



Original Research

Decision Making Pattern on Existing Feeding Practices among the Dairy Farmers of Manipur

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Abstract

Dairy farming is one of the notable sectors in India. It is a means of nutritional and livelihood support to many individuals. The most commercial state amongst the several for dairy farming are Haryana, Punjab, Uttar Pradesh and Rajasthan. The dairy farming requires proper knowledge, management and well decision support system. The success of dairy farming depends on the proper decision making at right time such fodder requirement, artificial insemination, healthcare, selection of breed, mineral mixture etc. In Indian context, mostly the task related to dairy farming done by the women and it is vigorously found in Uttar Pradesh, Rajasthan, Punjab, Haryana, Maharashtra although there, the women are less empowered. Another empirical fact is that in the North Eastern States of India, the women are comparatively more empowered than other parts of India. Therefore, it becomes kin interest to know the use of empowerment in the form of decision making pattern related to dairy farming in Manipur. The study has been conducted in the two district of Manipur namely Imphal West and Imphal East, there were 80 farm families interviewed personally with the help of semi-structured interview schedule. Some of the heartfelt facts about empowerment on the basis of decision making pattern related to feeding pattern has been found that the male counterpart has been playing a significant role in almost all the parameters such as green fodder to be fed, quantity of green fodder to be fed and quantity of dry fodder to be fed were 88.75 percent, 90.00 percent and 90.00 percent respectively. Thus, it brings to the conclusion that the empowered women of Manipur are not empowered in feeding of dairy animals. The work and decision related to feeding and taking care of animals goes to male counterpart.

Key words: Decision Making, Empowerment, Feeding, Knowledge, Management

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Introduction

Gender empowerment is the major concern of the today's era. Every nation has been giving focus on gender equality in diverse aspect. On this regards, the data of International Monetary Fund (2012) working paper





revealed that India has one of the lowest Female Labour Force Participation (FLFP) rates among emerging markets and developing countries. A total of 20.50% women were employed in the organized sector in 2011 with 18.10% working in the public sector and 24.30% in the private sector (Population Census, 2011). The labour force participation rate for women across all age groups was 25.30% in rural sector and 15.50% in urban sector compared with 55.30% and 56.30% for men in the rural and urban sector respectively. Among the various sector, the manufacturing and services account for just 18 percent of rural employment for women and in agriculture dominates at 75 percent (FAO, 2015). Similarly, in dairy sector, the work force participation of women is much higher than men. Patki and Nikhade (1998) reported that participation in decision making process of farm women had medium to high (85.00 per cent) level of participation in decision making process in relation to various agriculture activities. Decision making power among the women is another important parameter which glorifies the height of empowerment. Women's participation in decision making about farm activities is dependent upon social, cultural and economic conditions in the area and it varies widely among different regions, ecological sub zones, farming system, caste, class and stages in the family cycle. Increasing the capacity of rural women is a necessary step toward allowing them equal right and power with men (Mulugeta & Amsalu, 2014). Certain characteristics such as education, social participation, extension contact, land holding, annual income, cosmopolitaness, scientific orientation, risk orientation and economic motivation positively and significantly influenced the participation of farm women in decision making process. Farm women had medium to high level of participation in decision making process in relation to agriculture activities (R.H. Gondaliya and J.K. Patel ,2012). Decision-making involves the selection of a course of action from among two or more possible alternatives in order to arrive at a solution for a given problem. (Trewatha and Newport, 2008). Dairy farming production contributes considerably to the advancement of the rural area (Dagula & Kiminami, 2009).

As per feeding of dairy animals, decision making plays a vital role to keep animal healthy and productive. Right decision at right time is the key to success in any enterprise such as dairy, agriculture, manufacture and so on. The feeding parameters includes green fodder production, variety to be grown, sown of fodder, time of harvesting, irrigation, weed management etc. Afzal *et al.* (2009) conceptualized that although rural women played a very important task in agriculture and contributed in all operations related to crop production, still today women are faced with various traditional restraints. The participation of women in decision making is highly appreciable in agriculture and allied sectors, but it varies from community to community and region to region. In this context, the investigation was conceded out with the entitled "Decision Making Pattern on Existing Feeding Practices among the Dairy Farmers of Manipur" to know the decision making power enjoyed by the women-folk of Manipur related to feeding of dairy animals.



Materials and Methods

Materials and methods used for this investigation were satisfactory. The study was piloted in the two district of Manipur i.e. Imphal East and Imphal West. From these two districts, eight villages were selected randomly and from each village ten farm families, thus total farm families were 80 in number. The men and women who were directly involved in dairy related activities at the time of investigation are interviewed separately from 80 farm families, therefore, total respondents was 160 respectively. The semi-structured interview schedule was developed and purposively used. The raw data was analyzed by using appropriate statistical tools such as mean, standard deviation, frequency and percentage.

Results and Discussion

The study was conducted on two broad aspects which is related to decision making on feeding practices followed by dairy farmers of Manipur such as a) Qualitative parameters and b) Quantitative They are discussed below-

Qualitative Parameters

Cultivation of Types of Fodder Crops

Manipur is covered with forest which gives abundant grasses and tree leaves to feed their animals. Therefore, cultivation of fodder crops is not done like other parts of India such as Punjab, Haryana, Uttar Pradesh, Rajasthan etc. Limited farmers used to cultivate fodder crops that are doing dairy commercially. Some of the fodder crops grown are Berseem, Lucerne and Maize. The decision making related to cultivation of types of fodder crops is being done jointly which was 3.75 percent. It has been revealed by Sharma *et al.* (2013) that in Jammu district only 2% of the respondents took independent decision and 24% were involved in partially regarding cultivation of fodder for livestock.

Green Fodders are to be Fed

Green fodder feeding is very important to maintain higher milk production, animal health and other reproductive issues. The decisions regarding green fodder are to be fed or not are crucial and it is done mainly by men (88.75%). The share of women in decision making is 3.75 percent and jointly 46.25 percent.

Storage of Green and Dry Fodder

Proper storage of green and dry fodder is must to maintain the nutritive value of the fodder. It helps to avoid loss of feeding material both quality & quantity and can be used for longer period. The stored dry matter become friends of farmer during rainy days as access to green fodder become difficult. In this regards, the investigation on decision making about proper storage of green & dry fodder was done and found that 33.75 percent men were hold with them followed by jointly 18.75 percent and women only 3.75 percent.

Similarly, Narmatha *et al.* (2015) revealed that decision was taken mostly by men (53.22%) in majority of the occasional activities like construction of shed and store room for forage.

Table 1: Qualitative parameters

Particulars	Men (n=80)	Women (n=80)	Joint Decision (n=160)
Cultivation of types of fodder crops	3 (3.75%)	-	3 (1.87%)
Green fodder are to be fed	71 (88.75%)	3 (3.75%)	74 (46.25%)
Storage of green and dry fodder	27 (33.75%)	3 (3.75%)	30 (18.75%)
Purchase of concentrate	17 (21.25%)	-	17 (10.62%)
Purchase of mineral mixture	27 (33.75%)	-	27 (16.87%)
Purchase of green and dry fodder	5 (6.25%)	-	5 (3.12%)
Others (Bringing salts, grass cutting tools etc.)	-	19 (23.75%)	19 (11.87%)

Purchase of Concentrate

Commercial farmers used to do dairy farming on large scale. Their prime motive is to earn capital. It would be possible when animal is at good condition, healthy, disease free, genetically good breeder and high milk yielder etc. and feeding of concentrates plays a great role to maintain such condition. The dairy farmers are less in statistics in Manipur and they are keeping animal mostly for family requirement, therefore purchase of concentrate is minimal. Although, the decision making on purchasing of concentrates is stand 21.25 percent in men and 10.62 percent jointly. The women-folk are not at all taking part in this matter.

Purchase of Mineral Mixture

Dairy farmers of Manipur are low-cut in purchasing area specific mineral mixture but as per decision making is concern it would prefer 33.75 percent by men and 16.87 percent women. But in case of Assam, it has been found that 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 (Sarma and Payeng, 2012).

Purchase of Green and Dry Fodder

Manipur is a hilly area covered with 78 percent forest. The state has great opportunity to access green fodder. Therefore, the purchasing of fodder is negligible. Even though, the decision on purchasing green and dry fodder would rely 6.25 percent by men and 3.12 percent jointly. In support of this investigation, Ghosh (1997) earlier also observed that the Manipuri women are regarded in high position because of their unique function of the women-folk but as per decision making is concerned the men-folk play maximum shares. But on the other hand, in West Bengal, 66 percent women were involved in taking self-decision regarding fodder management which is opposite to each other (Garai, 2007).

Others

The parameters are bringing salts, grass cutting tools etc. where active participation and decision making power were observed 23.75 percent among the women and 11.87 percent jointly.

Quantitative Parameters

Quantity of Green Fodder to be Fed

Appropriate quantity of fodder is required in dairy husbandry practices. As in Manipur context, the fodder availability for dairy cattle has been found 20 Kg/day for crossbreed and 17 kg/day for indigenous in milking condition. Regarding, the decision making power on to be fed the green fodder to animal is concerned, the men shares 90.00 percent power followed by jointly 46.87 percent and lastly the womenfolk with 3.75 percent. The data itself revealed that the man has greater control on this parameter.

Frequency of Feeding of Mineral Mixture

Manipur is a state of ethnic people where pig, poultry, fish farming has good scope. They mostly prefer to have non-vegetarian food in a daily basis. The dairy farming in a commercial way is still need to be paced. The dairy farmer holds on average 2 to 3 animals for ploughing purpose side by side to meet their family milk requirement. Therefore, frequency of feeding of mineral mixture is not well performed but as per the shares of decision making on frequency of mineral mixture would owned by men 88.75 percent and jointly 44.37 percent said by the respondents.

Quantity of Dry Fodder to be Fed

Dry fodder plays a good role during rainy days when grazing of animal is limited. Rice straw is the main dry matter widely used in Manipur condition. Some tree leaves and bamboo leaves were also used. The share of decision related to dry matter conservation, storage, quantity of feeding etc. were taken 90.00 percent by men, jointly 46.25 percent and women only 2.50 percent.

Similarly, other quantitative parameters such as quantity of concentrate to be fed, quantity of mineral mixture to be fed, quantity of feed to be fed to the pregnant animals, quantity of feed to be fed animal in milk and quantity of feed to be fed to the calf and their shares of decision making by men, women and jointly were given in a tabular form below. However, the comparable study was conducted by Pampi *et al.* (2015) and revealed that though the females were more involved in feeding activities of animals. But the share of decision making still concentrated to the male members of the family in hilly region of Tripura.

Table 2: Quantitative parameters

Particulars	Men (n=80)	Women (n=80)	Joint Decision (n=160)
Quantity of concentrate to be fed	18 (22.55%)	-	18 (11.25%)
Quantity of mineral mixture to be fed	22 (27.50%)	-	22 (13.75%)
Quantity of feed to be fed to the pregnant animals	59 (73.75%)	5 (6.25%)	64 (40.00%)
Quantity of feed to be fed animal in milk	41 (51.25%)	4 (5.00%)	45 (28.12%)
Quantity of feed to be fed to the calf	67 (83.75%)	5 (6.25%)	72 (45.00%)
Quantity of seeds to be purchased	3 (3.75%)	-	3 (1.87%)

Quantity of Seeds to be Purchased

Seed is the main input in agriculture. Optimum quantity of seed is required to maintain the plant population per hectare which ensures maximum yield. If the plant population is dense or too low it won't give satisfactory results to the farmer. Therefore, standard seed rate should be followed to sow the crop. In this case, the decision to purchase seeds in Manipur condition goes to 3.75 percent in men and jointly 1.87 percent. The purchase and decision making on quantity of seeds or planting material is minimal due to the less interest in dairy farming. Moreover, they are highly depending on the common property resources and forest to feed their animals.

Highest Decision Power Rely on Different Parameters by Men, Women and Jointly

The highest decision making power on qualitative and quantitative are as below-

Table 3: Highest decision making power among the respondents

Highest Decision Making Power by Men		
Parameter	Particulars	Percentage
Qualitative	Green fodder are to be fed	88.75
Quantitative	Quantity of green fodder to be fed + Quantity of dry fodder to be fed	90

Highest Decision Making Power by Women		
Parameter	Particulars	Percentage
Qualitative	Others (Bringing salts, grass cutting tools etc.)	23.75
Quantitative	Quantity of feed to be fed to the pregnant animals + Quantity of feed to be fed to the calf	6.25

Highest Decision Making Power by Jointly		
Parameter	Particulars	Percentage
Qualitative	Quantity of green fodder to be fed	46.25
Quantitative	Quantity of feed to be fed to the calf	45

The above data revealed that the men used to take the decision on farming related activities in the north-eastern state of Manipur.

Conclusion

Decision making at the right time has a great importance in all the productive factors. It has utmost importance in agriculture and animal husbandry too such as decision making on date of sowing of crops, variety to be grown, irrigation, milking of animal, preventive measures on diseases and insemination of animal etc. play a significant role to become a successful agri-preneur/dairy entrepreneur. It has been reported world-wide that maximum agricultural and allied sector work used to do by the women. But on the other hand, the decision making power for the same work goes to the patriarchal side. The North-Eastern state Manipur is well known for their women empowerment country-wide from sowing to harvesting followed by processing and marketing of agricultural & allied sector products. Despite of these above empowerment activities, the decision making power rely on the men-controlled social system. This investigation has purely revealed the same as with other subject related researchers that the activities pertaining to animal husbandry particularly the decision making pattern on feeding practices are mostly performing by the men.

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