

Knowledge and skill development of farm women in case of members and non-members of dairy co-operatives in western U.P.

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Abstract

The study was conducted to examine the knowledge and skill development of farm women in members and non-members of dairy co-operatives in western U.P. in the year 2011-2012. A Total 250 dairy farm women from 8 villages were selected randomly in which 125 rural women were selected in members dairy co-operative (MDC) and 125 rural women in non-members dairy co-operative (NMDC). For the study primary data were collected from respondent women through a pre-structured questionnaire based interview schedule. The findings showed that knowledge level of the farm women, in general, was low in highly important areas of dairy farming like feeding, health and breeding. Most of the dairying activities are characterized by technologically simple operations, which demand limited skills. Most of the women were in low skill categories due to their comparatively limited level of education. There were no significant difference between the knowledge level about all the eight studied dairy farm technologies in MDC and NMDC system although a marked improvement was noticed in women associated with MDC. It is suggested from present study that need based training programmes on dairy practices would be useful to the farm women acquiring the latest technical know-how and skills development with regard to scientific touched dairying. Extension agents should be encouraged to play their role to trained women farmers on the improved livestock management strategies.

Key words: Women, Knowledge, Dairy, Skill, Members, Non-members, Co-operatives

Introduction

In India dairying is a female work forced dominated enterprise. Women are the backbone of Indian agriculture and comprising the majority of agricultural labourers. They are playing a significant and vital role for boosting the development in the field of agriculture and animal husbandry. In India, all major works are being done by the women in animal production but despite of that their hard work remains invisible. This may be carried out by them within the confined none of homesteads. The dairying has been considered as a potential means of alleviating large scale unemployment, especially in rural areas. Successful dairy husbandry enterprise not only improves the socio-economic status of rural women, but also assures a sustained and assured means of

income to supplement their income from the main enterprise. The prosperity, growth and development of nation depends on the status and developments of its women as we know that educating a woman means educating a family. (Ahuja,2019). Rural women are also responsible for collection, preparing dung cakes an activity that also brings additional income through fuel savings to poor families. Evidently, rural women are involved in almost all livestock related activities. Indian women are generally involved in animal shed cleaning, collection of farm yard manure, chopping of fodder, feeding, milking of animals etc. However, males share the responsibility in different livestock managerial activities. It is evident that the women are playing a comparatively dominant role in the livestock production and management activities in rural India so credit of growth in the livestock sector also goes to women. In spite of active involvement of

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women in different animal husbandry activities, lack of exposure and access to new technology has restricted women to show their full potential for the growth of livestock sector. It has been estimated that about 86 percent of the total rural women are working for various agricultural operations (Patel et al., 2016) need technological upliftment. So large percentage of women from rural areas those are involved in dairy farming should be scientifically trained in every aspect. Furthermore, if training are conducted frequently then there would be increase in the level of knowledge, which in turn reflects the better livestock farming, management and ultimately increases livestock production (Yasothai et al., 2009)

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. Women spent mainly 5.17 hrs. in out of total 6.76 hrs. for animal husbandry activities (Malik et al., 2015). Women consider livestock management as their traditional responsibility. Women participate in almost all activities of dairy farming and their level of involvement depends largely on the knowledge and skill levels possessed by the farm women about the given task. The dairy farmer's education and extension contacts enable them to acquire, access and avail new information and evaluate benefits of alternative sources of economically useful information besides higher a locative and productive efficiencies. The impact of education and extension is higher under the low technology than higher technology conditions, and this impact is sequential.

Keeping in view the above points the present study was undertaken with the objectives that study of knowledge and skills level and mass media exposure of rural women associated and non associated different skill development organizations in relation to dairy animal's production system.

Materials and Methods

The field study was carried out in Ghaziabad district of Uttar Pradesh. The related data were collected through questionnaire based personal interview schedule administered on randomly selected concerned one. After selection of villages, list of families was prepared from the official record of milk co-operative society (MDC) village. Similarly, list of the farm families of each non-members dairy co-operative (NMDC) village was prepared with the help of voter's list. Out of which, list of landless labourers, marginal,

small and medium large farmers was prepared. From the lists so prepared, farmer's category wise farm families having dairy animals and having adult women members were identified. From these randomly selected families one married women of at least 18 years of age, was selected as the respondent for the study. The 125 rural women from MDC (Member Dairy Co-operatives) purposively selected in four villages from the block covered under Ghaziabad Dugdh Utpadak Sahakari Sangh Limited (GDUSSL), Ghaziabad (UP). Similarly 125 rural women from NMDC (Non-members Dairy Co-operatives) purposively selected in four villages from the block not covered under GDUSSL. The final selection of 250 women respondent was done for the current investigation. The research data were collected from selected respondents in the year 2011-2012. Knowledge about dairy animal production practices was measured through knowledge tests. For measuring the knowledge about feeding test developed by Fulzele (1986). For measuring knowledge about breeding, management and marketing, the knowledge tests developed by Rath (1978) were used. For measuring knowledge about green fodder production, the test developed by Goswami (1987) was used and for measuring the knowledge about health care and milk products making, the knowledge tests developed by Jamal (1989) were used for the investigation. The data thus generated were analyzed by different statistical methods for better interpretation of the results.

Results and Discussion

Knowledge about dairy animal production tasks:

Knowledge is generally understood as an intimate acquaintance of an individual with facts. Knowledge is one of the important component of behavior and as such plays an important part in the covert and overt behaviour of an individual. It refers to the amount of information and understanding which can be recalled through memory or ideas or events by the respondent about dairy technologies.

The data on knowledge of farm women presented in Table 1 indicates that majority of women in MDC (51.42%) and NMDC (54.96%) possessed low level of knowledge. The farm women possessed low level of knowledge in feeding (60.00%), breeding (70.40%), management (44.00%), healthcare (63.20%) green fodder production (57.60%) and marketing (56.00%), in MDC system. Similarly 28.22 percent of respondents associated with MDC System

Table 1: Frequency distribution of respondents according to knowledge level in various practices of dairy animal's production
N=250

Knowledge Segment	Villages	Knowledge level			Total
		0-29% Low	30-59% Medium	60% and above High	
Feeding	MDC	75(60.00)	29(23.20)	21(16.80)	125(100.00)
	NMDC	82(65.60)	27(21.60)	16(12.80)	125(100.00)
Breeding	MDC	88(70.40)	22(9.60)	15(12.00)	125(100.00)
	NMDC	96(76.80)	12(9.60)	17(13.60)	125(100.00)
Management	MDC	55(44.00)	54(43.20)	16(12.80)	125(100.00)
	NMDC	49(39.20)	66(52.80)	10(8.00)	125(100.00)
Healthcare	MDC	79(63.20)	32(25.60)	14(11.20)	125(100.00)
	NMDC	92(73.60)	16(12.80)	17(13.60)	125(100.00)
Milk products making	MDC	16(12.80)	28(22.40)	81(64.80)	125(100.00)
	NMDC	18(14.40)	23(18.40)	84(67.20)	125(100.00)
Green fodder production	MDC	67(53.60)	43(34.40)	15(12.00)	125(100.00)
	NMDC	72(57.60)	39(31.20)	14(11.20)	125(100.00)
Marketing	MDC	70(56.00)	79(31.20)	16(12.80)	125(100.00)
	NMDC	72(57.60)	24(19.20)	29(23.20)	125(100.00)
Overall Average	MDC	64.28(51.42)	35.28(28.22)	25.42(20.33)	125(100.00)
	NMDC	68.71(54.96)	29.57(23.65)	26.71(21.36)	125(100.00)

Figures in parentheses indicate percentage to total.

and 23.65 percent respondents of NMDC system fall in the category of medium level of knowledge. Only 20.33 percent respondents of MDC system and 21.36 percent respondents of NMDC system had high level of knowledge. The knowledge level in segment of milk products making was found to be high in both MDC (64.80%) and NMDC (67.20%) system. The data suggested that level of knowledge of the farm women, in general, is low in highly important areas of dairy farming.

Skill level of farm women:

Skill is the complex organization of physical or verbal behavior developed through learning and directed towards a particular goal or centered on a specific activity. Skill is ability to perform a given task accurately. Skill and technical knowledge is mandatory in successful dairy production. Most of the dairying activities are characterized by technologically simple operations, which demand limited skills. Most of the women were in low skill categories due to their low level of education and male dominance in the society. The level of skill in activities in which farm women are usually involved viz. clean milk production and preparation and feeding of home- made

concentrate mixture were selected to measure their level of skills in these skilled activities.

The data presented in Table 2 indicates that 56 percent respondents in MDC and 68.80 percent respondents in NMDC had low skill level in clean milk production and the remaining had medium skill level. No respondent had found high skill level in this activity. Data presented in Table 3 shown that preparation and feeding of homemade concentrate mixture about 78 percent respondents in MDC and 83.20 percent respondents in NMDC system had low skill level and 12 percent of respondents in MDC and 16.80 percent in NMDC system had medium level of skill. A group of 12 respondents (9.60%) had training on preparation of concentrate mixture under Rastriya Krishi Vikas Yojna in a MDC village had high skill level.

Knowledge and skill level about dairy farm technologies.

In order to test the significance of difference in the mean scores of independent variables between MDC and NMDC systems, data based 't' test value was calculated using Minitab-15 software. Data shown in Table 4 clearly indicated that there were no significant differences between the knowledge level about all the

Table 2: Frequency distribution of respondents according to skill level in clean milk production N=250

Activities	Villages	Skilled			Total
		0-29% Low	30-59% Medium	60% and above High	
Clean milk production	MDC	70(56.00)	55(44.00)	-	125(100.00)
	NMDC	86(68.80)	39(31.20)	-	125(100.00)

Figures in parentheses indicate percentage to total.

Table 3: Frequency distribution of respondents according to skill level in preparation of homemade concentrate mixtures N=250

Activities	Villages	Skilled			Total
		0-29% Low	30-59% Medium	60% and above High	
Preparation of homemade concentrate mixtures	MDC	98(78.40)	15(12.00)	12(9.60)	125(100.00)
	NMDC	104(83.20)	21(16.80)	-(0.00)	125(100.00)

Figures in parentheses indicate percentage to total.

Table 4: Differences in mean scores according to knowledge level and skill level in MDC and NMDC systems

Knowledge Segment	MDC		NMDC		't'- value
	Mean Score	SD	Mean Score	SD	
Feeding	32.04	15.34	29.16	14.81	1.510
Breeding	27.48	20.93	26.04	21.39	0.538
Management	35.64	20.72	35.64	18.43	0.00
Healthcare	29.40	20.72	27.00	21.54	0.898
Marketing	32.04	21.32	35.04	25.01	1.021
Skill Segment					
Clean Milk Production	28.20	15.14	24.36	13.95	2.085**
Preparation of Home Made Concentrate	24.36	19.20	20.04	11.26	0.043

** Significant at 5% significance level.

eight studied dairy farm technologies in MDC and NMDC system however a significant difference was observed between the MDC and NMDC systems in clean milk production ($P>0.05$). Similarly no significant difference was observed in mean scores of preparation of homemade concentrate mixture in both MDC and NMDC systems.

Mass Media Exposure:

It refers to the participation/utilization of mass media like newspapers, printed material, radio, exhibition and television etc.

The Data presented in Table 5 revealed that mass media were utilized by limited number of respondents. A total 44.80 percent of the respondents

of MDC system and 60.80 percent of the respondents of NMDC system had low mass media exposure while 43.20 percent of the respondents of MDC and 31.20 percent of the respondents of NMDC system had medium level of mass media exposure. High level of mass media exposure was observed in 12.00 percent of respondents in MDC and 8.00 percent in NMDC system. Among mass media tools television was preferred by all farm women of all categories. This was probably due to the fact that women prefer to stay inside home.

In both MDC and NMDC system level of knowledge about dairy farm technologies and skill level of women had significant impact on lower the

Table 5: Frequency distribution of respondents according to the basis of scores obtained for mass media exposure N=250

Category	Villages	Mass media exposure score			Total
		<7.00 Low	7.00- 13.00 Medium	>13.00 High	
Landless	MDC	13(10.40)	13(10.40)	0(0.00)	26(20.80)
	NMDC	17(13.60)	5(4.00)	0(0.00)	22(17.60)
Marginal farmer	MDC	22(17.60)	16(12.80)	4(3.20)	42(33.60)
	NMDC	32(25.60)	9(7.20)	4(3.20)	45(36.00)
Small farmer	MDC	20(16.00)	21(16.80)	4(3.20)	45(36.00)
	NMDC	21(16.80)	15(2.00)	2(1.60)	38(30.40)
Medium large farmer	MDC	1(0.80)	4(3.20)	7(5.60)	12(.60)
	NMDC	6(4.80)	10(8.00)	4(3.20)	20(16.00)
Total	MDC	56(44.80)	54(43.20)	15(12.00)	125(100.00)
	NMDC	76(60.80)	39(31.20)	10(8.00)	125(100.00)

Figures in parentheses indicate percentage to total

productivity of animals. Therefore, there is a urgent need to encourage females, by making available all that is necessary for successful dairying. It is suggested that short duration training programmes on dairy practices would be useful to the farm women acquiring the latest technical knowledge and skills with regard to dairying.

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