RESEARCH NOTE

Constraints Faced by Dairy Farm Women: A Study in Nainital District of Uttarakhand

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ABSTRACT

Women play a very important role in shaping the country's economy through their active participation in agriculture and allied sector. In India animal husbandry is the core activity which forms the backbone of National Economy and in hill areas women are the pillars of the Indian agriculture and the Animal husbandry. Animal husbandry is an allied activity of agriculture and thus it forms an integral part of the rural economy. Involvement of women in livestock management is tradition in India, where domestic animals have been an integral part of the family system. In hill areas of Nainital district rural women are unaware about many aspects related to dairy farming. They are facing many constraints in dairy farming. Keeping this fact in view, the present study was undertaken in Nainital district of Uttarakhand with specific objectives that were to study the socio-economic characteristics of dairy farm women and to document the constraints faced by women engaged in dairy farming. Result revealed that majority of respondents belonged to General caste and middle age group category and they were educated upto primary level. Majority of respondents were involved in dairy farming and have 3-7 nali cultivable land. The entire respondent owned Mobile Phone and television. Majority of respondents reported that they were facing the problem of reproductive disorders in the milch animals, lack of market access for input, worm infestation, unawareness of improved dairy practices, inadequate training regarding dairy farming and high cost of feed and ingredients like mineral mixture and also face problems from wild animals.

***Key words**: Constraints; Dairy; Women; Animal husbandry;*

India is endowed with the largest livestock population in the world with 55 per cent buffalo's and 16 per cent of cattle population *(Economic Times, 2013)*. Although most of the world related to dairy farming is carried out by the women, their role has been ignored *(Khandari and Rakma, 2004)*. In hill areas of Uttarakhand women play a very prominent role in farming as well as in livestock management but they are facing many constraints in dairy farming due to lack of knowledge, education and information on various aspects. A constraint is anything that limits a system in reaching its goal *(Goldratt, 1990)*. Constraints could be physical or they could be policies which may hinder the effective and efficient management of a dairy and

livestock activities. According to *Kumari et.al., 2015* hardly five percent of the farm households in India were able to access the information on animal husbandry. This was due to the lack of efficient livestock extension system in that place. Before developing any strategies for hill women regarding dairy farming or livestock management, need and constraints assessment both are necessary. Keeping this fact in view, the present study was conducted in Nainital district of Uttarakhand with the specific objectives:

i. To know the socio-economic characteristics of women engaged in dairy farming.

ii. To know the constraints perceived by women involved in dairy farming.

METHODOLOGY

The present study was conducted in Bhimtal block of Nainital district in Uttarakhand. Total four villages viz; Jeoli, Bhaluti, Kausani and Sariyatal were selected for present research investigation. The sample was selected by proportionate to population random sampling technique. Total 100 dairy farm women were selected purposively. The study was conducted during the month of October and November 2017. The data were collected through semi structured interview schedule and participatory observation technique. Interview schedule was developed to evaluate socio-economic, communication characteristics and constraints faced by women engaged in dairy farming. The descriptive research design was employed in the present investigation. The collected data was analyzed with help of suitable statistical test like frequency and percentage, mean, ranking.

RESULTS AND DISCUSSION

Socio-economic characteristics: Table 1 clearly revealed the socio-economic characteristics of women engaged in dairy farming. Majority of respondents (50%) belonged to middle age group category (25-35 year) followed by old age group category (32%) and young age group category (18%). These findings are in line with the findings of *Rani and Subhadra (2009).* Majority of respondents (94%) belonged to General caste followed by Schedule caste (2%) and Other Backward Caste (4%). Majority of respondents (60%) were educated up to primary level followed by high school (18%) and very few (only 8%) respondents were educated up to intermediate level. Majority of respondents were involved in dairy farming and farming (80%) followed by bee keeping and dairy farming (16%) and Shop keepers with dairy farming (4%). Majority of respondents (72%) have 3-7 nali followed by >7 nali (14%) and <3 nali (10%) cultivable land.

Data clearly revealed that majority of respondents were of middle age group, belonged to general caste have primary level of education. They were engaged in Dairy as well as other occupational and have 3-7 nali cultivable land.

Use of information communication technologies by dairy farm women: Table 2 clearly indicated that mobile phone was owned by all the respondents followed by

Table 1. Distribution of respondents according to socio-economic characteristics of dairy farm women

Category	No.	%
Age		
Young (20-25)	18	18
Middle (25-35)	50	50
Old (Above 35)	32	32
Caste		
General	94	94
Other Backward	4	4
Schedule Caste and Schedule Tribe	2	2
Education		
Illiterate	14	14
Primary level	60	60
High school	18	18
Intermediate	8	8
Occupation		
Dairy farming and Farming	80	80
Bee Keeping and dairy farming	16	16
Shop keepers with dairy farming	4	4
Size of land holding (nali)		
>3 cultivable land	10	10
3-7 cultivable land	72	72
7< cultivable land	14	14

Table 2. Use of Information Communication Technologies by dairy farm women

Ownership of ICTs	No.	%	Cal WMS[1]
Mobile Phone	100	100	2.85
Television	98	98	2.15
Computer	14	14	1.14
Newspaper	26	26	1.87
Magazine	12	12	1.11

Cal. WMS1 = Frequency of use (Calculated WMS)

Television (98%), Newspaper (26%), Computer with internet (14%), Magazines (12%) respectively. The above table also stated that on the basis of calculated weighted mean score mobile phone (2.85) was used daily followed by television (2.15), newspaper (1.87), computer with internet (1.14), magazines (1.11). A similar finding was reported by (*Singh et.al., 1999*) that television and mobile phone were used by majority of respondents.

The study clearly revealed that mobiles and televisions were used by almost all the respondent in the village. All the respondents were used Mobile phone for connecting with their friend and relatives for communication purpose. They used television for

information as well as for entertainment purpose. They used computer for only official work purpose. This also meant that respondents used Information Communication Technologies for entertainment as well as for information purpose.

Animal husbandry activities undertaken: Findings in Table 3 indicated that majority of respondents have buffalo (50%) followed by cow (38%). Less than half per cent respondents have goats (36%). Majority of respondents (64%) reported that their animal provides >3 litter per day milk followed by 3-6 litter (20%). Majority of respondents (62%) reported that their animal's milk sale of 30 Rs. milk followed by 30-35 Rs (30%). Only 8 per cent respondents reported that milk sale of Rs 35-42 (8%). Majority of respondents earn income 1000-3000 Rs per month followed by >1000 (30 per cent respondents) and 3000< (8 per cent respondents). A similar finding was reported by *Narmatha et. al. 2009* that majority of respondents have buffalo, cow and goats.

Thus, it may be inferred that, most of the respondents had buffalo, goats and male cattle. Majority of respondents' sale milk of their animal of Rs 30 and they earn 1000-3000 Rs per month.

Table 3. Distribution of respondents according to animal husbandry activities undertaken

Animal	No.	%
Type of Animal		
Cow	38	38
Buffalo	50	50
Goats	36	36
Male cattle	9	9
Type of breed		
Deshi	98	98
Holeston	2	2
Yield (Milk Litter/Day)		
>3	64	64
3-6	20	20
6<	16	16
Sale of milk (Rs.)		
>30	62	62
30-35	30	30
35-42	8	8
Income Generated(Rs. Per month)		
>1000	30	30
1000-3000	62	62
3000<	8	8

Table 4. Distribution of respondents according to constraints faced by Dairy Farm women

Constraints	No.	%	Rank
Feeding			
Low availability and high cost of concentration	64	64	II
Low availability of dry fodder	10	10	III
Use and role of mineral mixture	90	90	I
Breeding			
Low productivity of animal	78	78	II
Incidence of reproduction disorders in the milch	42	42	III
Poor Knowledge of low conception of Artificial Insemination	98	98	I
Economic Constraints			
Lack of Market access for input	100	100	I
Non availability of credit facilities	86	86	II
Less financial support from Government	82	82	III
Animal Health care Constraints			
Inadequate knowledge about feeding balanced	78	78	II
Lack of awareness on animal health	62	62	V
Unawareness of improve dairy farming practices	76	76	III
Insufficient Veterinary Doctors/Staff	72	72	IV
Worm infestation	94	94	I
Marketing			
Lack of regulated marketing and milk co-operatives	100	100	I
Lack of transport facility and road	94	94	II
Low price of liquid milk	86	86	III
Technical Constraints			
Inadequate training about dairy farming	94	94	I
Ineffectiveness of indigenous strategies	82	82	II
Communication Constraints			
Non Availability of right information	100	100	I
Poor access to information source	100	100	I
Others			
Attacked by wild animal	98	98	I
Lack of space	66	66	III
Irregular payment	72	72	II

Constraints faced by dairy farm women: Constraints faced by the dairy farmers in various areas of the dairying were recorded and are presented in the Table 4.

Feeding: Under this head dairy farm women were asked if they were facing the problems of (1) Low availability and high cost of concentration (2) Low availability of dry fodder (3) Use and role of mineral mixture. Majority of respondents (90%) reported that

they were unaware use and role of mineral mixture (Ist rank). More than fifty per cent of the respondents (64%) were facing the problem of low availability and high cost of concentration followed by low availability of dry fodder (10%). This finding is in conformity with the finding of *Suresh and Jayaramaiah (1995).*

Data revealed that high cost of inputs is one of the factors due to which the dairy farm women were facing lots of problem.

Breeding: Under this head dairy farm women were asked if they were facing the problems of (1) Low productivity of animal (2) Poor Knowledge of low conception of Artificial Insemination (3) Incidence of reproduction disorders in the milch animals. Majority of respondents (98%) were facing the problems of Poor Knowledge of low conception of Artificial Insemination (1st Rank) followed by Low productivity of animal (78%) was ranked IInd and incidence of reproduction disorders in the milch animals (42%) was ranked IIIrd. These results are in agreement with the findings of *Dabas et al. (2004) and Balasubramanian (1995).*

Economic Constraints: This head comprised of four components which were: (1) Lack of Market access for input (2) Non availability of credit facilities (3) Less financial support from Government. All the respondents opined that they were suffering from the problems of lack of market access for input (Ist rank) followed by non availability of credit facilities (86%). It might be due to the distant location of the market and absence of all the marketing facilities in that place. *David (2007)* also reported that lack of market access was the major constraint. Less financial support from Government was also one problem and it was ranked 3nd by 82 per cent. The finding is in line with the finding of *Kant et.al. (2015).*

Animal health care constraints: This head comprised of five components which were: (1) Inadequate knowledge about balanced feeding (2) Lack of awareness on animal health (3) Unawareness of improve dairy farming practices (4) Insufficient Veterinary Doctors or attendants (5) Worm infestation. Majority of respondents (94%) respondents were facing the problems of worm infestation (1st rank) followed by inadequate knowledge about balanced feeding (78%) and unawareness of improve dairy farming practices (76%). Maximum respondents (72%) were facing the problems of insufficient Veterinary Doctors or attendants

(4th rank) followed by lack of awareness on animal health care (62%). A similar finding was reported by *Singh et. al. 2016.*

Marketing constraints: This head comprised of four component which were (1) Lack of regulated marketing and milk co-operatives (2) Lack of transport facility and road (3) Low price of liquid milk. All the respondents were facing the problems of lack of regulated marketing and milk co-operatives and was ranked 1st by 100 per cent of respondents. Maximum numbers of respondents (94%) respondents complained about the problems of lack of transport facility and road followed by low price of liquid milk (86%). These results are in agreement with the findings of *Vikash et. al, 2013.*

Technical constraints: This head comprised of two components which were (1) Inadequate training regarding dairy farming (2) Ineffectiveness of indigenous strategies. A large number of respondents (94%) respondents were suffering the problems of inadequate training regarding dairy farming and it was ranked 1st followed by ineffectiveness of indigenous strategies (82%). These results are in agreement with the findings of *Sethi, 2010.*

Communication constraints: This head comprised of two components which were (1) Non Availability of right information (2) Poor access to information source relevant to adaptation. All the respondents were facing the problems of non availability of right information and poor access to information source relevant to adaptation. Thus, non availability of right information and poor access to information source were ranked 1st as the major constraints. It was comparable with the findings of *David (2007).*

Others: This head comprised of three components which were (1) Attacked by wild animal (2) Lack of space (3) Irregular payment. Majority of dairy farm women (98%) were facing the problems of wild animal as a very serious constraint followed by irregular payment (72%) and lack of space (66%). These results are in agreement with the findings of *Huli, 1989.*

CONCLUSION

The main constraints confronting by women in respect of knowledge about dairy farming found to be varied. The most important constraints were reported unawareness of improved dairy practices, incidence of reproduction disorders in the milch animals, lack of market access for input, inadequate knowledge about

balanced feeding, worm infestation, lack of transport facility and road, attacked by wild animal, use and role of mineral mixture, ineffectiveness of indigenous strategies.

Therefore, in the light of above fact it could be suggested that strategic efforts should be made to increase the level of knowledge of women in respect of dairy farming through promoting extension activities.

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