

Impact of Dairy Cooperatives on Quality of Life Parameters: Gender Analysis

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ABSTRACT

The dairy cooperatives collect milk on a daily basis from villages and convert it into various value added products, which are sold through various outlets thereby benefiting both the suppliers and the consumers. The objective of the present investigation was to study the impact of dairy cooperatives on the quality of life parameters of members of dairy cooperative society (DCS). The study was conducted in Haryana state, India on a sample of 200 members of dairy cooperative, comprising of 100 men and 100 women drawn from 10 villages of two districts viz. Hisar and Mahendergarh. The impact of dairy cooperative societies (DCS) on nine quality of life parameters viz. economic, nutrition and health, housing, material possession, domestic violence, personal grooming, educational, social, recreational was investigated on gender basis. The impact on quality of life showed that the ranks were highly significant on gender basis for economic, nutrition and health, material possession, personal grooming and education but were negatively related in case of domestic violence. The overall impact was significant with spearman rank order correlation of 0.85.

In India, livestock sector has experienced remarkable growth during the last two decades in terms of production, value of output from livestock and trade. This sector contributes nearly 25 percent to the gross value of agricultural output at the national level and is a potential enterprise (Tiwari and Sharma 2007, Tiwari and Sharma 2008). Livestock development is emerging as a major rural development activity and more so as an activity which is likely to benefit women directly (Ramkumar et al. 2004, Chaudhary 2005).

Today in India, there are 75,000 dairy cooperative societies, spread all over the country with a membership of 10 million. The farmer in the village is now assured of a better future due to these cooperatives (NDDDB, 2005). Rural farmers in the State of Haryana are engaged in agro-based activities especially where land is a limiting factor. Dairying is the best suitable alternative in this situation for ensuring regular marketing of their produce, timely payment and other benefits (Grover and Sethi, 2005; BIRTHAL and TANEJA, 2006). The present study is an effort to study the impact of dairy cooperatives on the quality of life of members of dairy cooperative societies (DCS).

METHODOLOGY

The study was conducted in Haryana State, India on a sample of 200 members of dairy cooperative, comprising of 100 men and 100 women drawn from 10 villages of two districts viz. Hisar and Mahendergarh. Multistage sampling procedure was adopted for the selection of milk unions, districts, villages and respondents. The selected dairy cooperative societies were Baropati, Talwandi Rana, Arya Nagar, Ladwa and Dhaima from Hisar district and Balaha Kalan, Raghunathpura, Bachhod, Silarpur and Ratta Kalan from Mahendergarh district. Impact of dairy cooperative societies (DCS) was studied on nine quality of life parameters viz. economic, nutrition and health, housing, material possession, domestic violence, educational, social, recreational and others. To evaluate the impact of beneficiaries on each of the selected parameter, a set of statements was prepared under each parameter. Based on the scores obtained by the respondents against each statement, weighted mean score was calculated. The weighted mean scores thus obtained were finally ranked according to their degree of impact on various life quality aspects.

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RESULTS AND DISCUSSION

The impact of dairy cooperative societies (DCS) on various quality of life parameters viz. economic, nutrition and health, housing, material possession, domestic violence, personal grooming, educational, social, recreational was investigated and results presented in Table 1.

Impact of dairy cooperatives on quality of life

Economics impact was ascertained viz. change in income, expenditure, saving and investment. It is apparent from Table 1 that per cent of men and women reported increase in their income as a result of being member of DCS, whereas increase in saving and expenditure was reported by 85.0 per cent and 82.0 per cent of men as against 73.0 percent and 60.0 percent women. As far as investment is concerned, majority (72.0%) of men reported increase whereas majority (58.0%) of women reported that there was no change. The weighted mean score (WMS) and rank for these aspects for men for income was 3.0 & Rank I followed by savings 2.85 (Rank II), expenditure 2.82 (Rank III) and investment 2.72 (Rank IV) and for women for income was 3.00 (Rank I), expenditure 2.73 (Rank II), saving 2.60 (Rank III) and investment 1.84 (Rank IV). The spearman rank order correlation was 0.80 and shows that the ranks are significantly correlated at 5% level of significance. The findings are in consonance with the results of Deepti (2002), Ramkumar et al. (2004) and Pandey (2005) who also reported an increase income of the small, marginal and landless farmers due to dairy and dairy cooperatives. Further, Pandey (2005) reported that according to 67.0 per cent of beneficiaries their investment level remained same through dairy cooperatives.

The impact of dairy cooperatives on nutrition and health related aspects when studied revealed that cent percent of men and women reported increase in quality and variety of food and also experience of strain and fatigue. It was reported by 85.0 per cent and 82.0 per cent men beneficiaries that their expenditure on food items and on health care increased as against 78.0 per cent and 64.0 per cent women. The weighted mean score (WMS) and rank for these aspects for men for quality/ variety of food and experience of strain and fatigue was 3.00 (Rank I) followed by expenditure on food items 2.85 (Rank II) and expenditure on health care 2.82 (Rank III) and for women for quality/ variety of food and experience of strain and fatigue was 3.00 (Rank I), expenditure on food items 2.78 (Rank II) and

expenditure on health care 2.64 (Rank III). The spearman rank order correlation was 1.00 and reveals that the ranks between men and women are highly consistent and significant. Pandey (2005) reported that the maximum impact of women dairy cooperatives on quality of life of beneficiaries was evident on economic, educational and social aspects. Forty-eight per cent of the beneficiaries were highly satisfied with dairy cooperatives.

The result of impact on housing aspect of beneficiaries revealed that majority of the men beneficiaries (45.0%) went for interior decoration, followed by home improvement (40.0%), repair/maintenance (37.0%), furnishing and construction of house (25.0%) whereas majority of women (55.0%) went for home improvement followed by interior decoration (52.0%), repair/maintenance (32.0%), construction of house (20.0%) and furnishing (18.0%). The weighted mean score (WMS) and rank for these aspects for men for interior decoration was 2.45 (Rank I) followed by repair/maintenance 2.37 (Rank II), construction and furnishing of house 2.25 (Rank III) and home improvement 1.80 (Rank IV) and for women interior decoration was 2.52 (Rank I), repair/maintenance 2.32 (Rank II), home improvement 2.25 (Rank III), furnishing 2.18 (Rank IV) and construction 2.00 (Rank V). The spearman rank order correlation was 0.62 reveals that the ranks between men and women are fairly order correlation was 0.62 reveals that the ranks between men and women are fairly consistent.

As far as impact on material possession aspect was concerned, it was noted that 68.0 per cent of men beneficiaries reported increase in low prestige items followed by medium prestige items (40.0%) and high prestige items (22.0%). In case of women similar trend was observed (63.0%, 30.0% and 13.0%), respectively. The weighted mean score (WMS) and rank for these aspects for men for low prestige items was 2.68 (Rank I) followed by medium prestige items 2.40 (Rank II) and high prestige items 2.22 (Rank III) and for women for low prestige items was 2.63 (Rank I) followed by medium prestige items 2.30 (Rank II) and high prestige items 2.13 (Rank III). The spearman rank order correlation was 1.00 and shows that the ranks are significantly correlated at 5 Percent level of significance.

On domestic violence aspect majority of the women respondents reported decrease in domestic violence viz.,

taunting/mental torture (78.0%), alcoholism (75.0%), abuse/ beating (72.0%) and dowry demand (55.0%) as against men. In case of men similar trend was observed (63.0%, 30.0% and 13.0%), respectively. The weighted mean score (WMS) and rank for these aspects for women for taunting/mental torture was 2.78 (Rank I) followed by alcoholism 2.75 (Rank II), abuse/ beating 2.72 (Rank III) and dowry demand 2.55 (Rank IV) and for men for taunting/mental torture was 2.45 (Rank I) followed by alcoholism 2.25 (Rank II) and abuse/ beating and dowry demand 2.00 (Rank III). The spearman rank order correlation was -0.10 which shows that the ranks are negatively correlated. Regarding personal grooming, cent percent men beneficiaries reported same status whereas increase in expenditure on jewellery was reported by 48.0 per cent of women whereas 52.0 per cent of women reported same status. 37 per cent of women reported increase in clothing expenses as against 28.0 per cent men. The weighted mean score (WMS) and rank for these aspects for men for clothing was 2.28 (Rank I) followed by jewellery 2.00 (Rank II) and for women for jewellery was 2.48 (Rank I) followed by clothing 2.39 (Rank II). The spearman rank order correlation was -1.00 and shows that the ranks are significantly negatively correlated at 5% level of significance and the grooming aspects differ based on

gender preferences.

The information pertaining to impact on educational aspects revealed that majority of men and women (68.0% and 72.0%) reported that they were able to provide better schooling facilities for their children followed by spending on private tuitions/coaching of children (34.0% and 40.0%) and enrollment in extracurricular activities (30.0% and 23.0%). The weighted mean score (WMS) and rank for these aspects for men for better schooling facilities for their children was 2.68 (Rank I) followed by spending on private tuitions/coaching of children 2.34 (Rank II) and enrollment in extracurricular activities 2.30 (Rank III) and for women for better schooling facilities for their children was 2.72 (Rank I) followed by spending on private tuitions/coaching of children 2.40 (Rank II) and enrollment in extracurricular activities 2.23 (Rank III). The spearman rank order correlation was 1.00 and shows that the ranks are significantly correlated at 5 per cent level of significance.

Majority (78.0%) of male members reported that their size of social circle increased due to dairy cooperatives followed by social recognition of self (72.00%), status of their family in society (68.0%) and social participation (38.0%). In case of women majority (65.0%) reported that their social recognition

Table 1. Gender analysis of impact of dairy cooperatives on quality of life of members of dairy cooperative societies

Sl. No.	Aspects	Men (N=10)				Women (N=10)					
		Frequency/ percentage			Weighted Mean Score	Rank	Frequency/ percentage			Weighted Mean Score	Rank
Increase	Same	Decrease	Increase	Same			Decrease				
1.	Economic	(rs)= 0.80*									
	Income	100	00	00	3.00	I	100	00	00	3.00	I
	Expenditure	82	18	00	2.82	III	73	27	00	2.73	II
	Saving	85	15	00	2.85	II	60	40	00	2.60	III
	Investment	72	28	00	2.72	IV	42	58	00	1.84	IV
2.	Nutrition and health	(rs)= 1.00*									
	Expenses on food	85	15	00	2.85	II	78	22	00	2.78	II
	Quality/ variety of food	100	00	00	3.00	I	100	00	00	3.00	I
	Expenses on health care	82	18	00	2.82	III	64	36	00	2.64	III
	Experience of strain/fatigue	100	00	00	3.00	I	100	00	00	3.00	I

3. Housing	(rs)= 0.62									
Furnishing	25	75	00	2.25	III	18	82	00	2.18	IV
Repair/ maintenance	37	63	00	2.37	II	32	68	00	2.32	II
Home improvement	40	60	00	1.80	IV	55	45	00	2.25	III
Construction	25	75	00	2.25	III	20	80	00	2.00	V
Interior decoration	45	55	00	2.45	I	52	48	00	2.52	I
4. Material possession	(rs)= 1.00*									
Low prestige items	68	32	00	2.68	I	63	37	00	2.63	I
Medium prestige items	40	60	00	2.40	II	30	70	00	2.30	II
High prestige items	22	78	00	2.22	III	13	87	00	2.13	III
5. Domestic violence	(rs)= -0.10									
Abuse/ Beating	00	100	00	2.00	I	00	28	72	1.28	II
Taunting/ Mental torture	00	55	45	2.00	I	00	22	78	1.22	IV
Due to alcoholism	00	75	25	1.75	II	00	25	75	1.25	III
Due to dowry demand	00	100	00	2.00	I	00	45	55	1.45	I
6. Personal	(rs)= -1.00*									
Clothing	28	72	00	2.28	I	37	64	00	2.39	II
Jewellery	00	100	00	2.00	II	48	52	00	2.48	I
7. Educational	(rs)= 1.00*									
Better schooling of children	68	32	00	2.68	I	72	28	00	2.72	I
Provision of private tuitions/ coaching	34	66	00	2.34	II	40	60	00	2.40	II
Enrolment in extra- curricular courses like computers, art class,etc.	30	70	00	2.30	III	23	77	00	2.23	III

8. Social											
Social recognition of self	72	28	00	2.72	II	65	35	00	(rs)= 0.40	2.65	I
Social participation	38	44	18	2.20	IV	23	57	20		2.03	IV
Size of social circle	78	22	00	2.78	I	45	55	00		2.45	III
Status of family in society	68	32	00	2.68	III	57	43	00		2.57	II
9. Recreational											
Holidays, outings	00	18	82	1.18	IV	00	00	100	(rs)= 0.40	1.00	IV
Hosting/ attending parties	00	62	38	1.62	II	00	54	46		1.54	II
Time for hobbies	00	58	42	1.58	III	00	34	66		1.34	III
Celebration of festivals/ ceremonies	38	62	00	2.38	I	47	53	00		2.47	I

Increase -3; Same-2; Decrease - 1
 Max. WMS= 3.00; WMS = Weighted Mean Score
 (rs)= Spearman Rank Order Correlation

increased followed by increase in status of family in society (57.0%), size of social circle (45.0%) and social participation (23.0%) due to dairy cooperatives. But 18.0 per cent of men and 20.0 per cent of women reported decrease in social participation. This may be due to extra involvement in dairy cooperatives and it is also dependent on the type of family, size of family, social hierarchy and herd size. The weighted mean score (WMS) and rank for these aspects for men for size of social circle was 2.78 (Rank I) followed by social recognition of self 2.72 (Rank II), status of their family in society 2.68 (Rank III) and social participation 2.20 (Rank IV) and for women for social recognition of self was 2.65 (Rank I) followed by status of their family in society 2.57 (Rank II), size of social circle was 2.45 (Rank III) and social participation 2.03 (Rank IV). The spearman rank order correlation was 0.40 and shows that the ranks are somewhat correlated at 5% level of significance.

As far as impact on recreational aspect is concerned, it was revealed that 38.0 per cent of men and 47.0 per cent of women reported that the expenditure on

celebration of festivals, ceremonies increased. Majority of men (82.0%) and cent percent women beneficiaries informed that expenses on holidays and outdoor meals decreased probably due to less time available for such activities. The weighted mean score (WMS) and rank for these aspects men for celebration of festival/ ceremonies 2.38 (Rank I) followed by hosting/attending parties 1.62 (Rank II), time of hobbies 1.58 (Rank III) and holidays/outing 1.18 (Rank IV) and for women for celebration of festivals/ceremonies 2.47 (Rank I) followed by hosting/ attending parties 1.54 (Rank II), time of hobbies 1.34 (Rank III) and holidays/ outings 1.00 (Rank IV). The spearman rank order correlation was 0.40 and shows that the ranks are somewhat correlated at 5 per cent level of significance.

Overall impact

The gender analysis of overall impact of dairy cooperatives has been presented Table 2. The mean score data on impact of DCS indicated that their participation influenced all the selected parameters in a

positive way as the mean scores of most of the parameters was high, however, the maximum impact was visualized on economic, nutrition and health aspects both

for men and women. Further, the ranks when tested through spearman rank order correlation depict a high consistency between ranks ($r_s = 0.85$).

Table 2. Gender analysis of overall impact of dairy cooperatives

Sl. No.	Aspects	Mean (N=10)			Women (N=100)		
		Total Mean Value	Weighted Rank Score	Rank	Total Mean Value	Weighted Rank Score	Rank
1.	Economic	11.39	2.85	I	10.17	2.54	II
2.	Nutrition and health	11.67	2.92	I	11.42	2.86	I
3.	Housing	11.12	2.22	VI	11.27	2.25	VII
4.	Material possession	7.30	2.43	V	7.06	2.35	VI
5.	Domestic violence	7.75	1.94	VIII	5.20	1.13	IX
6.	Personal grooming	4.28	2.14	VII	4.87	2.44	IV
7.	Educational	7.32	2.44	IV	7.35	2.45	III
8.	Social	10.38	2.60	III	9.70	2.43	V
9.	Recreational	6.76	1.69	IX	6.39	1.60	VIII

0.85* (r_s)= Spearman Rank Order Correlation

CONCLUSION

Impact of dairy cooperative societies on various quality of life parameters viz. economic, nutrition and health, housing, material possession, domestic violence, personal grooming, educational, social, recreational indicated that dairying influenced these in a positive way. The maximum impact was estimated on economic, nutrition and health aspects both for men and women. Dairying through cooperative mode is a novel, profitable and sustainable rural development activity.

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