Gender Analysis of Constraints Faced By Dairy Cooperative Society Members

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ABSTRACT

The objective of the present investigation was to investigate the gender profile and constraints of members of dairy cooperative societies (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. It was revealed that majority of men and women (55 and 70 %) were in middle age group of 35 to 50 years, men had higher educational status with 40 per cent men up to matriculation and 40 per cent women in illiterate category, 60 per cent men and 55 per cent women had nuclear family. Majority of men had animal health care and management constraint followed by personal constraint, organizational constraint, educational constraint and milk supply and payment constraint whereas majority of women had educational constraint followed by personal, animal health care and management, milk supply and payment constraint and organizational constraint, respectively. The spearman ranks order correlation reveals that the ranks are not consistent. The gender analysis of constraints indicated that majority of both men and women had minor constraints followed by moderate and major, respectively. The chi-square value was found to be significant, which shows that the educational and personal constraints are closely associated with gender. Association of profile variables with constraints revealed that for men land holding, occupation of respondents, family education status, total annual income and material possession were found to be significantly associated with constraints while in case of women significant variables were education, size of family, land holding, family education status and type of family.

Key words: *Dairy cooperatives; Gender profile; Extent and rank dimension of constraints; Gender analysis;*

Dairy cooperatives societies (DCS) were established to act as a vehicle for empowering rural people along with providing a regular source of fair income. It was assumed that DCS would provide an organized forum through which members could address their personal and social needs and at the same time become active participants in development. Dairy farming has been proved as a powerful instrument to further economic progress and social change in rural areas of India and creation of mass employment opportunities. Profitability from agriculture is on a decline and there is higher dependency on monsoon and other factors. At the same time dairying is yielding regular and higher profits and providing regular employment (*Chaudhary, 2005*). Incorporation of dairying into general farming leads to more stable income to the family and social benefits of dairying under the

cooperative system appear substantial (*Pandey, 2005*). In spite of the ambitious programmes launched by the Government of India and State Governments, they were not able to deliver the expected results. Every programme no matter how effectively it has been formulated would encounter constraints. It was, therefore, assumed that the constraints faced by the men and women members of dairy cooperative societies (DCS) would be of varied nature which would further help to provide alternate suggestions to make the cooperative societies more functional, viable and useful to rural people. The present study is an attempt to compare profile of members of dairy cooperative societies by gender and to carry out gender analysis of various constraints viz., personal, educational, animal health care and management, milk supply and payment and organizational constraints of dairy cooperatives

members, and ascertain association of profile variables with constraints.

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. Being a gender study equal number of men and women were selected though majority of dairy cooperative membership is that of men. Five dairy cooperatives from each selected districts, which is total of ten dairy cooperatives, were selected purposively. 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.

Constraints in the present context were defined as any condition or situation that impede, hinder, restrict, limit the participation of beneficiaries in various aspects of dairy cooperatives and various activities or programmes related to it. Constraints were measured on an inventory prepared for the purpose and responses for various constraints were obtained in a category of major, moderate, minor and not a constraint with assigned score of 3, 2, 1 and 0, respectively and appropriate statistical tools were applied to analyze the data and draw inferences. Weighted mean score was calculated and ranks assigned. Association between profile variables and constraints was estimated using chi-square.

RESULTS AND DISCUSSION

Gender profile of members of dairy cooperative societies : The details of personal profile of the respondents revealed that 55 and 70 per cent of men and women were in middle age group, followed by 45 and 30 per cent being in young age category, respectively. Further, no man was illiterate whereas 40 per cent of women were illiterate while 20 per cent men and 5 per cent women were graduates. Further, 60 per cent men and 55 per cent women had nuclear families. On the economic front the total income from dairy for men and women was in the middle category (63% and 58%) followed by low (30% and 37%) and high (7% and 5%) respectively. The results of possession of land holding by men and women indicated that maximum (30% and 40%), were medium sized followed by small (30%), landless (20%), marginal

(10%) and large (10%) in case of men and landless, marginal and large 20 per cent each respectively in case of women.

Gender analysis of constraints faced by members : Tables 1 to 5 present the gender analysis of constraints viz. personal, educational, animal health care and management, milk supply and payment and organizational faced by dairy cooperative society members.

Personal constraints: From Table 1 it gets revealed that among the ten personal constraints for men and women, lack of technical training for growing green fodder (WMS 2.04, Rank I and WMS 2.54, Rank I) was rated a major constraint while intergender ranks for other constraints differed. Further, for men the second constraint was non-availability of green fodder round the year (WMS 2, Rank II), increase in work burden and responsibility and non-availability of sufficient water (WMS 1.58, Rank III) and non-availability of land to grow green fodder (WMS 1.40, Rank IV) were major constraints while remaining were not major constraints. For women dependence on family members for supplying milk (WMS 2.04, Rank II), non-availability of green fodder round the year (WMS 1.89, Rank III), small children or dependent in-laws (WMS 1.82, Rank IV), increase in work burden and responsibility (WMS 1.77, Rank V), control of family members over income (WMS 1.63, Rank VI), non-availability of land to grow green fodder (WMS 1.25, Rank VII) and non-availability of sufficient water (WMS 1.14, Rank VIII) were constraints faced by them. The Spearman rank order correlation was (rs) = 0.28 and depicts that the intergender ranks are fairly apart and constraints faced by men and women differ. *Nisha and Subramanian (2000)* found that distant location of dairy cooperative from home and difficulty in taking milk to center was a major constraint and revealed that social taboos, excessive burden of household works and responsibilities were felt as major constraints by the members. *Deepti (2002)* reported that increase in burden of work and responsibility, non- availability of land to grow green fodder, non- availability of green fodder round the year and dependence on other family members for carrying milk to society, lack of technical training to grow green fodder, non-availability of sufficient water in summer season and husbands control over the income earned by selling milk were the main constraints faced by the women. *Pandey (2005)* reported that major personal constraints encountered

by women were non-availability of land to grow green fodder, non-availability of green fodder round the year and small children and dependent in-laws. *Grover (2008)* reported that it was big problem for the landless farmers to procure green fodder while non-availability of green fodder round the year was a major constraint for other farmers.

Educational constraints: Regarding educational constraints it is clear from the Table 2 that among the five constraints investigated under this for men there was no major educational constraint while lack of timely guidance regarding feeding and care of milch animals obtained WMS 1.10 and Rank I and four constraints had WMS below 1.0 whereas major constraints faced by women were lack of knowledge about government subsidy for purchasing animals and animals feed (WMS 2.09, Rank I), inability of crosschecking the fat content due to illiteracy (WMS 2.03, Rank II) and lack of knowledge about advantages, facilities provided by dairy cooperative societies (WMS 1.96, Rank III) and lack of timely guidance regarding feeding and care of milch animals (WMS 1.10, Rank IV). The Spearman rank order correlation was (rs) = -0.02 and depicts that the

intergender ranks negatively differ. *Deepti (2002)* revealed that inability of women to cross check fat content due to illiteracy, lack of knowledge about advantage and facilities provided by dairy cooperatives, lack of knowledge about government subsidy for purchasing milch animals and animal feed, lack of knowledge about care and management of milch animals and lack of timely guidance by animal husbandry staff regarding feeding and care of milch animals, and *Pandey (2005)* revealed that lack of knowledge about advantages and facilities provided by dairy co-operative societies and lack of knowledge about government subsidy for purchasing animals and animals feed were the moderate constraints faced by women members.

Animal health care and management : Regarding animal health care and management, data presented in Table 3 shows that both for men and women high charges for emergency veterinary services (WMS 2.27, Rank I and WMS 2.04, Rank I), absenteeism among veterinary staff (WMS 1.74, Rank II and WMS 1.71, Rank II), short supply of foot and mouth disease vaccine (WMS 1.48, Rank III and WMS 1.46, Rank IX), non-availability of timely medical aid (WMS 1.42, Rank IV

Table 1. Gender analysis of personal constraints faced by members of dairy cooperative societies

S. No.	Personal Constraints	Men						Women					
		Constraints (%)*				WMS	Rank	Constraints (%)*				WMS	Rank
		3	2	1	0			3	2	1	0		
1.	Increase work burden and responsibility	18	22	60	00	1.58	III	22	33	45	00	1.77	V
2.	Small children or dependent in-laws	00	00	00	100	0.00	NA	22	38	40	00	1.82	IV
3.	Family member do not help in dairy work	00	15	20	65	0.50	VI	12	15	37	36	1.03	IX
4	Ill health	05	17	26	52	0.75	V	07	18	32	43	0.89	X
5.	Non-availability of sufficient water	05	48	47	00	1.58	III	07	40	53	00	1.14	VIII
6.	Non-availability of land to grow green fodder	20	25	30	25	1.40	IV	20	20	25	35	1.25	VII
7.	Non-availability of green fodder round the year	25	50	25	00	2.00	II	22	48	27	03	1.89	III
9.	Lack of technical training for growing green fodder	24	56	20	00	2.04	I	54	46	00	00	2.54	I
10.	Dependence on family member for supplying milk	00	05	12	83	0.22	VIII	34	46	10	10	2.04	II
11.	Control of family members over income	00	03	17	80	0.23	VII	22	35	27	16	1.63	VI

*Constraints : Major constraint=3; Moderate constraint=2; Minor constraint=1; Not a constraint=0   (rs)=0.28
Max. WMS = 3.00   WMS= Weighted Mean Score;   (rs) = Spearman Rank Order Correlation

Table 2. Gender analysis of educational constraints of members of dairy cooperative societies

S. No.	Educational Constraints	Men						Women					
		Constraints (%)*				WMS	Rank	Constraints (%)				WMS	Rank
		3	2	1	0			3	2	1	0		
1.	Inability of cross checking the fat content due to illiteracy	00	00	07	93	0.07	V	35	40	13	12	2.03	II
2.	Lack of knowledge about advantages and facilities provided by dairy cooperative society	03	05	12	80	0.31	IV	37	32	21	10	1.96	III
4	Lack of knowledge about government subsidy for purchasing animals and animal feed	05	18	25	52	0.76	II	45	28	18	09	2.09	I
5.	Lack of knowledge about care and management of milch animals	03	15	18	64	0.57	III	05	17	21	57	0.70	V
6.	Lack of timely guidance regarding feeding and care of milch animals	05	25	45	25	1.10	I	08	27	57	08	1.35	IV

$(r_s) = -0.02$

Table 3. Gender analysis of animal health care and management constraints faced by members of dairy cooperative societies members of dairy cooperative societies

S. No.	Animal Health Care and Management Constraints	Men						Women					
		Constraints (%)				WMS	Rank	Constraints (%)				WMS	Rank
		3	2	1	0			3	2	1	0		
1.	High charges of emergency veterinary services	45	37	18	00	2.27	I	52	40	08	00	2.04	I
2.	Absenteeism among veterinary staff	27	25	43	05	1.74	II	32	27	41	00	1.71	II
3.	Inability to buy balance feed on cash basis	15	22	48	15	1.37	VI	17	22	38	23	1.33	X
4	Distant location of AI center	05	20	48	27	1.03	VII	25	27	40	08	1.69	III
5.	Non-availability of timely medical aid	20	20	42	18	1.42	IV	22	20	48	10	1.54	VI
6.	Short supply of foot and mouth disease vaccine	15	28	47	10	1.48	III	18	22	48	12	1.46	IX
7.	Improperly trained staff working at AI center	05	15	32	48	0.77	VIII	19	30	42	09	1.59	IV
8.	Lack of training to first-aid worker	20	18	45	17	1.41	V	22	19	52	07	1.56	V
9.	Irregular supply of cattle feed	15	12	73	00	1.42	IV	18	15	67	00	1.51	VII
10.	High cost and inferior quality of cattle feed	05	27	68	00	1.37	VI	08	32	60	00	1.48	VIII

$(r_s) = 0.39$

and WMS 1.46, Rank VI), irregular supply of cattle feed (WMS 1.42, Rank IV and WMS 1.51, Rank VII) and lack of training to first aid workers (WMS 1.41, Rank V and WMS 1.56, Rank V) were the major constraints whereas distant location of AI centre (WMS 1.69, Rank III) and improperly trained staff working at AI centre (WMS 1.59, Rank IV) were additional constraints for women members. The Spearman rank

order correlation was (rs) = 0.39 and depicts that the intergender ranks slightly differ.

   Singh and Chauhan (2000) found less qualified staff working at the center for the technical assistance to the farmers as major constraint. *Deepti (2002)* and *Pandey (2005)* revealed that high charges of the emergency veterinary services was the major constraint followed by absenteeism among veterinary staff, inability of women to buy balanced feed for animals on cash basis and distant location of A.I center.

Milk supply and payment constraint : As far as milk supply and payment was concerned, it is evident from Table 4 that less milk price for cow's milk, irregular supply of cattle feed (WMS 1.32, Rank I and WMS 1.41, Rank I) was major constraint both for men and women whereas distantly located collection centre (WMS 1.10, Rank II) was additional major constraints for women members. The spearman rank order correlation of 1.00 reveals that the ranks between men and women are highly consistent. A literature search reveals both somewhat similar and differing constraints.

   Deepti (2002) revealed that low price of milk in comparison to buffalo's milk, followed by lack of incentives to milk producers for supplying milk to cooperative society and low milk rate provided by society in comparison to local milk vendors, distantly located milk collection center, unsatisfactory milk weighting and fat testing procedure and problem in receiving payment from cooperative society were the other constraints faced by women beneficiaries. *Pandey (2005)* revealed that low milk rate in comparison to local venders and less price for milk as moderate constraints.

Organizational constraints : As regards to organizational constraints thirteen constraints were investigated and presented in Table 5. It was noted that for both men and women biasness in distribution of free cost vaccine (WMS 1.95, Rank I and WMS 2.12, Rank I), no prior information about trainings (WMS 1.56, Rank II and WMS 1.12, Rank II), concerned officers are not easily approachable (WMS 1.52, Rank III and WMS 1.07, Rank III), and inappropriate distribution of benefits (WMS 1.50, Rank IV and WMS 0.95, Rank V) were major constraints whereas dominance of relatives/ friends and presence of family members of office bearers (WMS 0.99, Rank IV and WMS 0.66, Rank VI) were additional constraints faced by women members. The spearman rank order correlation was 0.84 reveals that the ranks between men and women are fairy consistent.

   However, other researchers reported different constraints. *Deepti (2002)* found that the major problem faced was the presence of male family members of dairy secretary at milk collection centre, lack of respect for women of lower caste and dominance of relatives and friends of dairy secretary in executive committee. *Pandey (2005)* observed that dominance of relatives and friends of office bearers, lack of co-ordination among office bearers and attention of secretary to influential women as major constraints.

Gender analysis of extent of constraints : Gender analysis of extent of constraints into three categories of major, moderate or minor with respect to personal, educational, animal health care and management, milk supply and payment, organizational constraints of members of dairy cooperative societies have been presented in Table 6.

Table 4. Gender analysis of milk supply and payment constraints faced by members of dairy cooperative societies

S. No.	Milk Supply and Payment Constraints	Men						Women					
		Constraints (%)				WMS	Rank	Constraints (%)				WMS	Rank
		3	2	1	0			3	2	1	0		
1.	Less price for cow's milk	15	37	13	35	1.32	I	18	38	11	33	1.41	I
2.	Lack of incentives for supplying milk to DCS	00	05	12	83	0.22	IV	00	11	18	71	0.40	IV
3.	Distantly located milk collection center	05	15	22	58	0.67	II	12	21	32	35	1.10	II
4	Unsatisfactory milk weighing and fat testing procedure	08	12	18	62	0.58	III	12	18	20	50	0.92	III
5.	Problem in receiving payments	00	00	05	95	0.05	V	00	00	09	91	0.09	V

(rs) = 1.00*

Table 5. Gender analysis of organizational constraints faced by members of dairy cooperative societies

S. No.	Organizational Constraints	Men						Women					
		Constraints (%)				WMS	Rank	Constraints (%)				WMS	Rank
		3	2	1	0			3	2	1	0		
1.	Presence of family members of office bearers	00	00	00	100	0.00	NA	08	12	18	62	0.66	VI
2.	Lack of respect for members of lower caste group	00	00	07	93	0.07	IX	00	00	09	91	0.09	XIII
3.	Dominance of relatives/ friends of office bearers	07	09	24	60	0.63	V	12	18	27	43	0.99	IV
4	Attention of secretary to influential members	02	04	17	77	0.31	VI	05	07	21	67	0.50	VII
5.	Biasness in distribution of free cost vaccine	32	43	13	12	1.95	I	35	45	17	03	2.12	I
6.	Rude behaviour of society secretary	00	00	07	93	0.07	IX	00	00	12	88	0.12	XI
7.	Concerned officers are not easily approachable	19	25	45	11	1.52	III	25	32	43	00	1.07	III
8.	Inappropriate timings	00	00	07	93	0.07	IX	00	00	21	79	0.21	IX
9.	No prior information about trainings	18	32	38	12	1.56	II	28	42	28	02	1.12	II
10.	Inappropriate distribution of benefits	15	35	35	15	1.50	IV	25	35	25	15	0.95	V
11.	Lack of coordination among office bearers	00	00	15	85	0.15	VII	00	00	10	90	0.10	XII
12.	Proper dairy accounts not made	00	00	08	92	0.08	X	00	05	12	83	0.22	VIII
13.	Delay in payment	00	00	12	88	0.12	VIII	00	00	15	85	0.15	X

(rs) = 0.84*

Table 6. Gender analysis of extent of constraints faced by members of dairy cooperative societies

S. No.	Constraints	Men		Women		
		No.	%	No.	%	
1.	Personal					$\chi^2=11.9415*$
	Minor	67	67.00	44	44.00	
	Moderate	24	24.00	34	34.00	
	Major	09	09.00	22	22.00	
2.	Educational					$\chi^2=32.5558*$
	Minor	83	83.00	45	45.00	
	Moderate	12	12.00	29	29.00	
	Major	05	05.00	26	26.00	
3.	Animal health care					$\chi^2=0.8841$
	Minor	63	63.00	57	57.00	
	Moderate	20	20.00	25	25.00	
	Major	17	17.00	18	18.00	
4	Milk supply & payment					$\chi^2=1.1709$
	Minor	84	84.00	78	78.00	
	Moderate	11	11.00	15	15.00	
	Major	05	05.00	07	07.00	
5.	Organizational					$\chi^2=1.6682$
	Minor	83	83.00	76	76.00	
	Moderate	11	11.00	14	14.00	
	Major	06	06.00	10	10.00	

* χ^2 significant at 5 per cent level of significance

It is evident from the table that majority of the men and women beneficiaries (67% and 44%) had minor personal constraints, followed by moderate (24%) and major (9%) in case of men and (34%) and (22%) in case of women. As regards to educational constraints majority (83% and 45%) of men and women members had minor constraints followed by moderate (12%) and high (5%) in case of men whereas in case of women (29%) and (26%) respectively. Regarding animal health care and management, majority (63% and 57%) of men and women members had minor constraints followed by moderate (20%) and high (17%) in case of men whereas in case of women (25%) and (18%) respectively. In case of milk supply and payment, majority (84% and 78%) of men and women members had minor constraints followed by moderate (11%) and high (5%) in case of men whereas in case of women (15%) and (7%) respectively. Majority (83% and 76%) of the men and women beneficiaries had minor organizational constraints, followed by moderate (11%) and major (6%) in case of men and (14%) and (10%) in case of women.

The value of chi-square presented in the table shows that the educational ($\chi^2 = 32.5558*$) and

Table 7. Rank wise dimensions of constraints of members of dairy cooperative societies

S. No.	Constraints	Men		Women	
		WMS	Rank	WMS	Rank
1	Personal	1.03	II	1.60	II
2	Educational	0.56	IV	1.63	I
3	Animal health care & management	1.43	I	1.59	III
4	Milk supply and payment	0.47	V	0.65	IV
5	Organizational	0.57	III	0.59	V

(rs) = 0.10

(rs) = Spearman Rank Order Correlation
WMS= Weighted Mean Score; Max. WMS = 3.00

personal constraints (χ^2=11.9415*) were significantly associated with gender while others were not.

Extent and rank dimension of constraints : From the rank wise dimensions of constraints presented in Table 7, it is evident that majority of men had animal health care and management constraint (WMS 1.43, Rank I) followed by personal constraint (WMS 1.03, Rank II), organizational constraint (WMS 0.57, Rank III), educational constraint (WMS 0.56, Rank IV) and milk supply and payment constraint (WMS 0.47, Rank V) whereas majority of women had educational constraint (WMS 1.63, Rank I) followed by personal (WMS 1.60, Rank II), animal health care and management (WMS 1.59, Rank III), milk supply and payment constraint (WMS 0.65, Rank IV) and

organizational constraint (WMS 0.59, Rank V) respectively. The spearman ranks order correlation of 0.10 reveals that the ranks are not consistent.

CONCLUSION

Profile of members reveals that dairying is being practiced mainly by men and women of middle age having nuclear family. Majority of men had animal health care and management constraint followed by personal constraint, organizational constraint, educational constraint and milk supply and payment constraint whereas majority of women had educational constraint followed by personal, animal health care and management, milk supply and payment constraint and organizational constraint, respectively. The spearman ranks order correlation reveals that the ranks are not consistent. The gender analysis of constraints indicated that majority of both men and women had minor constraints followed by moderate and major, respectively. The chi-square value was found to be significant, which shows that the educational and personal constraints are closely associated with gender. Maximum difference between male and female respondents regarding constraints was in educational constraints followed by organizational, animal health care and management, milk supply and management and personal. It may be concluded that that majority (76% and 60%) of men and women had minor constraints in dairy enterprise.

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