

Technological Needs of Women in Dairying

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Abstract

Women play an active role in tasks related to animal husbandry. Rearing the milch cattle, poultry, goatery, sheep rearing are some of the livestock enterprises in which women are actively involved to supplement the income of their families. In many places the entire management of the livestock, particularly in dairying, is done by women alone. The present study examines the profile of the women involved in dairying, their awareness about the recommended practices and the technological needs expressed by them to improve their information base. The study highlights the need for training these women on certain critical dairy husbandry practices.

Introduction

Rural women play an important role in agriculture and animal husbandry besides household responsibilities. A nucleus of dairy unit more or less exists as a traditional component in every rural household as a source of draught power or nutritional substance for the family or as a secondary source of income. Venkatachalam (1993) and Sethi (1991) observed that almost 80-90 per cent of the total work related to cattle care is performed by women. In many places the entire management of livestock, starting from cutting, collection, carrying and chaffing of fodder for feeding; milking of animals, preparation of milk products, cleaning of cattleshed, collection of cowdung, preparation of cowdung cakes and their storage was done by women.

In addition to these activities, women play an equally important role in decision making regarding number of milch cattle to be kept, feeding of milch cattle, purchase of cattle feed, place of keeping animals in summer and winter seasons and selling and buying of cattle. A study conducted by Patil,et al, (2008) revealed that women were involved in decision making regarding the selling of milk and milk products to a great extent.

Objectives

Keeping in view the significant involvement of women in the dairy sector, a study was undertaken with the following specific objectives;

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These include:

- Examining the awareness of women about the technologies related to dairying.
- 2. Assessing technological needs of women in dairying and
- 3. Finding correlation between the socio-personal factors and technological needs of women in dairying.

Methodology

The study was conducted in three randomly selected villages from three different mandals viz, Chevella, Manchal and Hayathnagar under Ranga Reddy district of Andhra Pradesh. From each of the selected villages a total of twenty farm households having milch cattle were selected randomly. One woman member of the family was interviewed for the study thus making the total sample sixty. A well-structured interview schedule was used along with focused group discussion for collecting the information. To find out the awareness about technologies, the practices of the respondents were compared with the package of practices recommended for dairying. If the practice of the respondents was matching or at least close to the recommended practice, it was considered as 'awareness' otherwise as 'no awareness'. The data was expressed as percentages. To find out the technological needs of the respondents in dairying, rank order method was followed by working out the mean scores for each of the items under package of practices. To find out the relation between the socio-personal factors and technological needs of the respondents in dairying, simple correlation coefficient was worked out.

Results and Discussion

The socio-personal profile of respondent women is given in Table -1.

Table -1. Socio-Personal Profile of the Respondents

Aspects	Per Cent (n = 60)
Age	
1. Upto 30 years	32.5
2. Between 30 and 55 years	67.5
	Age 1. Upto 30 years



		### HHW
11	Educational level	
	1. Illiterate	68.3
	2. Primary	19.2
•	3. Middle	8.3
	4. High School	4.2
Ш	Martial status	
,	1. Widow	2.5
	2. Married	97.5
IV	Family income (in Rs. Per annum)	
	1. Less than 20,000	17.5
	2. 20,000 - 40,000	38.3
	3. 40,000 - 60,000	28.3
	4. 60,000 - 80,000	9.2
	5. 80,000 and above	6.7
V	Category of Respondents	
	1. Marginal farmers	40.0
	2. Small farmers	48.33
	3. Large farmers	. 11.67
VI	Ownership of Land	
	1. Husband	65.8
	2. Inlaws	24.2
	3. Son	0.8
	4. Respondent	9.2
VII	Experience in dairying (in years)	•
	1. 0 -10	17.5
	2. 11-20	35.8
	3. 21-30	22.5
	4. 31-40	24.2
VIII	Age of entry into dairy activities (in years)	
	1. 0-10	21.0
	2. 11-20	58.0
	3. 21-30	19.0
	4. 31-40	2.0



Among the respondents 67.5 per cent belong to the age group of 30-55 years and more than 68 per cent are illiterates. With regard to family income 38 per cent are in the category of Rs.20,000 - 40,000 income with 28 per cent having an income of Rs.40,000 - 60,000 per annum. Majority of the respondents are in the category of small and marginal farmers. The ownership of the land lies mostly with the husband (65.8%) and only 9.2 per cent of the respondents are having the land ownership.

Reasons for Involvement in Dairy Activities

Nearly 82 percent of the women expressed that poor financial status and family compulsions were the major reasons for their involvement in dairy activities. In dryland agriculture, dairying is considered to be an important activity to supplement the family income.

The awareness of respondents about technologies related to dairying may be seen in Table - 2.

Table - 2. Awareness about the Technologies related to Dairying

		(n = 60)
Breed	Cows-Ongole, Jersey; Buffalo -Murrah, Nili, Ravi	41.1
Feed requirement of an adult	Concentrate Mixture 2 kgs, Green Fodder 20 Kgs & Dry fodder 4-6 kgs	29.3
Feed requirement of young stock	Concentrate mixture 1.5, green fodder 10 kg& dry fodder 2 kg	33.4
Feed requirement of milch animals	Concentrate mixture 1.2 kg, green fodder 10 kg and dry fodder 6 kg	15.9
Management Caring for the pregnant animals	Keep the animal in clean surroundings, avail services of veterinary doctor. Do not make them run or fight with other animals, stop milking after the completion of 7th month, mix 28.35 gms of bone meal and minerals in the feed. Milk the cow partially to avoid milk	83.9
	Feed requirement of an adult Feed requirement of young stock Feed requirement of milch animals Management	Feed requirement of an adult Concentrate Mixture 2 kgs, Green Fodder 20 Kgs & Dry fodder 4-6 kgs Feed requirement of young stock Concentrate mixture 1.5, green fodder 10 kg& dry fodder 2 kg Feed requirement of milch animals Concentrate mixture 1.2 kg, green fodder 10 kg and dry fodder 6 kg Management Keep the animal in clean surroundings, avail services of veterinary doctor Do not make them run or fight with other animals, stop milking after the completion of 7th month, mix 28.35 gms of bone meal and minerals in the feed



	Caring of newly born calf	Clean it with wet cloth, Allow it to take mother's milk within 6-10 hrs after birth	50.0
	Dehorning	Preferably within 15 days	0.00
	Deworming	Deworming should be done after 20 days of birth	16.1
	Cleanliness of cattlesheds	Cleaning every day and spraying 2%	
	and cattle	formalin as disinfectant Udder to be cleaned with potassium permanganate solution or neem leaves boiled in water	0.00
4.	Health control measures	Treatment for Haemorrhagic Septicaemia, Black quarter and Foot and Mouth disease	
		with the advice of veterinary doctor	73.2

It was observed that mostly Jersey cow and Murrah buffalo breeds were reared by the respondents. Awareness about balanced diet, feed requirement of young stock, heifer and milch animals was found to be very low. Though 69.6 per cent of respondents were aware of the care of newly born calf, they had a misconception that feeding colostrum would cause indigestion to the calf. Regarding the care of pregnant animals, 83.9 per cent of the respondents were aware of the practices recommended except for diet requirements. It was learnt that the cattle sheds were cleaned with water once in three days or a week, but no disinfectant was used. Health and sanitation practices were followed by 73.2 per cent of the respondents as per the doctor's advice. Dehorning was not in practice.

Ranking of technological needs as perceived by the respondents in dairying is presented in Table - 3.

Table -3. Rank Order of the Technological Needs of Respondents in Dairying

S.No.	Subject matter areas	Mean score	Rank order (n = 60)
1.	Balanced diet	2.429	ĺ
2.	Health care and sanitation	2.214	11
3.	Care of pregnant animals and new born calf	2.211	Ш
4.	Right way of milking.	2.071	IV
5.	Maintenance of cattle shed	1.964	V
6.	Processing of milk and preparation of milk products	1.946	VI
7.	Rearing of animals	1.895	VII
8.	Cultivation of fodder crops	1.786	VIII

Average mean score. 2.065



It could be observed that the respondents considered balanced diet, health care and sanitation, care of pregnant animals and newborn calf and right way of milking as the most important areas as compared to others.

The correlation between the socio-personal factors and technological needs of the respondents in dairying, is presented in table 4.

Table-4 Correlation between the Socio-Personal factors and Technological Needs of the Respondents in Dairying

S.No.	Variables	Correlation Coefficient
1.	Age	1454
2.	Caste	3232*
3.	Education	0466
4.	Type of Family	0421
5.	Size of the Family	1619
6.	Category of the respondent	0767
7.	Ownership of land	1582
8.	Family Income	2188*
9.	Farm experience	.1996*
10.	Participation in agriculture	0219
11.	Participation in horticulture	0657
12.	Participation in animal husbandry	.2969*

^{*} significant at .05 level, ** significant at .01 level

It can be observed (table-4) that caste and family income have shown negatively significant relationship at 0.05 per cent level with technological needs in dairying. This implies that higher the caste and family income, lower is the degree of technological needs of respondents in dairy. Farm experience and participation in animal husbandry had a positively significant relationship at .05 per cent level. It could be inferred that as farm experience and participation in animal husbandry increases, the desire for knowing about technologies related to dairying also increases. The other factors have not shown any significant relationship with the technological needs of the respondents.

Conclusion

The study revealed that the respondents were not aware of the importance of proportions of components in a balanced diet. They were also not aware of the



importance of cleaning milch animals and cattle sheds with disinfectants. They considered that balanced diet, health care, sanitation and right way of milking are some of the important areas of technologies they would like to learn about. Hence, it is suggested that short duration training programmes on dairy husbandry practices would be useful to the farm women in acquiring the technical knowledge and skills with regard to scientific dairying. In addition to training, the rural women need to be provided with institutional services like establishment of milk cooperative, credit and marketing which will enhance their managerial abilities in dairying. Simultaneously, the research system should develop specific need based technologies, especially in those segments of dairying in which women are actively involved.

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