

Original Research Article

Performance of Women Dairy Farmers in Ramanagara District of Karnataka

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ABSTRACT

Dairying has become an important secondary source of income for millions of rural families and has assumed the most important role in providing employment and income generating opportunities particularly for marginal and women farmers. Performance is the achievements made by women members with respect to improvement in dairy enterprise. The study was conducted in Ramanagara district of Karnataka. Magadi taluk and Ramanagara taluk were purposively selected based on the highest and lowest number of WDCS (Women Dairy Co-operative Societies) functioning respectively. Women dairy co-operative societies were exclusively selected. Six women dairy co-operative societies were randomly selected from each taluk. 15 women members including president, vice president and secretary are selected from each WDCS, constituting a sample size of 180 for the study. A great majority (70.56%) of the women dairy farmers practiced dairy + agriculture as occupation, had marginal (58.89%) land holding, medium (48.88%) annual income and low (61.11%) milch animal possession with respect to socio economic characteristics. Majority of the women dairy farmers had medium (58.89%) level of overall performance. Majority of women dairy farmers had low level of capacity building (47.22%) and self monitoring (62.22%) followed by medium level of economic activities (48.89%), social status (63.89%) and communicability (74.44%) with respect to dimensions of performance.

Keywords

Performance,
Women dairy
farmers

Introduction

Women have become aware about their rights and situations and entered in different fields of business, contributing to the growth of the economy. The activities like papad making, agarbathi making, tailoring, pickle making, pottery, petty shops etc., are the major entrepreneurial activities undertaken by women in rural areas to ensure economic security, besides engaging themselves in agriculture and allied activities including dairy enterprise. India ranks first among the world's milk producing nations since 1998

and has the largest bovine population in the World. Milk production has been increasing steadily over the year from 55.6 million tonnes in 1991-92 to 176.3 million tonnes in 2017-18. The average annual growth rate of milk production is 4.5% as on 2018. The per capita availability of milk in India during 2017-18 was 375 gm/day and by 2023-24, it is projected to increase to 592 gm/day. This represents sustained growth in the availability of milk and milk products for our growing population. Dairying has become an important secondary source of income for millions of rural families and has assumed the

most important role in providing employment and income generating activity particularly for marginal and women farmers. Most of the milk is produced by animals reared by small, marginal farmers and landless labourers. Karnataka Cooperative Milk Producers' Federation Limited (KMF) is the second largest dairy co-operative amongst the dairy cooperatives in the country. In Southern India it stands first in terms of milk procurement and sales. Dairying is an important means of livelihood to millions of rural families, which provides gainful employment for the family members, specifically for women. The dairy enterprise ensures not only economic support but also nutritional security for the children and family members. Majority of activities in dairying are taken up by women folk. Increasing demand for milk and milk products in recent years intensifies dairy farming as profitable enterprise for women. Further, in the recent past women dairy co-operative societies (WDCS) are gaining importance and are being established in huge numbers. Performance of women dairy farmers plays a key role in making the WDCS a successful unit. In this context, it was found worthwhile to conduct a study on "Performance of Women Dairy Farmers in Ramanagara District of Karnataka" with the following objectives.

1. To measure the socio economic characteristics of women dairy farmers
2. To measure the performance of women dairy farmers

Materials and Methods

The study was conducted in Ramanagara district of Karnataka. Magadi taluk and Ramanagara taluk were purposively selected based on the highest and lowest number of WDCSs functioning respectively and women

dairy co-operative societies were exclusively selected. Six women dairy co-operative societies were randomly selected from each taluk. 15 women members including president, vice president and secretary are selected from each WDCS, constituting a sample size of 180 for the study. The dependent variables are performance, four socio economic variables namely occupation, land holding, annual income and milch animal possession were considered for the study looking into the objectives of the study. Performance scale developed by Narayanaswamy (2005) was slightly modified and used to measure performance of women dairy farmers. Independent variables selected for the study were quantified by using structured schedule with suitable scales. Data were gathered through personal interview method with the help of structured, pre-tested interview schedule. The collected data were quantified and analyzed using frequencies, percentages, mean and standard deviation.

Results and Discussions

Socio-economic characteristics of women dairy farmers

The Socio-economic characteristics of the women dairy farmers are presented in table 1.

Occupation

It is evident from the table 1 that about 71.11 per cent of the women dairy farmers from Magadi taluk and 70.00 per cent from Ramanagara taluk were practicing dairy and agriculture as their occupation, nearly one fourth of the women from Magadi taluk (21.11%) and Ramanagara taluk (26.67%) were practicing dairy, agriculture and other as occupation, whereas only few respondents from Magadi taluk (7.78%) and Ramanagara taluk (1.11%) were practicing only dairy as

their occupation, followed by dairy and others in Ramanagara taluk (2.22%).

In pooled data vast majority (70.56%) of the women dairy farmers were practicing dairy and agriculture as their occupation and nearly one fourth (23.89%) were practicing dairy, agriculture and other as their occupation whereas only few (4.44%) of them practiced only dairy as their occupation followed by dairy and others (1.11%).

The findings observed could be due to the reason that dairy is an integral part of agriculture and are interdependent and contribute their respective bi products to each other's input. Members are aware about the profitability and the nutritional security for the family members by the dairy farming along with other occupations to ensure regular and sustained income. The findings observed are in line with Chaudhari (2006), Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Land holding

Results in the table 1 revealed that two third (63.34%) of the respondents are marginal farm women, whereas only one third of them (33.33%) were small women farmers followed by big (3.33%) farm women in Magadi taluk. In Ramanagara taluk 54.45 per cent were marginal farm women and 44.44 per cent were small followed by big (1.11%).

In pooled data majority (58.89%) are marginal farm women and 38.89 per cent were small followed by big (2.22%) farm women.

Marginal land holding by majority of respondents in the study observed could be due to the fact that most of the women having very less land and depend more on dairy enterprise to earn their living and fulfill the

needs. The results obtained are in accordance with Wadear *et al.*, (2003) and Khin (2005).

Annual income

It could be inferred from the table 1 that in Magadi taluk 40 per cent of the women dairy farmers belonged to low income group and 37.78 per cent women belonged to medium income followed by high income (22.22%). Whereas in Ramanagara taluk majority (60.00%) belonged to medium income category and 21.11 per cent belonged to low income followed by high (18.89%) income category

In pooled situation 48.88 per cent of the women dairy farmers belonged to medium income category and 30.56 per cent belonged to low income followed by high (20.56 %) income category.

The probable reason for the observed trend of income in this study may be attributed to the members being engaged in different occupations and getting assured income from dairy enterprise. The price for milk may not be remunerative as the cost of input in dairy enterprise is high. This may be the reason for majority belonging to medium income group. The above findings obtained are in accordance with the findings of Khin (2005), Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Milch animal possession

An examination of table 1 revealed that in Magadi taluk almost same per cent of the women dairy farmers possessed low (48.89%) and medium (46.67%) milch animals followed by high (4.44%). Whereas in Ramanagara taluk almost three fourth (73.33%) of the women dairy farmers had low milch animal possession while, nearly one fourth (25.56%) of them had medium

level of milch animal followed by high (1.11%) level of milch animal possession. In pooled data same trend continues as majority (61.11%) women dairy farmers possessed low milch animals followed by medium (36.11%) and only least (2.78%) possessed high milch animals.

The reason for the findings obtained could be attributed to the fact that the majority of the women dairy farmers are marginal farm women with medium level of income and they may not be able to purchase more number of cattle. Also, higher cost of maintaining bigger herds of improved breeds making it difficult for the women dairy farmers to possess more number of cattle. The results are in contrast with Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Overall performance of women dairy farmers in women dairy co-operative societies

An examination of table 2 clearly indicates that a majority (52.22%) of the women dairy farmers in Magadi taluk had medium level of performance followed by high (31.11%) and low (16.67%) levels of performance. In Ramanagara taluk majority (65.56%) of the respondents had medium level of performance followed by low (23.33%) and high (11.11%) levels of performance.

In the pooled situation majority (58.89%) of the respondents had medium level of performance followed by high level of performance (21.11%) level and low (20.00%) level of performance.

The possible reason for majority of the women dairy farmers falling under medium and high level of performance may be their dedication, hard work and willingness to achieve success in the women dairy co-operative society. In addition they are also financially depending on the dairy enterprise;

which drives them towards high performance. The above findings are in accordance with the findings of Arun Kumar (2004).

Dimension wise performance of women dairy farmers in women dairy co-operative societies

Capacity building

It is evident from the table 3 that 46.67 per cent, 28.89 per cent and 24.44 per cent of the women dairy farmers had low, high and medium level of capacity building respectively in Magadi taluk. In Ramanagara taluk 47.78 per cent, 35.56 per cent and 16.67 per cent of the respondents had low, medium and high level of capacity building respectively.

In case of pooled data, 47.22 per cent, 30.00 per cent and 22.78 per cent of the respondents from both the taluk had low, medium and high level of capacity building respectively.

The probable reason for majority having low to medium level of capacity building may be attributed to low and medium level of education and probably they are not capable of using the available literature and information to build their capacity.

Economic activities

A glance at table 3 reveals that 48.88 per cent, 36.67 per cent and 14.44 per cent of the women dairy farmers had medium, low and high levels of economic activities respectively in Magadi taluk. In Ramanagara taluk 48.89 per cent and 44.44 per cent of the respondents had medium and low level of economic activities respectively followed by high (6.67%) level of economic activity.

In the pooled data it is evident that 48.89 per cent, 40.56 per cent and 10.56 per cent of the respondents had medium, low and high levels

of economic activities respectively. The possible reason for the medium level of economic activities by most of the women dairy farmers might be due to the fact that they were not involved in value addition of milk, and they directly supplied milk to women dairy cooperative societies. Rarely might they have utilized the profit generated out of the dairy enterprise for further development of the enterprise.

Social status

It could be inferred from the table 3 that 57.78 per cent and 34.44 per cent of the women dairy farmers in Magadi taluk had medium and high level of social status respectively, followed by low (7.78 %) level of social status. In Ramanagara taluk majority (70.00%) of the respondents had medium level of social status followed by high (18.89%) and low (11.11%) level of social status.

In case of pooled situation majority (63.89%) of the respondents had medium level of social status followed by high (26.67%) and low (9.44%) level of social status.

The possible reasons for the medium to high social status by majority of the respondents may be due to their income from the dairy enterprise. The standard of living was improved after they started dairy enterprise and they are able to provide better and quality education to their children.

Communicability

Table 3 reveals that in Magadi taluk, a majority (61.11%) of the women dairy farmers had medium level of communicability followed by high (30.00%) and low (8.89%) level. In Ramanagara taluk, great majority (87.78%) of the respondents

has medium level of communicability followed by low (7.78%) and high (4.44%) level of communicability.

The pooled data indicates that less than three fourth (74.44%) of the respondents had medium level of communicability followed by high (17.22%) and low (8.33%) level of communicability.

The reason for a great majority of the respondents falling under medium to high level of communicability may be due to that they have been exposed to different types of communication skills in the training programs and their willingness to teach the skills they have learnt in the training programme to the fellow farm women.

Self monitoring

The results in the table 3 indicates that a majority (53.33%) of the women dairy farmers in Magadi taluk had low level of self monitoring followed by medium (28.89%) and high (17.78%) level of self monitoring. In Ramanagara taluk, majority (71.11%) of the respondents had low level of self monitoring followed by medium (28.89%) level of self monitoring.

In pooled data it is evident that a majority (62.22%) of the respondents had low level of self monitoring followed by medium (28.89%) and high (8.89%) level of self monitoring.

The possible reason for majority of the respondents falling under low level of self monitoring may be due to their medium to low level of education, low level of self confidence and majority of their actions and work being controlled by the men members of the family.

Table.1 Socio-economic characteristics of women dairy farmers

n=180

Sl. No.	Characteristics	Category	Magadi Taluk (n ₁ =90)		Ramanagara Taluk (n ₂ =90)		Total (n=180)	
			No.	%	No.	%	No.	%
1	Occupation	Dairy	7	7.78	1	1.11	8	4.44
		Dairy + Agriculture	64	71.11	63	70.00	127	70.56
		Dairy + Others	0	0.00	2	2.22	2	1.11
		Dairy +Agriculture+others	19	21.11	24	26.67	43	23.89
		Total	90	100.00	90	100.00	180	100.00
2	Land Holding (acres)	Marginal (≤ 2.5)	57	63.34	49	54.45	106	58.89
		Small (2.51-5.0)	30	33.33	40	44.44	70	38.89
		Big (>5.0)	3	3.33	1	1.11	4	2.22
		Total	90	100.00	90	100.00	180	100.00
3	Annual Income (Rupees) Mean =2,02,561 S.D. = 1,35,133	Low (<1,34,994.5)	36	40.00	19	21.11	55	30.56
		Medium (1,34,994.5 - 2,70,127.5)	34	37.78	54	60.00	88	48.88
		High(>2,70,127)	20	22.22	17	18.89	37	20.56
		Total	90	100.00	90	100.00	180	100.00
4	Milch Animal Possession (No.)	Low (1-2)	44	48.89	66	73.33	110	61.11
		Medium (3-5)	42	46.67	23	25.56	65	36.11
		High(>5)	4	4.44	1	1.11	5	2.78
		Total	90	100.00	90	100.00	180	100.00

Table.2 Overall performance of women dairy farmers n=180

Sl. No.	Category	Magadi Taluk (n ₁ =90)		Ramanagara Taluk (n ₂ =90)		Total (n=180)	
		No.	%	No.	%	No.	%
1	Low (<97.85)	15	16.67	21	23.33	36	20.00
2	Medium (97.85-103.81)	47	52.22	59	65.56	106	58.89
3	High (>103.81)	28	31.11	10	11.11	38	21.11
4	Total	90	100.00	90	100.00	180	100.00
Mean = 100.83				SD = 5.96			

Table.3 Dimension wise performance of women dairy farmers n=180

Sl. No.	Dimension	Category	Magadi Taluk (n ₁ =90)		Ramanagara Taluk (n ₂ =90)		Total (n=180)	
			No.	%	No.	%	No.	%
1	Capacity Building Mean = 23.83 S.D. = 1.51	Low (<23.08)	42	46.67	43	47.78	85	47.22
		Medium (23.08-24.58)	22	24.44	32	35.56	54	30.00
		High (>24.58)	26	28.89	15	16.67	41	22.78
2	Economic Activities	Low (<20.27)	33	36.67	40	44.44	73	40.56
		Medium	44	48.89	44	48.89	88	48.89

		(20.27-21.74)						
	Mean = 21.01 S.D. = 1.47	High (>21.74)	13	14.44	6	6.67	19	10.56
3	Social Status	Low (<22.97)	7	7.78	10	11.11	17	9.44
	Mean = 23.84 S.D. = 1.76	Medium (22.97-24.72)	52	57.78	63	70.00	115	63.89
		High (>24.72)	31	34.44	17	18.89	48	26.67
4	Communicability	Low (<17.99)	8	8.89	7	7.78	15	8.33
	Mean = 18.64 S.D. = 1.31	Medium (17.99-19.27)	55	61.11	79	87.78	134	74.44
		High (>19.27)	27	30.00	4	4.44	31	17.22
5	Self Monitoring	Low (<13.01)	48	53.33	64	71.11	112	62.22
	Mean = 13.52 S.D. = 1.02	Medium (13.01-14.02)	26	28.89	26	28.89	52	28.89
		High (>14.02)	16	17.78	0	0.00	16	8.89

Socio-economic characteristics of women dairy farmers

Occupation

Vast majority (70.56%) of the women dairy farmers were practicing dairy and agriculture as their occupation and nearly one fourth (23.89%) were practicing dairy, agriculture and other as their occupation whereas only few (4.44%) of them practiced only dairy as their occupation followed by dairy and others (1.11%). The findings observed could be due to the reason that dairy is an integral part of agriculture and

are interdependent and contribute their respective bi products to each other's input. Members are aware about the profitability and the nutritional security for the family members by the dairy farming along with other occupations to ensure regular and sustained income. The findings observed are in line with Chaudhari (2006), Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Land holding

Majority (58.89%) are marginal farm women and 38.89 per cent were small followed by big (2.22%) farm women.

Marginal land holding by majority of respondents in the study observed could be due to the fact that most of the women having very less land and depend more on dairy enterprise to earn their living and fulfill the needs. The results obtained are in accordance with Wadear *et al.*, (2003) and Khin (2005).

Annual income

About 48.88 per cent of the women dairy farmers belonged to medium income category and 30.56 per cent belonged to low income followed by high (20.56 %) income category. The probable reason for the observed trend of income in this study may be attributed to the members being engaged in different occupations and getting assured income from dairy enterprise. The price for milk may not be remunerative as the cost of input in dairy enterprise is high. This may be the reason for majority belonging to medium income group. The above findings obtained are in accordance with the findings of Khin (2005), Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Milch animal possession

Majority (61.11%) women dairy farmers possessed low milch animals followed by medium (36.11%) and only least (2.78%) possessed high milch animals. The reason for the findings obtained could be attributed to the fact that the majority of the women dairy farmers are marginal farm women with medium level of income and they may not be able to purchase more number of cattle. Also, higher cost of maintaining bigger herds of improved breeds making it difficult for the women dairy farmers to possess more number of cattle. The results are in contrast with Tekale *et al.*, (2013) and Prakash *et al.*, (2014).

Overall performance of women dairy farmers in women dairy co-operative societies

A majority (58.89%) of the respondents had medium level of performance followed by high level of performance (21.11%) level and low (20.00%) level of performance. The possible reason for majority of the women dairy farmers falling under medium and high level of performance may be their dedication, hard work and willingness to achieve success in the women dairy co-operative society. In addition they are also financially depending on the dairy enterprise; which drives them towards high performance. The above findings are in accordance with the findings of Arun Kumar (2004).

Dimension wise performance of women dairy farmers in women dairy co-operative societies

Capacity building

About 47.22 per cent, 30.00 per cent and 22.78 per cent of the respondents from both the taluk had low, medium and high level of capacity building respectively. The probable reason for majority having low to medium level of capacity building may be attributed to low and medium level of education and probably they are not capable of using the available literature and information to build their capacity. The findings are in contrast with the findings of Narayanaswamy (2005).

Economic activities

Approximately 48.89 per cent, 40.56 per cent and 10.56 per cent of the respondents had medium, low and high levels of economic activities respectively. The possible reason for the medium level of economic activities by most of the women

dairy farmers might be due to the fact that they were not involved in value addition of milk, and they directly supplied milk to women dairy cooperative societies. Rarely might they have utilized the profit generated out of the dairy enterprise for further development of the enterprise. The findings are in line with the findings of Narayanaswamy (2005) and Asha (2015).

Social status

A majority (63.89%) of the respondents had medium level of social status followed by high (26.67%) and low (9.44%) level of social status. The possible reasons for the medium to high social status by majority of the respondents may be due to their income from the dairy enterprise. The standard of living was improved after they started dairy enterprise and they are able to provide better and quality education to their children. The above findings are in accordance with the findings of Asha (2015).

Communicability

Less than three fourth (74.44%) of the respondents had medium level of communicability followed by high (17.22%) and low (8.33%) level of communicability. The reason for a great majority of the respondents falling under medium to high level of communicability may be due to that they have been exposed to different types of communication skills in the training programs and their willingness to teach the skills they have learnt in the training programme to the fellow farm women. The above findings are in accordance with the findings of Narayanaswamy (2005) and Shwetha and Shivalingaiah (2018).

Self monitoring

A majority (62.22%) of the respondents had low level of self monitoring followed by

medium (28.89%) and high (8.89%) level of self monitoring. The possible reason for majority of the respondents falling under low level of self monitoring may be due to their medium to low level of education, low level of self confidence and majority of their actions and work being controlled by the men members of the family. The findings are in contrast with the findings of Asha (2015).

In conclusion, a great majority of the women dairy farmers practiced dairy and agriculture as occupation had marginal land holding, medium annual income and low milch animal possession regarding socio-economic characteristics. Further majority of the women dairy farmers had medium level of overall performance. Majority of women dairy farmers had low level of capacity building and self monitoring followed by medium level of economic activities, social status and communicability with respect to dimensions of performance.

References

- ARUNKUMAR, T. D., 2004, Profile of SHGs and Their Contribution for Livestock Development in Karnataka. *M. Sc. (Agri.) Thesis (Unpub.)*, Univ. Agric. Sci., Dharwad, Karnataka.
- ASHA, K., 2015, A Study on the Performance of Self Help Groups in Ramangara District of Karnataka. *M.Sc. (Agri.) Thesis, (Unpub.)*, University of Agricultural Sciences, Bangalore.
- CHAUDHARI, R. R., 2006, A Study on Entrepreneurial Behaviour of Dairy Farmers. *Ph.D. Thesis, (Unpub.)*, University of Agricultural Sciences, Dharwad.
- KHIN MAR OO, 2005, Knowledge and Adoption of Improved Dairy Management Practices by Women Dairy Farmers in Dharwad District. *M.*

- Sc. Thesis, University of Agricultural Sciences, Dharwad.
- NARAYANASWAMY, B., 2005, Performance of Self Help Groups in Karnataka – An Analysis. *Ph.D. Thesis,(Unpub.)*, University of Agricultural Sciences, Bangalore
- PRAKASH KUMAR RATHOD, T. R. NIKAN, SARIPUT LANDGE, AMIT HATEY AND B. P. SIND, 2014, Entrepreneurship Behaviour of Dairy Farmers in Western Maharashtra, India. *Indian Research Journal of Extension education*, 14(2): 91-98.
- SHWETHA, N. V. AND SHIVALINGAIAH, Y. N., 2018, Performance of Farmers Adopting Different Farming Systems in Chikkaballapur District of Karnataka. *Trends in Biosciences*, 11(6): 807-811.
- TEKALE, V.S., BHALEKAR, D. N. AND SHAIKH, J. I., 2013, Entrepreneurial Behaviour of Dairy Farmers. *International Journal of Extension Education*, 9: 32-36.
- WADEAR, P.R., KIRESUR, V.R. AND GADDI, G.M., 2003, Human Labour Absorption in Dairy Farming in Karnataka – An Economic Analysis. *Rural India*, 66(12): 243-247.