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Participation of Farm Women in Dairy Farming in Chickmagalur District

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Abstract

The study was conducted in two taluks of Chickmagalur district based on maximum number of women Milk Producers Co-operative Societies (MPCS). A list of villages was prepared in each taluk and listed in descending order using the same criteria. Top six villages from each taluk and from each village, 10 dairy women were selected by using simple random technique thus making a total sample of 120. The results revealed that majority of farm women belonged to medium level of participation (58.00 %) followed by low (23.00 %) and high (19.00 %) level. With regard to the specific dairy practices, majority of farm women participated in maintaining expenditure records on medical care including veterinarian charges (65.83 %), collection of dung and cleaning cattle shed (57.50 %), selection of breeds (56.67 %), maintaining labour expenditure records (56.67 %), washing the cows (55.00 %), cleaning (55.00 %), watering (54.17 %), individual cow milk production record (54.17 %) and milking (52.50 %) along with their husbands or other male members of the family. The characteristics such as education, income, dairy experience, livestock possession, decision making ability, mass media participation, social participation, extension participation, risk orientation and economic motivation had positive and significant relationship with participation of farm women in dairy. This reflects that there is still scope for improvement on participation of the farm women by educating them about the dairy management the practices. Milk Unions should organize more extension educational programs like trainings, calf melas, fodder demonstrations, exposure visits etc. through MPCS to increase their participation in dairy. The positive and significantly related variables would serve as guideline for the extension personnel to select the target groups for extension educational activities.

Women play a significant and crucial role in agriculture and allied fields including crop production, livestock, horticulture, post harvest operations etc. It has been estimated that 86 per cent of the total rural women are working for various agricultural operations. They perform these activities in addition for long and arduous work in household maintenance, child rearing, cooking, fuel and fodder collection, fetching water etc. The major work of animal husbandry is also performed by the women. They work daily 14-16 hours. Hence, farm women have multifarious and multiple responsibilities in and outside the home. The nature and extent of women's involvement in agriculture and livestock activities varies greatly from region to region. Even within the region, their involvement varies widely among different ecological sub zones, farming system, caste, class and socio-economic status of families etc. (Swaminathan, 1985). The rural scene is dominated by farming, which constitutes farmers and farmwomen. Farmwomen perform a variety of chores and they involve themselves in household, agriculture and livestock management activities. It is well known fact that women perform most of the livestock activities either alone or with the help of their counter parts (Kumar and Arya, 2002). Some personal and socio-economic characteristics of dairy farm women also influence their participation. With this background, the present study has been formulated with the following specific objectives.

1. To study the extent of participation of women in dairy farming.

2. To know the relationship between personal and socio-economic characteristics of women dairy farmers with participation.

Methodology

The study was conducted in two taluks of Chickmagalur district based on maximum number of women Milk Producers Co-operative Societies (MPCSs). A list of villages in each taluk was prepared and listed in descending order using the same criteria. Top six villages from each taluk were selected from

each village, a list of dairy farm women was prepared and 10 were selected by using simple random technique, thus, making a total sample of 120. The data were collected by using structured interview schedule and analyzed the data by using appropriate statistical tools.

Results and Discussion

Participation of Farm women in dairy farming: It is observed from Table I that 58.00 per cent of the women respondents belonged to medium level of participation in dairy farming practices followed by 23.00 of 19.000 per cent of them belonged to high and low level of participation, respecively. This might be due to the reason that most of the women respondents are involved in dairy as subsidiary enterprise in addition to other house hold activities. These results are in line with the observation of Mishra and Aswathi (1988).

Table I

Extent of participation of women in dairy farming

(n = 120)

Extent of participation	Number	Per cent
Low (< 47.43)	23	19.00
Medium (47.43 to 65.47)	69	58.00
High (above 65.47)	28	23.00

Mean = 56.458 S D = 18.058

*Participation of farm women in specific dairy activities***:** The results of women participation in list of specific dairy activities under different dimension are presented in the Table II. As observed from Table II in cow selection, majority of (56.67 %) farm women participated in selection of breeds along with their husbands or other male members of the family. About 42.50 and 32.50 per cent of male members and women themselves participated in purchase of cows, respectively. The reason might be due to these activities needs lot roaming which can't be done by women alone without help of their men counterparts. These findings are in accordance with the findings of Dak *et al.* (1987) and Aparna Ray *et al.* (2007).

With regard to the dairy management aspects, majority of farm women participated themselves in activities *viz.*, collection of dung and cleaning cattle shed (57.50 %) followed by equal per cent in washing the cows (55.00 %) and cleaning (55.00 %), watering (54.17 %), milking (52.50 %) and fumigation of the shed (50.00 %). The probable reasons might be due to that the farm women themselves practicing the dairy since long time. Hence, these activities are traditional, habitual, simple and they mainly carried out as part of domestic activities. These findings are in accordance with the finding of Khin Mar (2006) and Ranuji (2006).

In medical care, majority of farm women participated themselves in supplementing the mineral mixture / vitamins / feed supplements / medicines in feed (52.50 %) followed by ectoparasitadal bath (45.00 %) deworming (43.33 %) and treatment of animal during ailment / infertility (40.00 %). This might be due to essentiality of maintaining animal health for better returns during location period. These finding are in line with the findings of Ranuji, (2006)

With regard to dairy marketing aspects, majority of respondents participated equally in activities such as selling the milk (50.00 %) and butter (50.00 %) followed by cow (49.17 %) and ghee (49.17 %) and manure (48.33 %) and curds (48.33 %) along with their husbands or other male members of the family. Similarly, majority of women themselves participated in selling of curds (45.83 %) followed by ghee (45.00 %) and milk (41.67 %). The probable reasons might be due to that the women sell outside their locality with the help of their husbands or other family members. Further, they also sell locally without others assistance. There are no studies available to support or contradict the above findings.

With respect to keeping records, majority of farm women participated in expenditure on medical care including veterinarian charges (65.83 %) followed by labour expenditure record (56.67 %), individual cow milk production record (54.17 %) total milk production record (50.00 %) and maintaining bank records (50.00 %) along with their husbands or other male members of the family. Whereas, 45.83 per cent and 43.33 per cent women themselves participated in keeping record related to expenditure on purchase of feed and electricity / miscellaneous charges, respectively. The reason might be due to compulsion

TABLE II

Participation of women dairy farmers in specific dairy activities

(n = 120)

Dairy Activities	Performed by herself		Jointly		Male member		Labour	
	Number	per cent	Number	per cent	Number	per cent	Number	per cent
A. **Cow selection**								
1. Selection of breeds	46	38.33	68	56.67	6	5.00	0	0.00
2. Purchase of cows	39	32.50	30	25.00	51	42.50	0	0.00
B. **Management aspects**								
1. Collection of dung and cleaning cow shed with disinfectants	69	57.50	45	37.50	0	0.00	6	5.00
2. Fumigation of the shed	60	50.00	47	39.17	7	5.83	6	5.00
3. Purchase / collection of feed	35	29.17	53	44.17	31	25.83	1	0.83
4. Washing of the cows	66	55.00	46	38.33	2	1.67	6	5.00
5. Watering	65	54.17	47	39.17	2	1.67	6	
6. Cleaning	66	55.00	47	39.17	1	0.83	6	5.00
7. Milking of the cows	63	52.50	50	41.67	2	1.67	5	4.17
8. Insurance of animals	45	37.50	52	43.33	21	17.50	2	1.67
C. **Medical care**								
1. Vaccination	46	38.33	49	40.83	20	16.67	5	4.17
2. Treatment of animals during ailment / infertility	48	40.00	48	40.00	20	16.67	4	3.33
3. Regular artificial insemination.	47	39.17	48	40.00	21	17.50	4	3.33
4. Pregnancy diagnosis	47	39.17	56	46.67	14	11.67	3	2.50
5. Deworming	52	43.33	53	44.17	9	7.50	6	5.00
6. Ectoparasitidal bath	54	45.00	51	42.50	9	7.50	6	5.00
7. Supplementing the mineral mixture / vitamins / feed supplements / medicines in the feed	63	52.50	50	41.67	2	1.67	5	4.17
D. **Marketing aspects**								
1. Selling of the milk	50	41.67	60	50.00	10	8.33	0	0.00
2. Selling of the manure	52	43.33	58	48.33	10	8.33	0	0.00
3. Selling of the cow	51	42.50	59	49.17	10	8.33	0	0.00
4. Selling of value added milk products								
4.1 Selling of curds	55	45.83	58	48.33	7	5.83	0	0.00
4.2 Selling of butter	53	44.17	60	50.00	7	5.83	0	0.00
4.3 Selling of ghee	54	45.00	59	49.17	7	5.83	0	0.00
E. **Keeping records**								
1. Expenditure on purchase of cow	48	40.00	57	47.50	15	12.50	0	0.00
2. Expenditure on purchase of feed	55	45.83	58	48.33	7	5.83	0	0.00
3. Expenditure on purchase of equipment	50	41.67	55	45.83	7	5.83	0	0.00
4. Electricity charges / miscellaneous charges	52	43.33	53	44.17	15	12.50	0	0.00
5. Milk production record	47	39.17	60	50.00	13	10.83	0	0.00
6. Individual cow milk production record	35	29.17	65	54.17	20	16.67	0	0.00
7. Expenditure on laboures	38	31.67	68	56.67	14	11.67	0	0.00
8. Insurance record	48	40.00	59	49.17	13	10.83	0	0.00
9. Expenditure on medical care including veterinarian charges	28	23.33	79	65.83	13	10.83	0	0.00
10. Banking records	48	40.00	60	50.00	12	10.00	0	0.00

of MPCSs members to maintain the records on these aspects. As women may not find time due to maximum involvement in domestic and in dairy management aspects they depends on their men counterparts for other aspects. These findings are in line with the findings by Ranuji (2006).

The results in Table II also revealed that less percentage of male members alone and very negligible percentage of labourers were participated in dairy activities.

Relationship between personal and socio-economic characteristics of dairy farm women with participation : The correlation co-efficient of each of the personal and socio-economic variables with participation of women dairy farmers have been furnished in Table III**.** It could be revealed from table that out of 13 characteristics of women dairy farmers, eight characteristics *viz.,* education, income, dairy experience, livestock possession, decision making ability, mass media participation, social participation, extension participation, risk orientation and economic motivation had positive and significant relationship with participation in dairy. Other variables *viz.*, age, family size and land holding did not establish any significant relationship.

TABLE III

Relationship between personal and socio-economic characteristics of dairy farm women with participation.

(n = 120)

Independent Variables	Correlation co-efficient ('r' value)
Age	-0.0391 NS
Education	0.2136 *
Family size	-0.0246 NS
Land holding	-0.1388 NS
Income	0.2843 *
Dairy experience	0.2835 *
Live stock possession	0.2847 *
Decision making ability	0.4496 **
Mass media participation	0.2326 *
Social participation	0.2336 *
Extension participation	0.2251 *
Risk orientation	0.2436 *
Economic motivation	0.3504 **

* : Significant at 0.05 level of probability
** : Significant at 0.01 level of probability
NS : Non Significant

The possible reasons might due to that education exposes dairy farm women to broaden the mental sphere, sufficient income increases the adoption of cost-intensive dairy farming technologies, longer experience help attain accuracy and efficiency in performing dairy activities, possession of resource base, right decision making and mass media provides opportunity for repeated exposure to new technologies. Further, participation in social organizations and extension activities helps to share ideas and motivate towards positive action. The risk orientation ability venture into new activities and motivation towards economic gain certainly increases their participation in dairy activities.

These findings are in agreement with findings of Ramesh Babu (1987), Prameelamma (1990), Shailaja (1990), Bhagyalaxmi *et al*. (2003), Chauhan *et al.* (2004), Suresh (2004), Khin Mar (2005), Arora *et al.* (2006) and Mande and Thombre (2009).

Multiple regression analysis of personal and socio-economic characteristics of dairy farm women with participation: It could be seen from Table IV that, 67.98 per cent of total variation in the participation of women dairy farmers was explained by the 13 independent variables. The education, income, dairy experience, livestock possession, decision making ability, mass media participation, social participation, extension participation, risk orientation and economic motivation showed positive and significant relationship with participation of women in dairy. The remaining, age, family and land holding did not establish any significant relation with participation

The findings of the study revealed that majority of the farm women belonged to medium level of participation (58.00 %) followed by low (23.00 %) and high (19.00 %) level. With respect to the specific dairy practices, majority of farm women participated in keeping expenditure records on medical care including veterinarian charges (65.83 %), collection of

dung and cleaning cattle shed (57.50 %), selection of breeds (56.67 %), maintaining labour expenditure records (56.67 %) washing the cows (55.00 %), cleaning (55.00 %), watering (54.17 %), maintaining individual cow milk production records (54.17 %) and milking (52.50 %) along with their husbands or other male members of the family. The characteristics such as education, income, dairy experience, livestock possession, decision making ability, mass media participation, social participation, extension participation, risk orientation and economic motivation had positive and significant relationship with participation of farm women in dairy. This reflects that there is still scope for improvement on participation of the farm women by educating them about the dairy management practices. Milk Unions should organize more extension education programs like trainings, calf melas, fodder demonstrations, exposure visits etc. through MPCSs to increase their participation in dairy. The positive and significantly related variables would serve as guideline for the extension personnel to select the target groups for extension educational activities.

TABLE IV

Multiple regression analysis of personal and socio-economic characteristics of dairy farm women with participation.

(n = 120)

Independent variables	Reg. coeff (b)	Std. error (SEb)	't' value
Age	-0.0243	0.376	0.0646 NS
Education	1.2690	0.214	5.9299 *
Family size	0.0969	0.154	0.6292 NS
Land holding	0.0562	0.267	0.2104 NS
Income	1.4530	0.409	3.5525 *
Dairy experience	1.2899	0.52	2.4805 *
Livestock Possession	1.2372	0.217	5.7013 *
Decision making ability	1.4503	0.278	5.2169 *
Mass media participation	0.1172	0.065	1.8030 *
Social participation	1.0539	0.047	22.4234 *
Extension partici pation	1.1083	0.187	5.9267 *
Risk orientation	2.2427	0.287	7.8142 **
Economic motivation	1.0072	0.39	2.582564 *

R2 = 67.98

F = 10.87

* : Significant at 0.05 level of probability

** : Significant at 0.01 level of probability

NS : Non significant

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