Original Research

Milk Production, Consumption and Disposal Pattern of Women Dairy Cooperative Society Members in Jaipur (Rajasthan)

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Rec. Date:	Mar 20, 2018 06:53
Accept Date:	Jun 15, 2018 16:52
DOI	10.5455/ijlr.20180320065318

Abstract

The present study was carried out on 120 randomly selected Women Dairy Cooperative Society (WDCS) members in Jaipur district of Rajasthan to assess their milk production, consumption and disposal pattern. The study revealed that 73.33 and 65.00 per cent respondents were having medium category of milk production and consumption, respectively. The average daily milk production and consumption per household in the study area was found to be 24.78 and 3.55 litres per day, respectively. Respondents were utilizing 19.27 per cent of daily milk production for making ghee and 9.82 per cent for dahi. Majority of them (78.33%) were disposing off their marketed surplus milk to cooperative societies only, but a considerable proportion of the members were disposing off their milk to other agencies like private milk dairies (9.17%), milk vendors (6.67%) and direct consumers (5.83%) and were getting maximum price by selling their milk directly to consumers (Rs. 33.14/litre).

Key words: Consumption, Disposal, Production, Women Dairy Cooperative Society

How to cite: Singh, V., Rewani, S., Rajoria, S., Wani, S., Singh, N., & Singodia, M. (2018). Milk Production, Consumption and Disposal Pattern of Women Dairy Cooperative Society Members in Jaipur (Rajasthan). International Journal of Livestock Research, 8(11), 190-194. doi: 10.5455/ijlr.20180320065318

Introduction

In present scenario dairy cooperatives have been considered as the most important measure for improvement in the marketing mechanism of milk in rural areas to increase producers share in consumer's

rupees to empower the rural masses especially women. Women focused approach were advocated as a part of the strategy under which sufficient number of Women Dairy Cooperative Societies (WDCS) were formed at village level with the point of view that these would provide a source of additional income and an organized platform to seek personal, social and other grievances (Niketha *et al*., 2017). The major emphasis in the WDCS is that the rural women will not only benefit economically through the project but possession and management of milch animals would enable them to learn by inferences and help in capacity building. The membership in most of Indian village-level Dairy Cooperative Societies (DCSs) were heavily dominated by men. The picture is now gradually changing in the favour of women. Efforts are on to give them their due place in dairy development. The Rajasthan state has total 13,492 registered DCSs in which 5,159 (38.24%) are WDCS (Anonymous, 2016). India is the largest milk producing country in the world with production of 146.3 million tones during the year 2015-16. 36 per cent of the milk production is contributed by indigenous buffaloes followed by 26 per cent by crossbred cattle. The indigenous cattle contribute 12 per cent of the total milk production in the country whereas non-descript cattle contribute 9 per cent milk production and non-descript buffaloes contribute 13 per cent milk production (Anonymous, 2017). Milk being the perishable commodity in nature, hence it requires quick disposal or conversion into milk products. The milk and milk products are the important food items for human health and nutrition in India. Therefore, milk producers boil the retained milk and some part is converted into a variety of traditional milk products like ghee, dahi and chhach etc. Rest of milk is sold to organized sector (milk producer's co-operative societies) and unorganized sector (milk vendors and consumers). The total production of milk in a household depends upon the proportion of animals in milk in addition to types of milch animals. For greater availability of milk to consumers, it is necessary that marketed surplus should increase out of increased production. A precise idea about the production, consumption and disposal pattern of milk is also important for planning and policy purposes with a view to generate economic information useful for projecting development activities in the dairy sector.

Materials and Methods

The present study was conducted in purposively selected Jaipur district of Rajasthan owing to prospective rate of dairying, good cooperative network, livestock wealth status and large numbers of dairy cooperatives. Four tehsils viz. Amber, Chaksu, Chomu and Phagi were selected randomly from Jaipur district and two villages were selected randomly from each tehsils. From each village, 15 women who were active members of WDCS for at least three years were selected randomly. Thus, total 120 respondents were selected for the study. The ex-post facto research design was followed. The data was collected by using a structured interview schedule. The statistical measures such as percentage and frequency were used.

 DOI 10.5455/ijlr.20180320065318

Result and Discussion

Herd Size

Table 1 indicates that majority of the respondents (80.83%) had medium size of herd followed by large (14.17%) and small (5.00%) herd size. The above finding is in consonance with the earlier findings of Nishi *et al.* (2011). The average herd size of the respondents was found to be 4.87 animals.

Table 1: Distribution of respondents according to their herd size (n=120)

S. No.	Herd Size	Frequency (*f*)	Percent (%)
i	Low (Upto 13.35)	6	5
ii	Medium (13.36 to 36.20)	97	80.83
iii	High (Above 36.20)	13	14.17
	Mean ± S.D.	**4.87±3.84**	

Milk Production

Table 2 reveals that majority of respondents (73.33%) fell in medium category of milk production followed by low (15.83%) and high (10.83%) milk production category. The results of the study are at par with the findings of Bairathi (1993) who found that majority of respondents had medium level of milk production. The average daily milk production per household in study area was found to be 24.78 litres per day.

Table 2: Distribution of respondents according to their milk production (n=120)

S. No.	Total Milk Production (litres/day)	Frequency (*f*)	Percent (%)
i	Low (Upto 13.35)	19	15.83
ii	Medium (13.36 to 36.20)	88	73.33
iii	High (Above 36.20)	13	10.83
	Mean ± S.D.	**24.78±11.42**	

Table 3 reveals that average daily milk production was highest in buffaloes (6.79 Litres/day) followed by crossbred cows (5.63 litres/day) and indigenous cows (4.22 litres/day). Table further shows that buffaloes were producing 73.11 per cent of total milk production followed by crossbred cows (23.63%) and indigenous cows (3.26%).

Table 3: Distribution of animals according to their milk production

S. No.	Animals	Avg. Production (litres/day)	Percent (%) of Total Milk Production
i	Indigenous cow	4.22	3.26
ii	Crossbred cow	5.63	23.63
iii	Buffalo	6.79	73.11

Milk Consumption

Table 4 reveals that the majority of respondents (65.00%) were in medium category of milk consumption followed by low (25.00%) and high (10.00%) milk consumption category. The average daily milk

DOI 10.5455/ijlr.20180320065318

consumption per household in study area was found to be 3.55 litres per day. Nishi *et al.* (2011) reported similar results in their respective studies i.e. majority of the respondents were in medium milk consumption category.

Table 4: Distribution of respondents according to milk consumption as fluid milk (n=120)

S. No.	Milk Consumption	Frequency (f)	Percent (%)
i.	Low (Upto 2.05)	30	25
ii.	Medium (2.06 to 5.05)	78	65
iii.	High (Above 5.05)	12	10
	Mean ± S.D.	**3.55±1.50**	

Milk Utilization for Value Added Products

The results from Table 5 reveals that respondents were utilizing 19.27 per cent of daily milk production for making ghee and chhach (chhach is byproduct obtained while making ghee) and 9.82 per cent for dahi.

Table 5: Distribution of respondents according to milk utilization for making value added products

S. No.	Particulars	Daily Milk Utilization for Making Value Added Products	
		Avg. quantity (litres/day)	Percent (%) of Total Milk Production
i	Ghee	4.78	19.27
ii	Dahi	2.44	9.84
iii	Chhach	4.78	19.27

Quantities Disposed to Different Marketing Agencies

The disposal pattern of milk to different agencies was based on customer preference, existing marketing channels, price offered and quantity of milk produced in households. The results presented in Table 6 reveals that majority of the women members (78.33%) were disposing off their marketed surplus milk to cooperative societies only, but a considerable proportion of the members (21.67%) were disposing off their produce of milk to other agencies also. The other marketing agencies which were preferred by the members to dispose their surplus of milk comprised of private milk dairies (9.17%), milk vendors (6.67%) and direct consumers (5.83%). The above finding is in consonance with the earlier findings of Wani *et al.* (2015).

Table 6: Distribution of respondents according to their marketing agencies (n=120)

S. No.	Agency	Frequency (f)	Percent (%)
i.	Only Cooperative	94	78.33
ii.	Cooperative + Local vendor	8	6.67
iii.	Cooperative + Consumer	7	5.83
iv.	Cooperative + Private dairies	11	9.17

Price Offered by Different Agencies

The average price of milk offered by different agencies indicated in Table 7 shows that the dairy cooperative societies were procuring milk at an average price of Rs. 29.94/litre which was lesser than the

price offered by other agencies (Consumer & Private dairies). The women members were getting maximum price by selling their milk directly to consumers who provided Rs. 33.14/litre. Further, milk vendors and private dairies were procuring milk at rate of Rs. 28.63/litre and Rs. 30.27/litre, respectively. The price offered in the WDCS in the study area is based on fat and SNF content of the milk. This finding is in corroboration with that of Wani *et al.* (2015).

Table 7: Distribution of the milk marketing agencies according to price offered

S. No.	Agency	Avg. price(Rs/litre)
i.	Cooperative	29.94
ii.	Local vendor	28.63
iii.	Consumer	33.14
iv.	Private dairies	30.27

Conclusion

An attempt was made to study production, consumption and disposal pattern of milk in members of women dairy cooperative societies. The average herd size of milch animals, average daily milk production and average daily household milk consumption were found medium and less amount of total milk production were utilized for making value added product as ghee. Most of the women dairy cooperative members were disposing their marketed surplus milk to the dairy cooperatives and were getting lesser price by selling their milk to dairy cooperatives as compared to other agencies (consumer and private dairies). Thus the dairy cooperatives should make dairying remunerative by providing competitive prices.

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