



## **Constraints in adoption of Improved dairy Husbandry practices and Perceived suggestions to overcome the constraints milk producers of Eastern and Western Uttar Pradesh**

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### **ABSTRACT**

*The study was conducted in Eastern district Faizabad and Western district bulandshahar of Uttar Pradesh selected purposively. A total number of 100 dairy farmers (50 Faizabad +50 bulandshahar) were selected through proportionate random sampling from four sample villages on the basis of herd size. The structured schedule was developed keeping in view the objectives & variables under study. The respondents were contacted personally for data collection. The percentage, mean, standard deviation and Correlation used for calculation. Finding that Out of 6 personal constraints, the constraints like 'Status of poor economic condition', 'Lack of interest of other family member', 'Women do not come out from the houses for taking care the animals' so on as for each constraints in descending order. Out of 5 social constraints about use of dairy farming technology, 'Lack of grass lands for grazing the animals', 'The women do not come out from the houses for taking care the animals because of social values. Out of 6 economical constraints about use of dairy farming technology, the peri-urban farmers ranked the constraints lack namely 'corruption prevailing in financing institutions for having loans to develop the dairy enterprises' and 'Dysfunctional of animal insurance schemes.*

**Key word:** Adoption, Milk Production Practices, Farmers, Animals, Dairy Farmers.

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### **INTRODUCTION**

India is predominately an agrarian country in which more than 70 per cent of the Human population in villages depends on agriculture, animal husbandry and allied activities for their livelihood. Among many livestock enterprises, dairying is the most ancient occupation that established well in rural setting of the country. Dairy sector contributes significantly in-generation of employment opportunities and supplementing the income for small and marginal farmers and landless laborers of rural India, besides providing food security. The rearing of cattle and dairying go hand in hand with agriculture for improving the socio-economic condition of rural people. Dairy enterprise is one of the important enterprises which provide continuous gainful income and regular employment to the rural families. The world's milk production estimated 121.8 million tons during the 2010-11 which is growing continuously @ 5.2 per cent, Compound Annual Growth Rate (CAGR) in India. Average daily cooperative milk marketing was 219.9 lakh liters with an average annual growth of about 5.2 per cent that compounded in the last decade @ 5.2 per cent. The daily milk supply by Cooperatives to each 1000 urban consumers has increased from 47.7 to 60 Kg per day [1]. The per capita availability of milk in India is 281 gm per day, which is lower than the world average of 285 gm per day.

## MATERIALS AND METHODS

The study was conducted during 2012-2013 in order to study extent of adoption of milk farmers regarding improved milk farming practices, at first selecting the Faizabad district in the eastern UP and bulandshahr is western UP. This The Eastern district Faizabad is located in the eastern plain zone of Uttar Pradesh. It is considered to be the most climatically suitable area for agricultural practices and Western district Bulandshahr is situated between Ganga and Jamuna rivers was selected purposively for this study because of the district comes in eastern and western Uttar Pradesh. Besides, there was having large milk farming practices, and the selection of villages, this stage of sampling, and the list of all the villages in the selected district was prepared. At Eastern district Faizabad Milkpur block, two villages first situated near the road in 100 meter directions road and 12 kilometers of block head quarter and second 2 kilometer road and 9 kilometer of block head quarter. Western district Danpur block, two villages i.e. Deurow and Barena first village situated 1 kilometer of road and 5 kilometer block head quarter and second 3 kilometer of road and 12 kilometer block head quarter and selection of respondents at last stage of sampling, the list of respondents were prepared separately for each sample village and thus, a total number of 100 dairy farmer (50 Eastern district Faizabad+ 50 Western district Bulandshahr) from 4 sample villages were selected through purposely random sampling technique on the basis of heard size. An interview schedule was prepared in the light of decided objectives and variables undertaken and adoption of recommended agricultural technology concerning to the milk production practices was measured by means of "Adoption Intensity Index". This procedure was followed for ten selected practices under study. It was viewed for the study of extent of adoption of new agricultural technology. The adoption of farm practices by individual farmer, however, is a topic which has large number of studies. The extent of adoption of improved dairy production technology was worked out for individual respondent for all practices. This procedure was applied for all the 100 (50 Eastern + 50 Western dairy farmers) respondents to get individual extent of adoption on the basis of 'Adoption Intensity Index.' After a pretesting of the questions, farmers were individually interviewed. The questionnaire consisted close questions, all of which were translated into the local language. Appropriate statistics are used to draw inferences accordingly.

## RESULT AND DISCUSSION

### Personal constraints

**Table 1. Distribution of respondents according to personal constraints about use of dairy husbandry practices** N=100

S. No.	Personal constraints	Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	Lack of interest of other family members.	28	56.00	IV	24	48.00	I
2.	The women do not come out from the houses for taking care the animals.	31	62.00	III	19	38.00	II
3.	Youngsters support in dairying.	18	34.00	VI	37	74.00	IV
4.	Status of poor economic condition.	36	72.00	II	14	28.00	III
5.	Lack of place for preparing shed.	27	54.00	V	13	26.00	V
6.	Lack of scientific knowledge about dairy husbandry practices.	38	76.00	I	18	36.00	VI

The Table-1. In Eastern area 'Lack of scientific Knowledge about dairy husbandry practices (I) followed by 'Status of poor economic condition II' and the 'Women do not come out from the houses for taking care the animals' ranked third (III) soon as for each constraints in descending order.

Western area 'Lack of interest of other family member' (I) followed by 'The women do not come out from the houses for taking care the animals' was ranked second (II) and 'Status of poor economic condition' ranked third (III) soon as for each constraints in descending order.

**Social constraints:****Table-2: Distribution of respondents according to social constraints about use of dairy husbandry practices N=100**

S. No.	Social constraints	Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	The women do not come out from the houses for taking care the animals because of social values.	38	76.00	I	32	64.00	II
2.	Distantly located animal health clinic	32	64.00	II	20	40.00	IV
3.	Employee working at AHC do not take proper care	25	50.00	IV	13	26.00	V
4.	Lack of grass lands for grazing the animals.	31	62.00	III	36	72.00	I
5.	Lack of interest of other family member	19	38.00	V	24	48.00	III

The Table- 2 envisages the rank order of sociological constraints in **Eastern viz.**, ‘The women do not come out from the houses for taking care the animals because of social values’(I) followed by ‘Distantly located animal health clinic’ ranked second (II) and ‘Lack of grass lands for grazing the animals’ ranked third (III) so on as for each constraints in descending order.

Western area ‘Lack of grass lands for grazing the animals’ ranked first (I) followed by ‘The women do not come out from the houses for taking care the animals because of social values’ was ranked second (II) and ‘Lack of interest of other family member’ ranked third (III) so on as for each constraints in descending order.

**Economical constraints:****Table-3: Distribution of respondents according to economical constraints about use of dairy husbandry practices**

S. No.	Economical constraints	Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	Poor purchasing power of the dairy farmers	19	38.00	III	14	28.00	V
2.	Improved milch cattle are costly to have	23	46.00	II	27	54.00	I
3.	Veterinary medicines are very costly for treatment of sick animals.	24	48.00	I	15	30.00	IV
4.	The inputs (concentrates and minerals etc.) are very costly to maintain animal.	18	36.00	IV	21	42.00	III
5.	Lack of support for dairy enterprises from government side	16	32.00	VI	13	26.00	VI
6.	Nonfunctional of animal insurance schemes.	17	34.00	V	26	52.00	II

The Table-3. envisages the rank order of economical constraints *viz.*, ‘Corruption prevailing in financing institutions for having loans to develop the dairy husbandry’ and ‘Veterinary medicines are very costly for treatment of sick milch cattle’ was each ranked first (I) followed by ‘Improved milch cattle are costly to have’ ranked (II) and ‘Poor purchasing power of the dairy farmers’ was ranked (III). So on for each constraints in descending order. The score value for each constraints indicate the seriousness which had considerable contribution towards low adoption.

Western dairy farmer ‘Improved milch cattle are costly to have’ was each ranked first (I) followed by ‘Improved milch cattle are costly to have’ was ranked (II) and he inputs (concentrates and minerals etc.) are very costly to maintain animal.

As ranked (III). So on for each constraints in descending order. The score value for each constraints indicate the seriousness which had considerable contribution towards low adoption.

**Technological constraints:****Table-4: Distribution of respondents according to technological constraints about use of dairy husbandry practices N=100**

S. No.	Technological constraints	Respondents					
		Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	Lack of knowledge about cattle breed improvement for higher milk production	29	56.00	II	17	34.00	IV
2.	Improved breed are not available in nearby market	25	50.00	IV	20	40.00	III
3.	Lack of contact of veterinary personnel's	27	54.00	III	22	44.00	II
4.	A I and BAIF centers are far from the village which causes failure in timely A I for cattle breed improvement	32	64.00	I	37	74.00	I
5.	More mortality of calves due to unavailability of timely treatment.	18	36.00	V	14	28.00	V

The Table-5.35 envisages that the rank order of technological constraints *viz.*, 'AI and BAIF centers are a from the village which causes failure in timely AI for cattle breed improvement' was ranked (I) followed by 'Lack of knowledge about cattle breed improvement for higher milk production' was ranked (II) and 'Lack of contact of veterinary personnel' was ranked (III).

Western dairy farmer 'AI and BAIF centers are from the village which causes failure in timely AI for cattle breed improvement' was ranked (I) followed by 'Lack of contact of veterinary personnel' was ranked (II) and Improved breed are not available in nearby market was ranked (III) So on for each constraints in descending order. The score values for each constraints indicate the seriousness which had considerable contribution and towards low adoption.

**Marketing constraints:****Table-5: Distribution of respondents according to marketing constraints about use of animal husbandry practices N=100**

S. No.	Marketing constraints	Respondents					
		Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	Lack of remunerative milk prices.	21	42	V	32	64.00	I
2.	Lack of proper marketing channels.	33	66.00	I	15	30.00	III
3.	Poor transportation also affects adversary in proper disposal of the products.	31	62.00	II	12	24.00	VI
4.	Dominance of intermediaries in dairy marketing.	29	58.00	III	13	26.00	V
5.	Lack of cooperative milk collection network	23	46	IV	14	28.00	IV
6.	Perishable nature of milk compel to the farmers for selling their milk at any lower cost	12	24.00	VI	19	38.00	II
7.	Lack of storage facilities for milk and milk products	18	36.00	VII	8	16.00	VI
8.	Monopoly of intermediaries in price fixation of milk and milk products.	09	18.00	VIII	7	14.00	VIII

The Table-5 envisages that the rank order of marketing constraints *viz.*, Lack of proper marketing channels. was ranked (I) followed by Poor transportation also affects adversary in proper disposal of the products. 'was ranked (II) and 'Dominance of intermediaries in dairy market' was ranked (III).

In western dairy farmer 'Lack of remunerative milk prices., was ranked (I) followed by 'Perishable nature of milk compel to the farmers for selling their milk at any lower cost' was ranked II and 'Dominance of intermediaries in dairy market' was ranked III. So on as for each constraints in descending order. The score values for each constraint indicate the seriousness which had considerable contribution in towards low adoption.

**Suggestive measures of the constraints****Table-6: Suggestive measures of the constraints N=100**

S. No.	Suggestions	Respondents					
		Faizabad (district of Eastern U.P) (N=50)			Bulandshahr (district of Western U.P) (N=50)		
		No.	%	Rank	No.	%	Rank
1.	Government must provide marketing facilities at village level for selling the milk and milk products	34	68.00	I	19	38.00	IX
2.	Animal health clinic should be established nearest to the village	30	60.00	III	18	36.00	X
3.	Proper prices for milk and milk products should be insured	12	24.00	XII	22	44.00	VII
4.	Government must provide more credit facilities for purchasing animals	17	34.00	VII	9	18.00	XVI
5.	Improved breeds should be made available in nearby markets	18	36.00	V	27	54.00	III
6.	Educational programmes regarding cattle breeds improvement for higher milk production should be implemented	22	44.00	VI	37	74.00	I
7.	Vaccination at proper intervals should be done through AHC centers	16	32.00	VIII	23	46	VI
8.	Collection of milk from door step should be initiated with milk cooperatives.	8	16.00	XVI	13	26.00	XIII
9.	Social campaigns regarding vaccination should be conducted in village.	23	46.00	IV	28	56.00	II
10.	Government insurance scheme for animals should be provided easily.	14	28.00	X	10	20.00	XV
11.	Animals doctor should approach the village frequently.	31	62.00	II	17	34.00	XI
12.	Precision should be made by the govt. regarding fixation of prices with involvements of the dairy farmers.	13	26.00	XI	24	48.00	V
13.	Proper marketing channels should be involved by the government so that monopoly of intermediaries can be minimized.	9	18.00	XV	25	50.00	IV
14.	Incentive should be given with cooperative movement.	10	20.00	XIV	16	32.00	XII
15.	Storage facilities for milk & milk products should be provided at village level.	11	22.00	XIII	12	24.00	XIV
16.	More AI & BIAF centers should be opened for easy approach.	15	30.00	IX	21	42.00	VIII

The Table-6 envisages the rank orders of suggestive to overcome the constraints as perceived by the respondents about dairy enterprise the technology *viz.*, 'Government must provide marketing facilities at village' was ranked first (I) followed by 'Animals doctor should approach the village frequently' ranked (II) and 'Animal health clinic should be established nearest to the village' ranked (III) respectively.

In Western dairy farmer 'Educational programmes regarding cattle breeds improvement for higher milk production should be implemented' was ranked first (I) followed by 'Social campaigns regarding vaccination should be conducted in village' ranked (II) 'Improved breeds should be made available in nearby markets' ranked (III) respectively.

**CONCLUSION**

Out of 6 personal constraints, the constraints like 'Status of poor economic condition', 'Lack of interest of other family member', 'Women do not come out from the houses for taking care the animals' so on as for each constraints in descending order. In case of rural dairy farmer 'Lack of interest of other family member', 'The women do not come out from the houses for taking care the animals', 'Lack of poor

economic condition' so on as for each constraints in descending order. Out of 5 social constraints about use of dairy farming technology, 'Lack of grass lands for grazing the animals', 'The women do not come out from the houses for taking care the animals because of social values', 'Lack of interest of other family member' so on as for each constraints in descending order. In case of rural dairy farmer 'The women do not come out from the houses for taking care the animals because of social values', 'Lack of grass lands for grazing the animals', 'Distantly located animal health clinic' so on as for each constraints in descending order. Out of 6 economical constraints about use of dairy farming technology, the peri-urban farmers ranked the constraints lack namely 'corruption prevailing in financing institutions for having loans to develop the dairy enterprises' and 'Dysfunctional of animal insurance schemes', 'hybrid milch cattle are costly to have', 'Concentrates and minerals are very costly to feed the milch cattle'. So on so forth each constraints in descending order. In case of rural dairy farmer 'veterinary medicines are very costly for treatment of sick milch cattle', 'hybrid milch cattle are costly to have' and 'poor purchasing power of the dairy farmers'. So on so forth each constraints in descending order. Out of 5 Technological constraints about use of dairy farming technology, 'the peri-urban constraints 'AI and BAIF centers are a from the village which causes failure in timely AI for cattle breed improvement', 'Lack of contact of veterinary personnel' and 'exotic breed are not available in nearby market'. In case of rural dairy farmer 'AI and BAIF centers are a from the village which causes failure in timely AI for cattle breed improvement', 'Lack of knowledge about cattle breed improvement for higher milk production' and 'Lack of contact of veterinary personnel' So on so forth each constraints in descending order. Out of 8 Economical constraints about use of dairy farming technology, the peri-urban farmers 'Lack of remunerative milk prices', 'Perishable nature of milk compel to the farmers for selling their milk at any lower cost' and 'dominance of intermediaries in dairy market'. In case of rural dairy farmer 'Poor transportation also affects adversity in proper disposal of the product', 'dominance of intermediaries in dairy market' and 'lack of proper marketing channels'. So on so forth each constraints in descending order.

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