

Adoption Extent about Dairy Farming Practices among Semi-Urban and Rural Dairy Areas

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Abstract

The dairy is a business which provides the continuous source of income to the occupants. India needs to increase milk production which can be possible by narrowing down the gap between the existing technologies and their adoption. The research was based on a survey done in 2021-23 to know 'adoption extent about dairy farming practices among semi-urban and rural dairy areas' in Fatehpur district of Uttar Pradesh. 15-15 respondents from each selected semi-urban and rural villages panchayats were selected randomly to constitute 120 samples (60 semi-urban + 60 rural areas). The adoption extent have been studies under different sub-heads like: cattle breed adoption, cattle-shed adoption, balanced ration adoption, disease control adoption, and milk product adoption. Majority of semi urban respondents adopted of improved cattle breeds whether the local/domestic breed adopted by rural respondents. Single row system of cattle shed adopted by the majority of respondents of both areas; whereas double row system adopted by most of the semi urban responds. Maximum components of balanced ration/diet adopted by majority of semi urban respondents than rural areas respondents. Most of the components of vaccination and sanitation were adopted by majority of semi urban respondents then the respondents of rural areas. Maximum components of milk and milk product were prepared by majority of semi urban respondents then the respondents of rural areas..The Majority of the respondents from the overall adoption of the semi-urban farmers 78.33 percent and rural dairy farmers 71.66% percent possessed medium level of adoption whether 16.66 present semi-urban farmers and 13.33 percent rural dairy farmers were possessed high level of adoption.

Keywords: Adoption, Dairy, Farming, Practices, Semi-urban, Rural.

Introduction:

In spite of India's position as highest producer of milk, the productivity per animal is very low. The low productivity is due to the gradual genetic deterioration and neglecting of animals rearing over the centuries consequently due to the rise in the population of non-descriptive cows 80 percent and buffaloes 50 percent. Despite largest producer of milk, the low productivity of dairy animals attributed to low adoption of scientific management practices by the farmers^[3, 4]. Now a day's peri-urban dairy farming has become widespread as a consequence of the high price of milk in urban centers and

insufficient milk marketing infrastructure which raises the demand for milk in urban areas^[1]. India needs to increase milk production which can be possible by narrowing down the gap between the existing technology and there adoption. This undoubtedly requires a technological break through in the areas of animal sciences, veterinary and dairying and much depends upon the rate and speed of dissemination of such information to dairy entrepreneurs. The factors contributing to low productivity include continuing draughts in some parts of the country, chronic shortages of feed & fodder

coupled with their poor nutritive value and poor fertility of dairy animals. Considering these things practicing scientific dairy management practices has become much more important for increasing productivity and assuring the sustainability of these dairy farms. It is an essential requirement for occupational awareness to farmers which consequently forms the basis of action preceding the act of adoption. An efficient return from improved dairy technologies pre-supposes that desirable use of dairy innovations will depend upon relevant acquired knowledge, which is an

Material and Method

The research was based on a survey done in 2022-23 in order to ‘adoption extent about dairy farming practices among semi-urban and rural dairy areas’. The process of area and respondents selection were as; At the first stage the list of all the semi-urban villages situated near the pacca road within 5 K.M. from Nagar Palika boundary of district headquarter were selected then four semi-urban villages namely; Bilanda, Gajipur, Ashothar and Haswa has selected randomly from State-Uttar Pradesh and District-Fatehpur were selected purposively for the study. In the same

Results and Discussion

Adoption extent about dairy farming practices among semi-urban and rural dairy areas. The adoption extent have been studies under different heads like:

Cattle Breed Adoption:

Table 1 Distribution of respondents according to adoption extent about Cattle Breed Adoption

S.N.	Categories	Respondents (Percentage)			
		Semi-urban Areas		Rural Areas	
		Number	Percentage	Number	Percentage
1.	Improved/ Exotic breeds	47	78.33	43	71.66
2.	Deshi/Local breeds	13	21.66	17	28.33
	Total	60	100	60	100

important force to accelerate their adoption. Considering these facts sustainability of existing dairy farms is of prime importance for meeting the future demands of milk in the state which should be in line with the most widely accepted definition of sustainability i.e., “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Peri-urban dairies are mostly situated in and around cities for meeting the high demand for milk in urban areas^[2].

manner, four villages namely Chhichni, Ramwa, Ekari and Fatehpur situated beyond 05 kilometers from Nagar Palika boundary of the same district and state were selected purposively for the study. At last stage of sampling, 15-15 respondents from each selected semi-urban and rural villages were selected randomly to constitute 120 samples (60 semi-urban + 60 rural). Data were collected by researcher through an interview schedule method by open ended response of respondents. An appropriate statistics measures has been used to draw inferences.

cattle breed adoption, cattle-shed adoption, balanced ration adoption, disease control adoption, and milk product adoption:

The extent of adoption of cattle breed under dairy adoption extent, have been presented in Table 1. It was observed that in case of semi-urban respondents improved/exotic breeds of both (cow and buffalo) were adopted highest 78.33 percent followed by local breeds 21.66 percent. While, in case of rural respondents, the position of improved/exotic breeds was observed highest 71.66 percent followed by local breeds 28.33 percent respectively.

It is oblivious from above table that the semi urban respondents have more aware about the milch animal breed because they were selling their produce in urban areas direct to consumers. These consumers of urban areas are not rearing any milch animals therefore they may willing to pay any high amount of milk than rural areas' consumer that's why respondents economically motivated to produce high milk by the adoption of exotic breeds.

Cattle-shed Adoption-

Table 2 Distribution of respondents according to adoption extent about Cattle Shed Adoption

S.N.	Cattle shed	Respondents (Percentage)			
		Semi-urban Areas		Rural Areas	
		Number	Percentage	Number	Percentage
1.	Single row system	40	66.66	42	70.00
2.	Double row system	14	23.33	02	03.33
3.	Without system	12	20.00	16	26.66
	Total	60	100	60	100

Table 2 indicates that the majority of the semi-urban respondents 66.66 percent adopted single row system of the cattle shed while only 23.33 percent adopted double row system and 20.00 percent were found who did not adopted any system of cattle shed. In case of rural dairy respondents, the majority of the respondents 70.00 percent were adopted single row system of the cattle shed

whereas only 03.33 percent adopted double row system and 26.66 percent were found who did not use any system of cattle shed.

It is concluded that the majority of semi urban respondents were adopted double row system that was head to head and tail to tail because double row system required less space/land and easy to shedding and sanitation.

Balanced Ration Adoption-

Table 3 Distribution of respondents according to adoption extent about Balanced Ration Adoption

S.N	Ration type	Respondents (Percentage)									
		Semi-urban Areas					Rural Areas				
		Balance d	Some what balanced	Not balance d	Nil	Total	Balance d	Some what balanced d	Not balanced	Nil	Total
1.	Straw	23.33	46.67	16.67	13.33	100	18.33	30.00	10.00	41.67	100
2.	Green fodder	8.33	25.00	8.33	58.33	100	20.00	20.00	20.00	20.00	100
3.	Concentrate	18.33	40.00	35.00	6.67	100	11.67	46.67	18.33	23.33	100
4.	Milking stage	15.00	50.00	11.67	23.33	100	13.33	20.00	30.00	41.67	100
5.	Pregnancy period	26.67	50.00	23.33	0.00	100	15.00	66.67	11.67	6.67	100
6.	Salt	36.67	43.33	20.00	0.00	100	33.33	45.00	20.00	1.67	100
7.	Chalk	48.33	50.00	1.67	0.00	100	20.00	36.67	6.67	6.67	100

Table-3 indicates the adoption of balanced ration offered to the cattle by the majority of rural respondents over the semi-urban respondents is only green fodder but others balanced ration adoption

more adopted by semi-urban respondents. Majority of rural respondents were not adopted balanced ration. Due to balanced ration cattle health and milk quality and quantity are maintained.

Disease Control (Vaccination and Sanitation) Adoption-

Table 4 Distribution of respondents according to adoption extent about Disease Control Adoption

S. No.	Disease control	Respondents (Percentage)			
		Semi-urban Areas		Rural Areas	
		Number	Percentage	Number	Percentage
A.	Vaccination				
1.	Foot Mouth Disease (F.M.D.)	58	96.66	59	98.00
2.	Galaghoto	32	53.33	20	33.33
3.	Milk fever	14	23.33	06	10.00
4.	Black Quarter	08	13.33	05	08.33
B.	Sanitation				
1.	Cattle shed wall	30	50.00	20	33.33
2.	Cattle shed floors	08	13.33	15	25.00
3.	Drainage channel	20	33.33	10	16.66
4.	Ectoparasites	18	30.00	16	26.66

Table-4 shows the adoption extent of disease control by vaccination and sanitation. All the practices of vaccination (except F.M.D.) and sanitation under disease control were adopted by majority

of semi urban respondents then the respondents of rural areas. This may be due to major farming was dairy farming in semi urban areas whether supplementary farming was dairy farming in rural areas.

Milk Product Adoption-

Table 5 Distribution of respondents according to adoption extent about of Milk Product Adoption

S. No.	Milk Products	Respondents (Percentage)			
		Semi-urban Areas		Rural Areas	
		Number	Percentage	Number	Percentage
1.	Cream	05	08.33	03	05.00
2.	Butter	02	03.33	03	05.00
3.	Khoya/Mava	07	11.66	06	10.00
4.	Curd	10	16.66	15	25.00
5.	Ghee	13	21.66	13	21.66
	Total	60	100	60	100

The Table-5 shows that the majority of respondents were prepared cream and khaya in semi-urban areas

whether butter and curd in rural areas but highest and equal majority of respondents

21.66 percent were prepared ghee in both areas.

It is concluded that majority of both respondents were adopted ghee

product preparation because of its preservation quality higher than other milk product.

Table 6 Distribution of respondents according to overall adoption of Dairy Farming Practices Adoption

S.N.	Categories	Respondents (Percentage)			
		Semi-urban Areas		Rural Areas	
		Number	Percentage	Number	Percentage
1.	Low (Score up to 34)	03	05.00	09	15.00
2.	Medium (Score 35 to 56)	47	78.33	43	71.66
3.	High (Score 57 and above)	10	16.66	08	13.33
	Total	60	100	60	100

Mean = 44.9, S.D. =10.71, Min=22, Max=79.31

The Table-6 depicted that the majority of the semi-urban respondents 78.33 percent were observed in medium level of adoption followed by high 16.66 percent and low 05.00 percent level of adoption respectively. Whereas the majority of rural dairy respondents 71.66 percent were observed medium level of

Conclusion

It is concluded from overall adoption that majority of the semi-urban respondents 78.33 percent were observed in medium level of adoption followed by high 16.66 percent and low 05 percent level of adoption, whereas the majority of rural dairy respondents 71.66 percent possessed medium level of adoption followed by high 15.00 percent and low 13.33 percent level of adoption. A little difference or gap found between semi-urban and rural areas regarding dairy farming practices. Demand of milk increasing in urban areas and dairy farming is closely associated with agriculture and agriculture is main

adoption followed by high 15.00 percent and low 13.33 percent level of adoption respectively.

It is obvious from the overall adoption of dairy farming practices that there was no much difference or gap in adoption of dairy farming practices among semi urban and rural areas.

occupation in rural areas that's why increase in dairy or agriculture will increased in both farming simultaneously therefore improved dairy farming practices have to adopt to all farmers because about 16.00 percent respondents were high adopted dairy farming practices from the both areas that was very less. This less adoption of dairy farming practices by both areas respondents are showing/reflects that extension and awareness activities were not conducted in these areas therefore need of hour to organize extension and awareness activities regarding improvised dairy farming practices in both areas.

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