



## Assessment of Impediments for Dairy Farming in Punjab

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### ABSTRACT

A field level study was conducted in all the six agro-climatic zones of Punjab state of India to know about the various impediments for dairy farming. A total of 180 dairy farmers (30 from each zone) rearing more than five dairy animals were randomly selected. Respondents were personally interviewed with the help of a pre-tested interview schedule. Most of the dairy farmers (70.6%) were facing green fodder scarcity problem for some period of year. All the farmers revealed high cost of concentrate as a serious constraint in dairy farming when compared to the price, they receive for milk. Majority of the farmers (64.4%) were not dependent on labour. Training facilities regarding dairy farming were either not available (40.5%) or available far away from home (41.7%) to most of the farmers. Milk marketing facilities were available at optimal price (53.3%) and government schemes were easily available to only 2.8% farmers. Majority of the respondents (36.7%) were of the opinion that young generation does not take interest in dairy farming activities.

**Keywords:** Impediments, dairy, Punjab, marketing, fodder, training facility

Dairying is an instrument of great importance for improving the socio-economic status of rural populations, particularly of the landless and marginal farmers (Kaur, 2004). Punjab is one of the leading states in India in terms of milk production (5<sup>th</sup> rank) (National Dairy development Board (2016), however there is a scope for further improvement. The extension machinery provides an ideal bridge between research institutions and dairy farmers for their catalytic effects (Meena and Malik 2009). The understanding of farming practices followed by the farmers is necessary to identify the strengths and weaknesses of the rearing systems and to formulate suitable intervention policies (Gupta *et al.* 2008). Many a times improved and modernized practices are not adopted up to the required extent due to various impediments such as green fodder scarcity, quality of market feed, labour dependence, treatment cost, training facilities, milk marketing related constraints and interest of young generation. The study of these impediments helps in formulation of effective extension strategies as per the needs of farmers. So a field level extensive study was planned to study the various impediments in dairy farming in Punjab.

### MATERIALS AND METHODS

On the basis of agro climatic conditions, Punjab has been divided into six different zones namely Sub mountainous undulating region (Zone I), Undulating plain region (Zone II), Central plain region (Zone III), Western plain region (Zone IV), Western region (Zone V) and Flood plain region (Zone VI) (Mahi and Kingra, 2013). From each zone, 30 respondents rearing more than five animals were selected by random sampling technique. So, the total number of respondents was 180. The data was collected by personally interviewing the respondents with the help of pre-tested interview schedule. The various observed impediments were categorised as in table 1 and 2. Data was subjected to frequency and percentage analysis. The ranking of various impediments was also done.

### RESULTS AND DISCUSSION

It is clear from table 1 that most (70.6%) of the dairy farmers were facing green fodder scarcity problem for some period of year while 29.4% dairy farmers in group-I

**Table 1: Distribution of dairy farmers according to the perceived constraints related with fodder, concentrate feed, labour, treatment cost and training facilities in Punjab**

Parameter	Category	Agro-climatic Zones						Overall (n=180)
		I (n=30)	II (n=30)	III (n=30)	IV (n=30)	V (n=30)	VI (n=30)	
Green fodder scarcity	Never	6 (20.0)	6 (20.0)	12 (40.0)	11 (36.7)	13 (43.3)	5 (16.7)	53 (29.4)
	Sometimes	24 (80.0)	24 (80.0)	18 (60.0)	19 (63.3)	17 (56.7)	25 (83.3)	127 (70.6)
	Whole of year	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Market feed quality	Unsatisfied	9 (30.0)	6 (20.0)	12 (40.0)	4 (13.3)	7 (23.3)	12 (40.0)	50 (27.8)
	Satisfied	21 (70.0)	24 (80.0)	18 (60.0)	26 (86.7)	23 (76.7)	18 (60.0)	130 (72.2)
Cost of concentrate feed as compare to milk price	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Medium	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	180 (100)
Labour dependence	Independent	18 (60.0)	28 (93.3)	14 (46.7)	23 (76.7)	17 (56.7)	16 (53.3)	116 (64.4)
	Partially dependent	1 (3.3)	0 (0.0)	6 (20.0)	2 (6.7)	3 (10.0)	2 (6.7)	14 (7.8)
	Dependent	11 (36.7)	2 (6.7)	10 (33.3)	5 (16.7)	10 (33.3)	12 (40.0)	50 (27.8)
Treatment cost	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Optimum	26 (86.7)	21 (70.0)	27 (90.0)	26 (86.7)	20 (66.7)	26 (86.7)	146 (81.1)
	High	4 (13.3)	9 (30.0)	3 (10.0)	4 (13.3)	10 (33.3)	4 (13.3)	34 (18.9)
	Not available	14 (46.7)	18 (60.0)	14 (46.7)	1 (3.3)	10 (33.3)	17 (56.7)	73 (40.5)
Training facilities	Available far from home	0 (0.0)	12 (40.0)	5 (16.7)	27 (90.0)	20 (66.7)	11 (36.7)	75 (41.7)
	Available near home	16 (53.3)	0 (0.0)	11 (36.7)	2 (6.7)	0 (0.0)	2 (6.7)	32 (17.8)

Figures in parenthesis indicate percentage

were not facing green fodder scarcity problem. Majority (72.2%) of dairy farmers was satisfied with the quality of feed available in market while 27.8% dairy farmers were unsatisfied with the quality of feed available in market. However all the farmers from all the six zones and overall Punjab complained about high cost of concentrate feed as compared to the milk price. Nagrale *et al.* (2015) also reported lack of availability of green fodder and high cost of concentrate as main feeding constraint. 27.8% dairy farmers were permanently dependent on labour to sustain in dairy venture and 7.8% dairy farmers were partially dependent over labour. Further, 25% (Zone I and III), 30.8% (Zone V), 14.3% (Zone VI) and 20.3% (Overall Punjab) complained that it is very difficult to get labour on time to manage the dairy farm operations.

High proportions (81.1%) of dairy farmers said that treatment cost for their animals was optimum while 18.9%

dairy farmers said that treatment cost for their animals was high. Maximum proportion of dairy farmers (33.3%) who were facing high treatment cost was from zone V. Rathod *et al.* (2012) and Eqbal *et al.* (2013) had also reported that farmers were facing high treatment cost as an impediment in dairy farming practices. Training facilities regarding dairy farming were available, but very far from home for 41.7% dairy farmers, whereas training facilities were available near home for only 17.8% dairy farmers. However, no training facilities were available for 40.5% farmers.

Table 2 depicts that 36.7% dairy farmers were selling milk to local dairies, 32.2% were selling milk to milk co-operatives, 15.5% dairy farmers were using milk for their own consumption, 8.9% dairy farmers were selling milk to local vendors and 6.7% dairy farmers were selling milk on their own. Mohapatra *et al.* (2012) and Rathod *et*

**Table 2: Distribution of dairy farmers according to milk marketing patterns, Govt schemes and young generation interest in Punjab**

Parameter	Category	Agro-climatic Zones						Overall (n=180)
		I (n=30)	II (n=30)	III (n=30)	IV (n=30)	V (n=30)	VI (n=30)	
Milk marketing	For own use	0 (0.0)	15 (50.0)	1 (3.3)	6 (20.0)	2 (6.7)	4 (13.3)	28 (15.5)
	Sell on their own	1 (3.3)	5 (16.7)	3 (10)	1 (3.3)	0 (0.0)	2 (6.7)	12 (6.7)
	Local dairy	4 (13.3)	8 (26.7)	14 (46.7)	18 (60.0)	6 (20.0)	16 (53.3)	66 (36.7)
	Milk vendor	3 (10)	2 (6.7)	2 (6.7)	2 (6.7)	2 (6.7)	5 (16.7)	16 (8.9)
	Co-operatives	22 (73.3)	0 (0.0)	10 (33.3)	3 (10.0)	20 (66.7)	3 (10)	58 (32.2)
Marketing facility with price	Not available	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Available with optimum price	11 (36.7)	16 (53.3)	22 (73.3)	19 (63.3)	6 (20.0)	22 (73.3)	96 (53.3)
	Available with low price	19 (63.3)	14 (46.7)	8 (26.7)	11 (36.7)	24 (80.0)	8 (26.7)	84 (46.7)
Marketing place	Far from home	3 (10.0)	9 (30.0)	7 (23.3)	5 (16.7)	4 (13.3)	8 (26.7)	38 (21.1)
	Near home	27 (90.0)	21 (70.0)	23 (76.7)	25 (83.3)	26 (86.7)	22 (73.3)	142 (78.9)
	Not available	6 (20.0)	8 (26.7)	2 (6.7)	1 (3.3)	4 (13.3)	5 (16.7)	26 (14.4)
Government schemes	Easily available	0 (0.0)	1 (3.3)	1 (3.3)	0 (0.0)	0 (0.0)	3 (10)	5 (2.8)
	Available with much formalities	6 (20.0)	9 (30.0)	10 (33.3)	16 (53.3)	20 (66.7)	16 (53.3)	77 (42.8)
	Never bothered	18 (60.0)	12 (40.0)	17 (56.7)	13 (43.3)	6 (20.0)	6 (20.0)	72 (40.0)
Young generation interest	Yes	16 (53.3)	12 (40.0)	25 (83.3)	26 (86.7)	22 (73.3)	13 (43.3)	114 (63.3)
	No	14 (46.7)	18 (60.0)	5 (16.7)	4 (13.3)	8 (26.7)	17 (56.7)	66 (36.7)

Figures in parenthesis indicate percentage.

*al.* (2012) had also reported that farmers were not getting remunerative price for milk. Majority of the dairy farmers (53.3%) reported that marketing facilities are available with optimum price for milk, where as 46.3% dairy farmers opined that marketing facilities are available but with low price for milk. 78.9% dairy farmers said that marketing place is near their home while 21.1% dairy farmers said that marketing place for milk is very far from home.

Majority of dairy farmers (42.8%) stated that government schemes were available but they have to undertake so many formalities to avail them while 40% dairy farmers never bothered about these schemes. 14.4% dairy farmers reported that no government schemes were available for upliftment of dairy sector. Only 2.8% dairy farmers reported that government schemes were easily available. Mohapatra *et al.* (2012) also reported that 45.83% dairy farmers had to face lot of difficulties in getting loan from banks. Most of the dairy farmers (63.3%) stated that young

generation takes interest in dairy farming related activities where as 36.7% dairy farmers said that their young ones in family are not interested in dairy farming.

**Table 3: Ranking of impediments**

Sl. No.	Impediments	Rank
1	Green fodder scarcity	II
2	Market feed quality	VII
3	Cost of concentrate feed as compared to milk price	I
4	Labour dependence	VI
5	Treatment cost	IX
6	Less training facilities	IV
7	Improper milk marketing pattern	VIII
8	Availability pattern of government schemes	III
9	Less interest of young generation	V



It is clear from table 3 that cost of concentrate feed as compared to milk price is a major impediment, followed by green fodder scarcity, availability pattern of government schemes, less training facilities, less interest of young generation. These impediments should be taken into consideration while formulating extension programmes and should be tackled by educating the masses with the help of various extension programmes such as animal welfare days/camps, trainings, distribution of literature in local language at field level for making the dairy farming a profitable venture.

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