Training Needs of Dairy Farm Women and their Multiple Regression Analysis toward Animal Husbandry Practices

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ABSTRACT

Animal husbandry is an integral component of rural farmers in India. It is established that women always participated in animal husbandry activities in addition to the daily household chores. Training is one of the important aspects, which can enhance knowledge, improve skills and change the attitude of farm women. Keeping this in view, the present attempt has been made to analyze the training needs of dairy farm women and their multiple regression analysis in animal husbandry practices. The study was carried out in the Chhotaudepur district of Gujarat State. Data were collected with the help of a pre-tested semi-structured interview schedule on 90 farm women. The study revealed that training was most needed in feeding, breeding, health care and management practices. Further, out of 11 variables, only 2 variables *i.e.*, education and mass media exposure had significant contributions to the training needs of farm women. However, all the 11 variables fitted in the model show a 66.30 per cent contribution to the training needs of farm women.

Key Words: Animal, Dairy, Farm women, Husbandry, Regression, Training.

INTRODUCTION

Animal husbandry plays a pivotal role in the economy as well as the socio-economic development of our country. Women play an important role in animal husbandry occupations as managers, decision-makers and skilled workers. In fact, the major share of the credit for India's position as the largest milk producing country in the world and the significant increase in the per capita availability of milk in the country has to go to the largely illiterate rural women dairy farmers (Patel, 1998). Moreover, the Dairy sector plays a prominent role in strengthening India's rural economy. It has the potential to act as an instrument to bring socioeconomic transformation. Dhayal and Mehta (2019) concluded that it will help the extension agencies to organize the suitable training programmes for the dairy farm women in improved animal husbandry practices to improve their milk production and make the dairying a successful enterprise.

Training provides a systematic improvement of knowledge and skills which in turn helps the trainees to function effectively and efficiently in their given task on completion of the training (Sajeev and Singh, 2010). Transfer of technology through training has become a common and major extension activity in the field of agriculture (Sharma *et al*, 2014). After acquiring training, the rural women not only learn about the improved animal husbandry practices but also opt them into practices (Sharma *et al*, 2021).

MATERIALS AND METHODS

The proposed investigations were carried out in Pavi-Jetpur and Bodeli taluka of the chhotaudepur district, from each of which, three villages were selected. Thus, total of six villages were selected for the study and from each village, 15 farm women involved in animal husbandry were selected, making a total sample of 90 farm women, which was selected by using simple random sampling

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Training Needs of Dairy Farm Women and their Multiple Regression

Table 1: Distribution of the dairy farm women according to their practice-wise training needs in animal husbandry practices n=90

Sr.	Animal husbandry practice	Most	Somewhat	Not needed	Total	Mean	Rank
no.		needed	needed		Score	Score	
1	Feeding	13 (14.44)	56 (62.22)	21(23.33)	188	2.09	I
2	Breeding	10 (11.11)	63(70.00)	17 (18.89)	187	2.08	II
3	Health care	08(8.89)	67(74.44)	15(16.67)	187	2.08	II
4	Management	12(13.33)	61(67.78)	17(18.89)	185	2.06	III
5	Clean milk production,	15(16.67)	56(62.22)	19(21.11)	184	2.04	IV
	preservation and value addition						
6	Fodder	16 (17.78)	57(63.33)	17(18.89)	181	2.01	V

(Figures in parenthesis indicate percentage)

method. The research design followed in the study was ex-post facto. To assess the training need of farm women, a well structured pre-tested interview schedule was prepared in consultation with dairy, veterinary and extension experts and based on the review of the literature. Each respondent was asked to mention their response against the training needs on three point continuum viz; 'Most needed', 'Somewhat needed' and 'Not needed' for which a score of 2, 1 and 0 respectively. On the basis of perceived training need score, all respondents were categorized in to three groups, viz; low, medium and high by using mean and standard deviation. To measure the extent of training needs 'training needs index' was calculated by following formula:

Perceived training	Total obtained score	
needs index =	Maximum obtainable score	x 100

The statistical analysis of tabulated data was done to establish the relationship of selected traits of dairy farmers with perceived training needs

RESULTS AND DISCUSSION

Practice-wise training needs of farm women toward animal husbandry practices

An attempt was made to ascertain aspect-wise raining needs in animal husbandry practices for the farm women. This included areas on breeding, feeding, fodder production, management practices, health care practices, clean milk production, preservation and value addition.

The data presented in (Table 1) indicated that farm women need training in animal husbandry practices about feeding practices with a mean score of 2.09 ranked first, followed by breeding and health care practices (2.08), management practices (2.06), Clean milk production, preservation and value addition (2.04), fodder practices (2.01) secured with rank second, third, fourth and fifth, respectively. These findings were in consonance with the findings of Singh *et al* (2018), Vahora (2015), Rajkumar *et al* (2018), Patel *et al* (2012), Deka *et al* (2020), Sharma *et al* (2021) and Arora *et al* (2022).

In the case of multiple regressions analysis out of 11 variables, only 2 variables i.e. education and mass media exposure had significant contributions to the training need of farm women, the remaining 9 variables i.e. education, experience in animal husbandry practices, occupation, land holding, annual income, herd size, milk production, family type and social participation did not indicate any significant contribution in participation of tribal women. However, all the 11 variables fitted in the model show a 66.30 per cent contribution to the

Training Needs of Dairy Farm Women and their Multiple Regression

Table 2: Multiple regression analysis between the training need of farm women and their selected independent variables. n = 90

Sr. No.	Independent variable	Regression coefficient "b" value	Standard error of regression coefficient	" t" value for partial 'b'	Standard regression co-efficient "β" value	Rank	R ²
1	Age	0.142	0.074	1.907	0.173	I	
2	Education	8.007	0.933	8.585**	0.719	II	
3	Experience in animal husbandry practices	-1.062	1.397	-0.760	-0.067	IX	0.6630
4	Occupation	-2.140	1.307	-1.638	-0.115	V	0.0030
5	Landholding	0.297	0.340	0.874	0.060	VIII	
6	Annual income	-7.723	0.000	-1.239	-0.084	VII	
7	Herd size	-0.763	1.131	-0.674	-0.096	XI	
8	Milk production	0.235	0.330	0.711	0.096	X	
9	Family type	-2.719	1.731	-1.571	-0.106	VI	
10	Social participation	2.230	1.250	1.785	0.125	IV	
11	Mass media exposure	0.818	0.229	3.576*	0.272	III	

 $R^2 = 0.6630$

training need of farm women. The results were in line with the findings of Sharma *et al* (2020), Arora *et al* (2022) and Ahuja *et al* (2018).

CONCLUSION

It can be concluded that training was most needed by dairy farm women in feeding, breeding, health care and management practices. There is a need for conducting more needs-based and well-tailored training programmes suited to animal husbandry and given top priority in the curriculum of the training programmes which would in turn help them to have more extension agency contacts. Thus, the dairy farm women should be acquainted with improved animal husbandry practices through appropriate extension programmes like training,

awareness campaign, exhibitions, demonstration, *etc*. to obtain more output from their animal husbandry. Education and mass media had a significant contribution to the training need of farm women. So, there is a need to motivate farm women towards education and mass media exposure.

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Assessment of knowledge based training needs regarding scientific cattle management practices among cattle

^{* 5} Per cent level of significant

^{** 1} Per cent level of Significant

Training Needs of Dairy Farm Women and their Multiple Regression

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