in most of the activities either independently or jointly with the spouse. It is seen that in matters like whether concentrates are to be fed or not (48.57%), quantity of concentrate to be fed (56.43%), green fodders are to be fed or not (32.86%), quantity of crop residue to be fed (62.86%), fodders are to be chaffed or not (34.26%), most of the farm women were reported to be taking decisions independently. In matters like whether mineral mixtures are to be fed or not (43.57%), frequency of feeding mineral mixtures (40.71%), quantity of green fodders to be fed (30%) and method of straw storage (45%) the decisions were taken by spouse only independently. The above table also indicated that silage/hay making is not practised by majority of farmers in

the area under study and a high percentage of respondents (60.71%) did not respond to this activity.

The findings of this study are in consonance with the results of Singh and Srivastava (2012) and Dubey et al. (1982) that farm women are involved in decision making process in feeding the dairy cattle and buffaloes.

Breeding

Table 2 indicates that the farm women are not much involved in the decision making process in breeding activities of dairy animals, whether adoption of AI or natural service or whether or not go for pregnancy diagnosis. Dubey et al. (1982) and Singh and Srivastava (2012) had also reported similar results.

Most of the breeding activities are outdoor activities which require the animal to be taken outside the home to the veterinary hospital, generally located at a distance from the village. This might be the reason of poor participation in decision making in these activities by the farm women. In addition, this is a time consuming process for farm women as they have other domestic and livestock-related works at home to perform. The decisions are therefore taken by the spouse.

Management

Management of dairy animals is very important part of dairy animal production system. Most of

Table 1: Involvement of farmwomen in decision-making in FEEDING (n = 140)

Sl. No.	Activities / Task	Decision-making pattern				
		Spouse only (%)	Collective (%)	Joint (%)	Farmwomen only (%)	% non-respondents
1	Concentrates are to be fed or not	8.57	16.43	26.43	48.57	-
2	Quantity of concentrate to be fed	12.86	10.71	20.00	56.43	-
3	Mineral mixtures are to be fed or not	43.57	7.86	27.86	16.43	4.29
4	Frequency of feeding minerals	40.71	9.29	31.43	14.29	4.29
5	Green fodders are to be fed or not	26.43	12.14	28.57	32.86	-
6	Quantity of green fodders to be fed	30.00	10.71	29.29	27.86	2.14
7	Quantity of crop residue to be fed	12.14	5.00	24.29	62.86	2.86
8	Silage or hay making	5.71	2.86	7.14	23.57	60.71
9	Fodder chaffing	35.71	19.29	9.29	34.26	1.43
10	Straw storage method	45.00	23.57	7.86	20.00	1.43
	Overall average	26.07	10.79	21.22	34.20	7.72

Collective = All family members / relatives / friends

Joint = Spouse and farm women only

Table 2: Involvement of farmwomen in decision-making in BREEDING (n = 140)

Sl. No.	Activities / Task	Decision-making pattern				
		Spouse only (%)	Collective (%)	Joint (%)	Farmwomen only (%)	% non-respondents
1	Adoption of AI or natural service	79.26	12.86	5.71	-	2.14
2	Bull selection in case of natural service	86.43	7.14	6.43	-	-
3	Treatment of animals with reproductive disorders	75.00	15.00	7.14	2.86	-
4	Pregnancy diagnosis	66.43	9.26	12.14	1.43	10.71
	Overall average	76.78	11.07	7.86	1.07	3.21

Collective = All family members / relatives / friends

Joint = Spouse and farm women only

the management activities are indoor activities and most of these need monetary involvement. Table 3 showed that decisions about weaning of calves (59.29%), keeping the animal in open or in shed (60.71%), time of milking (79.26%) and number of times the animals are to be milked (78.57%) were taken by farm women alone, while decisions about whether the shed is to be pucca or kutchcha was decided jointly by the farm women and the spouse (44.26%), although in 30% of the cases, the decision is taken by the spouse alone. In regard to the number of dairy animals to be kept by the family was mainly a joint decision of the house wife and the spouse although about 26.43 percent respondents reported it as collective family decision.

It was observed that in this area of management of dairy animals, activities requiring monetary involvement was decided either by jointly by the

farm women and the spouse or collectively by the family. Activities like feeding colostrum and shed to be disinfected or not were not responded by a large number of respondents as they were unaware about these important management practices.

Health Care

It was observed from Table 4 that a large number of respondents failed to respond to the activity like vaccination is to be done or not (52.14%) and deworming of dairy animals (61.43%). This is probably because of ignorance of the farm families of the area to these important health care activities. However, 30.71% of the respondents reported that the decision about vaccination was taken by the spouses only. About 15% of the respondents reported that the spouse decided the matter of deworming schedule to be followed. Regarding treatment of sick animals, majority of respondents

Table 3: Involvement of farmwomen in decision-making in MANAGEMENT (n = 140)

Sl. No.	Activities / Task	Decision-making pattern				
		Spouse only (%)	Collective (%)	Joint (%)	Farmwomen only (%)	% non-respondents
1	Weaning of calves	5.71	7.86	6.43	59.29	20.71
2	Animals are to be kept in open or in shed	2.14	22.14	14.29	60.71	0.71
3	Shed to be pucca or kutchcha	30.00	10.71	44.26	15.00	-
4	Colostrum to be fed to the new born calf or not	7.14	19.29	2.14	3.57	67.86
5	Number of dairy animals to be kept	20.00	26.43	40.00	13.57	-
6	Shed to be disinfected or not	25.00	19.26	7.86	5.00	42.86
7	Number of times animals are to be milked	2.14	12.86	6.43	78.57	-
8	Time of milking	2.86	12.86	5.00	79.26	-
	Overall average	11.87	16.43	15.80	39.37	16.52

Collective = All family members / relatives / friends

Joint = Spouse and farm women only

Table 4: Involvement of farmwomen in decision-making in HEALTH CARE (n = 140)

Sl. No.	Activities / Task	Decision-making pattern				
		Spouse only (%)	Collective (%)	Joint (%)	Farmwomen only (%)	% non-respondents
1	Vaccination to be done or not	30.71	12.14	5.00	-	52.14
2	Treatment of sick animals to be done or not	39.29	25.71	20.00	4.26	10.71
3	Deworming schedule to be followed or not	15.00	9.26	11.43	2.86	61.43
	Overall average	28.34	15.71	12.14	2.37	41.43

Collective = All family members / relatives / friends

Joint = Spouse and farm women only

reported that the decision was taken either by the spouses themselves (39.29%) or it was taken in consultation with the farm women (20%), or that was a collective decision (25.71%).

Singh and Srivastava (2012) reported similar finding while Dubey et al. (1982) had, however, that the housewife was involved in decisions regarding the health care of dairy cattle and buffaloes.

Processing of milk

The activities in the processing of milk for product making as revealed from Table 5 are indoor activities and are mainly within the home domain of farm women. It is seen from the table that activities like quantity of milk to be used for home consumption (46.43%) and type of milk product to be made from surplus milk (59.29%) was decided by the farm women themselves, although 20.71% respondents also reported that they were taking decisions in consultation with their spouse with regard to quantity of milk to be used for home consumption. About 30% respondents said it was

a collective decision for whether the surplus milk to be sold or processed for product making.

Being the homemaker and housewife, the farm women have to look into and cater to the nutritional requirements, needs and tastes of other family members. This might be the probable reason of involvement of the farm women in decision making process with regard to quantity of milk to be used for home consumption and type of milk product to be made. These findings are in agreement with the conclusions arrived at by Dubey et al. (1982), Saraswati et al. (1987) and Singh and Srivastava (2012).

Regarding breeding and health care activities of dairy animals, the decisions were taken by the spouse or livestock owners alone or collectively by the family. The farm women had very low involvement in decision making in these activities of dairy husbandry. There is a need to provide technical knowledge and guidance to the farm women to increase their participation in decision making in these areas of dairy animal production for an overall improvement. It can be concluded

Table 5: Involvement of farmwomen in decision-making in PROCESSING OF MILK (n=140)

Sl. No.	Activities / Task	Decision-making pattern				
		Spouse only (%)	Collective (%)	Joint (%)	Farmwomen only (%)	% non-respondents
1	Quantity of milk to be used for home consumption	2.86	29.29	20.71	46.43	0.71
2	Surplus milk to be sold/ processed for products	12.14	30.00	23.57	27.14	7.14
3	Type of milk product to be made	7.86	26.43	5.71	59.29	0.71
	Overall average	7.62	28.57	16.66	44.29	2.85

Collective = All family members / relatives / friends

Joint = Spouse and farm women only

that most of the decisions related to feeding, management, and processing of surplus milk for product preparations were taken by farm women either independently or jointly with their spouses.

REFERENCES

- Dubey VK, Singh SB, Khera JK (1982). Role of rural women in decision-making with respect to animal husbandry practices. *Indian Journal of Home Science* 14(2):18-21
- Jain V, Verma SK (1992). Nature and extent of involvement of men and women in animal husbandry operations. *Indian Dairyman* 44(7): 332-337
- Saraswati LS, Padma AV, Perumal P (1987). Position of farm women in Tamil Nadu: A report on a general study on farm women in villages of Keelapavoor (Tirunelveli) and Palur (South Arcot). A research project sponsored by DANIDA
- Singh B, Srivastava S (2012). Decision making profile of Ummednagar village of Jodhpur district. *Indian Res J of Extension Education*, Special Issue 1: 235-137
- Singh P, Mishra BA, Singh B (2005). Assessment of women role in animal husbandry: Proceedings of National Seminar on Entrepreneurship on development for livelihood security-Experiences, Prospects and Strategies for Rural India. IVRI, Izatnagar, India. pp 68
- Viswanathan B (1989). Women in livestock in India. A desk study for FAO regional office for Asia and Pacific, Bangkok, Thailand