

## **Economical Constraints Perceived by Farmers in Rearing Dairy Animals in Haryana**

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### **Abstract**

Regarding institutional constraints, lack of milk procurement cooperative society (47.33%) was ranked as one of the most serious constraints by the farmers of Hisar and non-availability of quality breeding bulls through village panchayat (47.13%) in Karnal district. The reason that people still prefer natural mating is highlighted by the observation that the majority of farmers considered non-availability of quality breeding bulls through village panchayats the most serious constraint. In case of marketing, improper monitoring of milk producers cooperative society was considered as most serious by farmers of both the districts (58.33%-Hisar and 63.00%-Karnal). Inadequate market intelligence for marketing of bovines (14.33%) was considered less serious by farmers of Hisar district, while farmers of Karnal district perceived lack of refrigeration facilities at cooperative societies (26.67%) as least serious.

**Key words :** Self employment, Dairy development, Economical constraints.

Development of dairying in India has more than one dimension. It is not only to increase the milk production but also to provide assured employment to the rural people. Dairying fits most appropriately in the country's development program for increasing food production, rural employment and equitable distribution of income. The government of India is laying emphasis on improving the socio-economic status of resource poor farmers through increasing food production, rural employment, the implementation of various dairy development programmes and equitable distribution of income. Indian experience over the last four decades has amply demonstrated that dairying is an important intervention for increasing the income level of rural families, especially marginal and landless. Haryana is leading state in the country in terms of milk production, and to maintain the pace of production, the state government has been launching various dairy development programmes from time to time. One of such program in operation since 1976-77 is the self Employment Program through dairying. The main objectives of the program are to provide employment opportunities to the rural youths and simultaneously to increase the milk production. The beneficiaries selected under the programme were given one month's training on improved dairy farming practices at various training centers of the state. Thereafter, they were linked with financial institutions

to set up dairy units of 5 to 50 milch animals. Presumably, the small scale dairy farmers are less likely to be profitable without the development of marketing infrastructure in the state. Taking into consideration the reason that the land is the most limiting factor to increase the level of income and employment on the majority of the farms in the country and livestock enterprises require comparatively less land and more labor than field crops, there is need to systematically develop livestock husbandry for the betterment of farmers. The livestock products have relatively higher income elasticity of demand. By assuring remunerative prices for milk and milk products, expansion of dairy industry has a good future in the state. Increasing the income and employment of marginal and small farmers and landless agricultural labour households through dairying is in conformity with the national objectives. Keeping the importance of livestock sector in the economy of the state, the present study was confined to analyze the various constraints such as institutional and marketing that inhibiting the development of cattle and buffalo husbandry in the state.

### **Methods**

The Hisar and Karnal districts of the state which form important tract for the famous Haryana breed of

**Table 1.** Constraints of cattle and buffalo owners of Hisar district about institutional arrangements. MS = Mean score ; MPS = Mean percent score ; RO = Rank order.

Parameters	MS	Small MPS	RO	MS	Medium MPS	RO
1 Non-availability of cooperative feed manufacturing unit	0.74	24.67	V	0.86	28.67	III
2 Lack of farmers voluntary organization to manufacture cattle feed	0.61	20.33	VI	0.29	9.67	VI
3 Defunct milk procurement cooperative society	0.90	30.00	IV	0.83	27.67	IV
4 Lack of milk procurement cooperative society	1.52	50.67	I	1.38	46.00	I
5 Non-availability of quality breeding bulls through village panchayat	1.23	41.00	II	1.14	38.00	II
6 Lack of voluntary organization for milch animals trading	0.94	31.33	III	0.79	26.33	V

**Table 1.** Continued.

Parameters	MS	Large MPS	RO	MS	Overall MPS	RO
1 Non-availability of cooperative feed manufacturing unit	0.56	18.67	V	0.78	26.00	V
2 Lack of farmers voluntary organization to manufacture cattle feed	0.33	11.00	VI	0.42	14.00	VI
3 Defunct milk procurement cooperative society	0.78	26.00	III	0.85	28.33	III
4 Lack of milk procurement cooperative society	1.22	40.67	I	1.42	47.33	I
5 Non-availability of quality breeding bulls through village panchayat	1.00	33.33	II	1.16	38.67	II
6 Lack of voluntary organization for milch animals trading	0.67	22.33	IV	0.83	27.67	IV

cattle and Murrah breed of buffaloes, and also dominate the livestock sector with higher concentration

in livestock population and infrastructural development were selected purposively for this study. The

**Table 2.** Constraints of cattle and buffalo owners of Karnal district about institutional arrangements. MS = Mean score ; MPS = Mean percent score ; RO = Rank order.

Parameters	MS	Small MPS	RO	MS	Medium MPS	RO
1 Non-availability of cooperative feed manufacturing unit	1.14	38.00	IV	1.11	37.00	IV
2 Lack of farmers voluntary organization to manufacture cattle feed	0.80	26.67	VI	0.82	27.33	VI
3 Defunct milk procurement cooperative society	1.00	33.33	V	0.93	31.00	V
4 Lack of milk procurement cooperative society	1.41	47.00	II	1.55	51.67	I
5 Non-availability of quality breeding bulls through village panchayat	1.45	48.33	I	1.48	49.33	II
6 Lack of voluntary organization for milch animals trading	1.24	41.33	III	1.34	44.67	III

**Table 2.** Continued.

Parameters	MS	Large MPS	RO	MS	Overall MPS	RO
1 Non-availability of cooperative feed manufacturing unit	0.91	30.33	V	1.08	36.00	IV
2 Lack of farmers voluntary organization to manufacture cattle feed	0.65	21.67	VI	0.78	26.00	VI
3 Defunct milk procurement cooperative society	1.04	34.67	III	0.98	32.67	V
4 Lack of milk procurement cooperative society	1.13	37.67	II	1.41	47.00	II
5 Non-availability of quality breeding bulls through village panchayat	1.22	40.67	I	1.42	47.13	I
6 Lack of voluntary organization for milch animals trading	1.04	34.67	III	1.24	41.33	III

**Table 3.** Constraints of cattle and buffalo owners of Hisar district about marketing. MS = Mean score ; MPS = Mean percent score ; RO = Rank order.

Parameters	MS	Small MPS	RO	MS	Medium MPS	RO
1 Lack of organized/regulated markets for quality breed	0.87	29.00	V	0.69	23.00	V
2 Inadequate market intelligence for marketing of bovines	0.52	17.33	VIII	0.31	10.33	VII
3 Defunct milk producers' cooperative society for milk procurement	0.71	23.67	VI	0.21	7.00	VIII
4 Improper monitoring of milk producers cooperative society	1.71	57.00	I	1.79	59.67	I
5 Lack of minimum support price for milk	1.45	48.33	II	1.43	47.67	II
6 Problem of milk transportation to the market	1.29	43.00	III	1.05	35.00	III
7 Lack of referegerational facilities at cooperative societies	0.71	23.67	VI	0.5	16.67	VI
8 Inadequate / lack of cooperative milk procurement booth in the village	0.97	32.33	IV	0.71	23.67	IV

**Table 3.** Continued.

Parameters	MS	Large MPS	RO	MS	Overall MPS	RO
1 Lack of organized / regulated markets for quality breed	0.67	22.33	V	0.76	25.33	V
2 Inadequate market intelligence for marketing of bovines	0.67	22.33	V	0.43	14.33	VIII
3 Defunct milk producers' cooperative society for milk procurement	0.78	26.00	IV	0.46	15.33	VII
4 Improper monitoring of milk producers cooperative society	1.67	55.67	I	1.75	58.33	I
5 Lack of minimum support price for milk	1.22	40.67	II	1.41	47.00	II
6 Problem of milk transportation to the market	1.00	33.33	III	1.14	38.00	III
7 Lack of referegerational facilities at cooperative societies	0.67	22.33	V	0.60	20.00	VI
8 Inadequate / lack of cooperative milk procurement booth in the village	0.67	22.33	V	0.80	26.67	IV

multistage stratified random sampling technique was used for selection of the respondents. The selection of tehsils, cluster villages and dairy farmers formed the first, second and third stages of sampling, respectively. From amongst tehsils of these selected districts, one tehsil each was selected randomly. Karnal

and Hisar tehsil from amongst tehsils of Karnal and Hisar district were selected, respectively. All the villages of these respective tehsils were enumerated and two cluster villages (each cluster with two village hamlets) were selected randomly. Thus, in all eight villages were selected. All the dairy farmers were classi-

**Table 4.** Constraints of cattle and buffalo owners of Karnal district about marketing. MS = Mean score ; MPS = Mean percent score ; RO = Rank order.

Parameters	MS	Small MPS	RO	MS	Medium MPS	RO
1 Lack of organized / regulated markets for quality breed	1.18	39.33	III	1.32	44.00	III
2 Inadequate market intelligence for marketing of bovines	0.76	25.33	VIII	0.98	32.67	VI
3 Defunct milk producers' cooperative society for milk procurement	0.82	27.33	VI	1.14	38.00	IV
4 Improper monitoring of milk producers cooperative society	1.84	61.33	I	1.93	64.33	I
5 Lack of minimum support price for milk	0.84	28.00	V	1.05	35.00	V
6 Problem of milk transportation to the market	1.41	47.00	II	1.43	47.67	II
7 Lack of referegerational facilities at cooperative societies	0.82	27.33	VI	0.82	27.33	VIII
8 Inadequate/lack of cooperative milk procurement booth in the village	0.94	31.33	IV	0.89	29.67	VII

Table 4. Continued.

Parameters	Large			Overall		
	MS	MPS	RO	MS	MPS	RO
1 Lack of organized / regulated markets for quality breed	1.04	34.67	II	1.20	40.00	III
2 Inadequate market intelligence for marketing of bovines	0.74	24.67	V	0.84	28.00	VII
3 Defunct milk producers' cooperative society for milk procurement	0.65	21.67	VIII	0.91	30.33	V
4 Improper monitoring of milk producers cooperative society	1.91	63.67	I	1.89	63.00	I
5 Lack of minimum support price for milk	0.74	24.67	V	0.90	30.00	VI
6 Problem of milk transportation to the market	1.04	34.67	II	1.35	45.00	II
7 Lack of refergerational facilities at cooperative societies	0.74	24.67	V	0.80	26.67	VIII
8 Inadequate / lack of cooperative milk procurement booth in the village	0.91	30.33	IV	0.92	30.67	IV

fied into three categories based on number of milch animals reared by them, viz. small (1 to 2 milch animals), medium (3 to 5 milch animals) and large (more than 5 milch animals) by adopting the cumulative total method. Thus, in all 82 small farmers, 86 medium and 32 large farmers constituted the total 200 farmers were selected. The data were collected for a period of one year i.e. March, 2007 to February 2008.

*Economical Constraints Inhibiting the Development of Cattle and Buffalo Husbandry.* A list of all the important economical constraints affecting the adoption of various scientific cattle and buffalo husbandry practices was prepared with help of literature, scientists of concerned departments, field veterinarians under the heads of institutional constraints and constraints pertaining to marketing. Regarding constraint analysis, the response (various constraints as perceived by the farmers pertaining to institutional and marketing) were recorded on three point continuum i.e. very serious, serious and some what serious and subsequently assigned a weightage of 3, 2 and 1, respectively.

The constraints score of each respondent and of all the respondents for each item were worked out. The mean score and rank order were also computed.

Following formula was employed to calculate mean percent score :

$$\text{Mean percent score} = \frac{\text{Mean of item (constraint) for all responses}}{\text{Maximum score of the item (constraint)}} \times 100$$

## Results and Discussion

### *Institutional Constraints*

Lack of milk procurement cooperative society (47.33%) was ranked as one of the most serious constraint by the farmers of Hisar (Table 1) and non-availability of quality breeding bulls through village panchayat (47.13%) in Karnal district (Table 2). This is an indicator that farmers prefer cooperative societies over other traditional marketing channels. However, the cooperative societies follow business criterion for setting up their collection units in different villages. It is, therefore, difficult to find a solution. Theoretically, collective action on part of villagers can be helpful. Lack of farmers voluntary organization to manufacture cattle feed (14.00%)- Hisar and 26.00%-Karnal) was found to be the less constraint amongst all constraints. Villagers can form their own small groups and pool milk which then can be transported to nearest milk collection center. This will significantly reduce the transaction costs. However, such an action is difficult to come by own its own. Secondly, the reason that people still prefer natural mating is highlighted by the observation that the majority of farmers considered non-availability of quality breeding bulls through village panchayats the most serious constraint. Yadav et al. (1) had earlier reported inadequate credit availability, high interest rate, bank loan problems, unawareness regarding loans, commission to middlemen and agents as constraints affecting adoption of dairy technologies.

### *Constraints Pertaining to Marketing* Improper monitoring of milk producers coop-

erative society (58.33%-Hisar and 63.00%-Karnal) was considered as most serious constraint by farmers of both the districts (Tables 3 and 4). Inadequate market intelligence for marketing of bovines (14.33%) was considered less serious by farmers of Hisar district, while farmers of Karnal district perceived lack of refrigeration facilities at cooperative societies (26.67%) as the least serious constraint. It is, therefore, suggested here that adequate infrastructural investment to create transportation system should be made that will facilitate development of appropriate marketing opportunity to all the rural areas and will thus act as an incentive for higher production. Secondly, with the increasing demand of milk in the past few years, the need for minimum support price is automatically done away with. Such increases in demand are already fuelling the prices of milk. Such a high rise in price of milk has become a problem these days, as the adulteration business has become highly profitable. What is needed is that the marketing infrastructure in terms of modern supply chain be significantly expanded to meet consumer needs and provide adequate incentive to the rural milk producers. Lower price of milk and high cost of production has earlier

been reported as major constraints (2—7).

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