



Employment Generation through Dairy Farming in District Moradabad: A Case Study

Authors

Nizamuddin Khan¹, Ashish Kumar Parashari²

¹Professor, Department of Geography, Department of Geography, Aligarh Muslim University
Aligarh, 202002

²Research Scholar, Department of Geography Department of Geography, Aligarh Muslim University,
Aligarh, 202002

Corresponding Author

Ashish Kumar Parashari

Research Scholar, AMU, Aligarh

Email- amu.ashish@gmail.com

Abstract

The dairy sector in India is characterized by a smallholder production system of village based production units often consisting of one to three milking animals. Government agencies and policymakers of India have underlined the key role of dairy enterprise in terms of improving the socio-economic status of the rural poor by reducing the longstanding problems of unemployment and underemployment. The present study was conducted in five villages of Moradabad District, Uttar Pradesh and entirely based on primary data. The study revealed that despite the involvement of large number of farmers the dairy farming is considered as the secondary occupation. The increasing demand for milk and milk products has resulted in the increase in milk production but low productivity per animal and unorganized channel of milk marketing is dominant in the study area. The employment generation is determined by with the landholding, caste, access to market, income from dairy enterprise and other socio-economic attributes. The major problems, faced by dairy farmers, are low pricing system, fodder crisis, absence of ready market, lack of veterinary services, exploitation by milkmen etc.

Keywords: dairy farmer, employment, small farmer, milk marketing, livestock

Introduction

Dairy farming has been considered one of the most important value added farming systems practiced in the country. Dairy farming in India has been shaping the lives of rural people as a major source of employment and income generation. Government agencies and policymakers of India have underlined the key role of dairy farming in terms of improving the socio-economic status of the rural population by reducing the longstanding problems of

unemployment and underemployment. It plays a catalytic role in modeling the socio-economic profile of the rural masses through the production of milk, meat and assisting the agricultural operations in many ways (Khan et al. 2009). The dynamic and diverse systems of livestock provide ideal safety nets for small holder and landless farmers (Yadav, MP.2012). It has also been recognized as an instrument to bring socio-economic transformation in the rural sector (Mathur, B.N. 2000). Dairying is a secure path

and future of rural development and is now becoming a commercial preposition (Gangasagar, P.T. and Karanjkar, L.M.2009). Dairy farming is one the major economic activity in the rural India along with agriculture. The importance of dairy farming in the rural economic development and employment generation, the present work has been undertaken with the following objectives:

- ❖ To find out holding-wise distribution of dairy farmers.
- ❖ To analyze the different modes of employment generation through dairy farming.
- ❖ To assess the caste-wise involvement of people in the dairy farming.
- ❖ To discuss the problems faced by dairy farmers.

Study Area-

To study and analyze the modes of involvement of people in dairy farming and its role in employment generation, the district of Moradabad

in Uttar Pradesh has been selected taking into consideration its agricultural economy and status of dairy farming as major proportion of rural population involved in dairy farming. The Moradabad district lies between $28^{\circ}21' N$ to $28^{\circ}16' N$ latitude and $78^{\circ}4' E$ to $79^{\circ}00' E$ longitude (figure 1). According to the 2011 census the population of Moradabad district is 4,773,138 persons. The district possesses sex ratio of 903, and has a literacy rate of 58.67 per cent. For administrative convenience the district is divided into threetehsils (Sub divisions) having eight developmental blocks. Moradabad lies in the Gangetic plain and is an agriculturally developed district of Uttar Pradesh. The district possess a large livestock population with 11,78,319 heads comprising of various species but for the purpose of dairy farming only three species have been taken into consideration.. The share of buffalo is largest (84.92 per cent) followed by goat (17.54 per cent) and cattle (17.49 per cent).

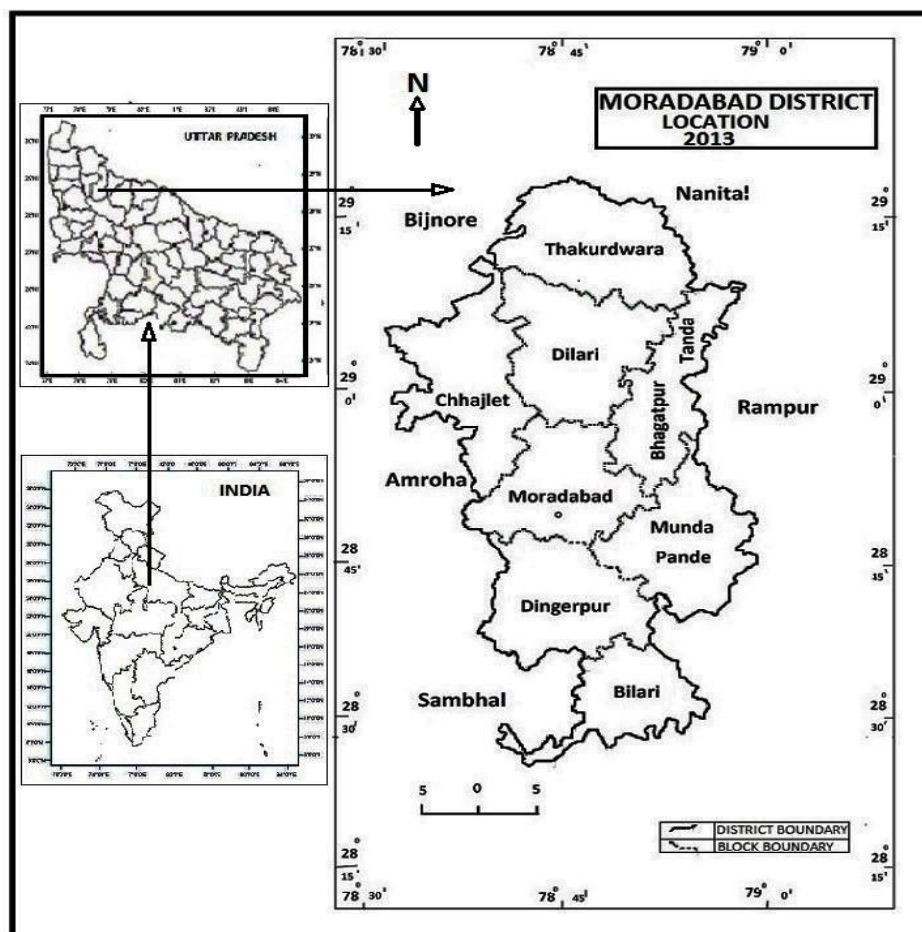


Fig.1

Database and Methodology

The study is entirely based on primary sources of data collected through field survey by direct questionnaire in the year 2013-14. Five village spread all over the study-area were selected for detail study. Data were collected using stratified random sampling technique. These villages were selected on the basis of their population size as

well as accessibility to urban areas and market centres. On the basis of stratified random sampling 150 dairy farmers were interviewed regarding the modes of employment generation through dairy farming, their caste and problems faced by them in the dairy operations. For purpose of data analysis simple statistical methods have been used.

Table 1: Holding-wise Distribution of Dairy Farmers in Moradabad District, 2012-13.

Village Name	Total H.H.	Landless	Marginal	Small	Semi-medium	Medium	Large	Total
KuakheraKhalsa	30	1 (3.33)	4 (13.33)	5 (16.67)	13 (43.33)	6 (20.0)	1 (3.33)	30 (100)
Felra Patti	30	2 (6.67)	3 (10.0)	7 (23.33)	10 (33.33)	7 (23.33)	1 (3.33)	30 (100)
Ababakpur	30	1 (3.33)	5 (16.67)	4 (13.33)	9 (30.0)	8 (26.67)	3 (10.0)	30 (100)
DharampurKalan	30	2 (6.67)	4 (13.33)	8 (26.67)	9 (30.0)	5 (16.67)	2 (6.67)	30 (100)
BahoranpurKalan	30	-	6 (20.0)	6 (20.0)	11 (36.67)	7 (23.33)	-	30 (100)
Total	150	6 (4.0)	22 (14.67)	30 (20.0)	52 (34.67)	33 (22.0)	7 (4.67)	150 (100)

Source: Field Survey, 2012-13. Figure in Brackets Indicate Percentage.

Dairy Farmers and Size of Holdings

Size of landholding is one the important economic attribute which determine level pattern of dairy farming at grass root level in the rural areas. Dairy farmers have been classified into six categories as landless, marginal (less than 1 hectare), small (1-2 hectares), semi-medium (2-4 hectares), medium (4-10 hectares), and large (more than 10 hectares). Table 1 presents the distribution and proportion of dairy farmers according to size of landholding in the study area. Marginal farmers accounted for 14.67 percent whereas small farmers accounted for 20 per cent to the total dairy farmers. The semi-medium dairy farmers have the highest participation i.e. 34.67 percent whereas the share of medium farmers is 22 percent. The participation of semi-medium and medium farmers is higher in the dairy sector in the study

area as they have the extra man power and dairy farming provides them employment in the rural areas. Dairy farming provides necessary economic sustenance and economic support for small and marginal dairy farmers too. Large farmers constitute only 4.67 percent to total dairy farmers because they do not have so much interest in dairy farming on account of much engagement in intensive commercial cropping system and employment in other economic sectors like trade and business and services of higher remuneration.. It is due to the fact that their financial requirements and household needs are fulfilled by their large size of landholding, moreover, they are involved in respectable and comfortable jobs so their social status is high and their women do not wish to involve in household operations of dairy farming.

Employment Generation

Dairy farming and allied activities have appeared as major source of employment generation for the people in rural areas. The increasing demand for milk and milk products and the employment

generation through dairy marketing have provided a better option of income generation to supplement the agricultural inputs and fulfill household expenditures. Table 2 illustrates that a large proportion of population is

Table 2 Different Modes of Employment Generation in Moradabad District, 2012-13.

Village Name	Rearing	Marketing	Distribution	Collection / Processing	Total
Kuakhera Khalsa	22 (73.33)	2 (6.67)	4 (13.33)	2 (6.67)	30 (100)
Felra Patti	23 (76.67)	4 (13.33)	2 (6.67)	1 (3.33)	30 (100)
Ababakpur	20 (66.67)	3 (10.00)	4 (13.33)	3 (10.0)	30 (100)
Dharampur Kalan	21 (70.0)	3 (10.00)	3 (10.0)	3 (10.0)	30 (100)
Bahoranpur Kalan	19 (63.33)	2 (6.67)	5 (16.67)	4 (13.33)	30 (100)
Total	105 (70.00)	14 (9.33)	18 (12.0)	13 (8.67)	150 (100)

Source: Field Survey, 2012-13. Figures in Bracket Indicate Percentage.

engaged in different operations of dairy farming like rearing, marketing, distribution, collection / processing of milk and milk derived products as part time as well as full time workers. The analysis of data reveals that 70 per cent workers, involved in dairy sector, are engaged in rearing in five selected villages of Moradabad district. Rearing is the main operation of dairy farming because most of people prefer to rear dairy animals to supplement their main income. Distribution ranks second with a share of 12 percent and the marketing is on third position with 9.33 per cent in terms of proportion of people engaged in various operations of dairy farming. People engaged in distribution of milk and milk derived products to the nearby towns and cities on daily basis because dairy products are perishable and it constitutes important part of meal. Marketing of dairy animals is an emerging operation for the people in the rural areas as the selling and purchasing of dairy animals is increasing rapidly.

People in collection/ processing have the least proportion of 8.67 per cent in total farmers engaged in dairy farming because mostly consumers prefer to prepare milk products by themselves.

Social Profile of Dairy Farmers

The socio-economic profile of farmers as well as consumers is major controlling factor in the level of employment generation through dairy farming because social stratification is a major social characteristic of Indian society. Table 3 presents a wide view of cast-wise involvement of people in dairy farming and it reveals that other backward castes (OBCs) have highest share of 41.33 per cent followed by high castes with a proportion of 32.66 percent and scheduled castes (SCs) have least proportion of 27.33 percent in total people involved in dairy farming. In the OBCs 75.81 percent people involved in rearing while 9.68 percent people engaged in marketing and 8.06

percent people engaged in distribution and collection/ processing has least share of 6.45 percent to the total OBCs dairy farmers. Among

the OBCs Jat has highest proportion of dairy farmers (14.67%) followed by Jatavs (11.33), Yadav (9.33), and Kumhar (3.33).

Table 3: Caste-wise Proportion and Structure of Workforce Involved in Dairy Farming in Moradabad District, 2012-13.

Social Groups	Percent Share	Percent of People in Different Operations of Dairy Farming				
		Rearing	Marketing	Distribution	Collection/ Processing	Total
High Castes						
Thakur	15.33	17 (73.91)	3 (13.04)	2 (8.70)	1 (4.35)	23 (100)
Brahmin	8.67	10 (76.92)	1 (7.69)	1 (7.69)	1 (7.69)	13 (100)
Elite Muslims	4.67	7 (77.77)	1 (11.11)	-	1 (11.11)	9 (100)
Others	2.67	4 (100.0)	-	-	-	4 (100)
Total	32.66	38 (77.55)	5 (10.64)	3 (6.38)	3	49 (100)
OBCs						
Jat	14.67	17 (77.27)	2 (9.09)	1 (4.55)	2 (9.09)	22 (100)
Jatav	11.33	12 (70.59)	3 (17.65)	1 (5.88)	1 (5.88)	17 (100)
Yadav	9.33	10 (71.43)	1 (7.14)	2 (14.29)	1 (7.14)	14 (100)
Kumhar	3.33	4 (80.0)	-	1 (20.0)	-	5 (100)
Others	2.67	4 (100.0)	-	-	-	4 (100)
Total	41.33	47 (75.81)	6 (9.68)	5 (8.06)	4 (6.45)	62 (100)
SCs	27.33	32 (78.05)	5 (12.20)	2 (5.12)	-	39 (100)
Grand Total	100	117 (78.0)	16 (10.67)	10 (6.66)	7 (4.66)	150 (100)

Source: Field Survey, 2012-13. Figure in Brackets Indicate Percentage.

In the high castes 77.55 percent people engaged in rearing , 10.64 percent involved in marketing while 6.38 percent people involved in distribution and 3 percent people engage in collection/ processing. Among the high castes Thakur has the

highest proportion of 15.33 percent followed by Brahmin with 8.67 percent while Elite Muslims has the lowest share of 4.67 percent to total dairy farmers. Rearing has the largest proportion of 78.05 percent in the SCs followed by marketing

with 12.2 percent while distribution has 5.12 percent.

Problems Faced by Dairy Farmers

Despite the fact that dairy farming is one of the major contributors to the socio-economic development in the rural area and driving factor in rural economy improvement but it is unorganized and inefficient due to large number of problems faced by this sector in the study area.. Major problems of dairy farming are mentioned below:

(a) Feeding Problems: In the study area particularly and in the country in general, the animals are fed mainly by crops residues , so mainly agricultural farmers and people of small size of landholding are involved in dairy farming. This resulted in the imbalance diet and lack of proper nutrients in animal feed which ultimately led to weakening of animals and makes them unproductive.

(b) Absence of Standard Pricing System- Due to the price fluctuation and market instability the dairy farmers face financial loss. Since there is no standard pricing for milk at grassroots level, therefore, dairy do not get proper price for their products.

(c) Absence of Ready Market- Milk is perishable item so it needs to be sold as soon as possible but in absence of ready market farmers have to sell their products at much lower price causing heavy economic loss to dairy farmers.

(d) Lack of Transportation System- Efficient transport is necessary for delivering milk to nearby towns and cities but lack of transport system is major setback in the development of dairy farming and marketing channels for milk products.

(e) Unorganized Markets- Dairy market is unorganized which leaves private players to enter in dairy industry work for their benefits instead of developing the grass root level producers.

(f) Lack of Credit Facilities- Credit facilities for dairy farmers through government agencies are absent in the study area which has discouraged the dairy farming in the area.

(g) Exploitation by Milkmen- Major proportion of total milk produced in the study area is purchased by milkmen nearly at half of market price which result in heavy economic loss to dairy farmers.

(h) Lack of Veterinary Facilities- For the increased production of milk animal must be in good health but there is shortage of veterinary hospital facilities and medical assistance for the animals. It has decreased the productivity of dairy animals.

Conclusion

Dairy development in India is the result of the efforts of millions of individuals that form our masses and but not mass production. Dairy farming for a long time has been considered as subsidiary enterprise or complementary agriculture, but is becoming the major enterprise economically and agriculture is becoming dependent on dairy farming. Increasing demand for milk and milk products has created a huge market and an employment option for the rural people to engage in dairy operations from different socio-economic strata. People from different socio-economic groups are engaged in different operations of dairy farming in the study area. The size of landholding is an important economic attribute which determine the level and proportion of dairy farmers located at grass root level. There are various socio-economic attributes such as size of landholding, caste, community, education; age, etc. are constantly affecting the growth and development of dairy farming in the study area and determining the level and pattern of employment generation through dairy farming. Dairy farmers in the study area are also facing problems such as lack of credit facility, inefficient pricing system, problem of management, exploitation by milkmen, lack of veterinary services etc.

References

1. District Statistical Magazine, 2013.
2. Gangasagar, P.T. and Karanjkar, L.M. (2009) "Constraints in Adopting Animal Husbandry Practices by the Dairy Farmers in the Marathwada Region of Maharashtra" *Veterinary World*, Vol. 2, No.9, September, pp. 347-349.
3. Himachal Pradesh Development Report, Planning Commission, Government of India, 1997.
4. Karmakar, K.G. and Banerjee, G.D. (2006), "*Opportunities and Challenges in the Indian Dairy Industry*" Technical Digest, Issue 9, pp. 24-27
5. Khan, N. et. al (2009), "Livestock Husbandary, Rural Workforce and Employment Generation: A Case Study" *The Geograoher*, Vol. 56, No. 2, July, pp. 77-87.
6. Kumar, S.S. et al. (2012) "*Strategies for sustainable Dairy farming in India: A Review*" *Research Journal of Recent Sciences*, , Vol. 2, pp. 42-44.
7. Kumar, R. and Prabhakar, R.K. (2013) "Opportunities and Challenges in Indian Dairy Industry Supply Chain: A Literature Review" *International Journal of Logistics and Supply Chain Management Perspectives*, Vol.2, No.4, October-December, pp. 791-800.
8. Kurien, V. (2000) "*India's Milk Revolution*" *NFI Bulletin*, a Bulletin of Nutrition Foundation of India, Vol. 21, No. 1, pp. 1-5.
9. Mishra, P.K. and Shekhar, B.K. (2011) "*Impact of Risks and Uncertainties on Supply Chain: A Dairy Industry perspective*" *Journal of Management research*, Vol. Vol.3 No. 2, E11, pp. 1-18.
10. Mathur, B.N. (2000), "Current Problems and Challenges Confronting the Dairy Industry in India" *Asian-Aus. J. Anim.Sci.* July, p.p. 447-452.
11. Patil, A.P. (2012) "*Constraints Faced by in Nagpur District while Adopting Animal Management Practices*" *Veterinary World*, Vol. 2 (3) 111-112.
12. Patil, A. et.al. (2009) "Constraints Faced by the Dairy Farmers in Nagpur District while Adopting Animal Management Practices" *Veterinary World*, Vol.2(3), pp. 111-112.
13. Candler, W and Kumar, N. (1998) "*India: The Dairy Revolution*" *World Bank Operations Department*, The World Bank, Washington D.C.
14. Raut K.C. et al. (2002), "*Disparities in Livestock Development in India*" *Journal of Ind. Soc.Ag. Statistics*, Vol. 55(1), pp. 108-115.
15. Reddy. B.P. (2010) "*Growth and trend Discerning Indian Dairy Industry*" *Asia-Pacific Journal of Social Sciences*, July-December, Vol. II (2), pp. 105-125.
16. www.nddb.org\
17. www.dahd.org.
18. Yadav, M.P. (20012) "*Livestock Production and Improvement in India: Problems and Opportunities in the Context of Global Scenario*" *Third RUFORUM Biennial Meeting*, September, Entebbe, Uganda, pp. 1719-1729.