

ROLE OF PRIMARY MILK COOPERATIVES IN RURAL DEVELOPMENT IN INDIA: A CASE STUDY OF DAIRY COOPERATIVES IN SHIKARIPUR TALUK

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Abstract

Dairy cooperatives play a vital role in achieving and strengthening the sustainability of rural people and they are positively influencing improvement of villages in India. This paper highlights the role of dairy industry in India's rural economy. It examines the contribution of dairy cooperatives to rural economy. It is a case study of Three villages situated in Shikaripur Taluka of Shivamogga District in Karnataka. It tries to assess the contribution of selected three primary milk cooperatives in the rural development of the villages. The study comprises the analysis of primary data as well as secondary data related to demography of the sample, change in income, and change in standard of living of the farmers. The results put forth the contribution of primary milk cooperatives in this development in terms of upliftment of poor people, increase in income level.

Key Words: Primary Milk Cooperatives, Upliftment of Poor, Rural Development, Income level.

Introduction

Majority of the population of India is dependent on agriculture on one hand, agriculture is not profitable, it is a big challenge before Indian economy on the other hand. In this context, transferring people from farm employment to non-farm employment should be priority along with providing opportunities to the poor to excel themselves by own economic activity appropriate to their skill or even after improving their skill providing them training. (Dr.Shrikrishna S Mahajan, 2012). Dairying has become an important supplementary source of income for millions of rural families and it plays an important role in providing employment and income generation. Cooperatives generate sustainable employment and development most suited to reduce poverty and identifying economic opportunities to the members, empowering the disadvantaged sections, providing security and converting individual risks into collective risks by generating income. Cooperatives promote gender equality by providing opportunities to women in local economies and empowering them to take leadership roles in decision making. Almost all regions of India are suitable for setting up dairy farming business, India has vast resources of livestock, which play an important role in the national economy and also in the socio economic development of millions of rural households. With the uncertainty of the agriculture in respect to rain and crop production. Dairy cooperatives become major source of income for small and marginal farmers, they provide assured market for milk and fair price depend upon the quality of milk. Demand for milk increased due to increase in population, change

in life style of the people, raising income level of people , food habits , awareness about the nutritional value of milk and export opportunities. Therefore, the Government has made efforts to accelerate systematic promotion of dairy cooperatives through financial and policy support.

Recognizing the importance of dairy farming in its substantial contribution to the agriculture economy and to the livelihoods of poor/rural population, high priority is attached in several locations strengthening the milk marketing infrastructure, veterinary services for breed improvement and health care, extension support for capacity. International Journal of building of farmers, developing entrepreneurship, technical skills and knowledge on scientific dairy farming practices, etc. several programmes have been launched from time to time by State/Central Governments for promoting the sector (Sathish Belhekar, 2016). The government adopted the successful model and set up the National Dairy Development Board (NDDB) in 1965 which prepared a blueprint for a milk revolution across the country known as Operation Flood, this programme began in 1970 and was implemented across the country. It was also one of the largest rural development programmes in the world which ran for 26 years and helped India to emerge as the world's largest milk producer in 2003-04 with a record output of 88.1million tonnes. (Dr.A.Sailam, 2011). Indian government has made efforts to accelerate systematic promotion of dairy cooperatives (DCs) through financial and policy support. In 2017, 16.3 million dairy farmers (about 20% of total dairy farmers) with about 48% women members were associated with 180,000 dairy cooperative societies (DCSs) in India, which procured an average of 42.8 million kg of milk per day and sold 33.1 million litres of liquid milk per day (NDDB 2017). (Sudan, 2018).

Dairying has broader social and economic dimensions,wherein about 70 million rural households are engaged in dairying and contributes 26% income of the poorest households and 12% of rural income in 2017 (NDDB 2017) . With increasing uncertainty in rainfall and its adverse effect on crop production, dairying is increasingly becoming a major source of income to small and marginal farmers. In India, milk production has increased at 4.8% compound annual growth rate (CAGR), reaching 163.7 million metric tonnes (MMT) in 2016-17 from 155.5 MMT in 2015-16. The NDDB's initiatives have improved the livelihood of dairy farmers, empowered women dairy farmers, improved operations of Cooperative Milk Unions (CMUs) and increased income of dairy farmers. Financial inclusion of producer members of village Dairy Cooperative Societies (DCSs) was also encouraged by opening their individual bank accounts. (Sudan, Role of Dairy Cooperatives in Achieving the Economic Dimention of the SDGs, 2018) . India ranks first in milk production, accounting for 19.97 per cent of world production (828 million tonnes), achieving an annual output of 165.4 million tonnes during 2016-17 as compared to 137.69 million tons during 2013-14 recording a growth of 6.26 per cent (Anonymous, 2017). India's livestock sector is one of the largest in the world with a holding of 11 per cent of world livestock population. India ranks first in respect of buffalo population, contributing 56.70 per cent to the world's buffalo population and second rank in respect of cattle population, contributing 12.50 per cent to the world's cattle population (Anonymous, 2017) (Vinayak patil, 2019). In 2018, The Department of Animal Husbandry, Dairying and Fisheries (DAHD&F), Ministry of Agriculture and Farmers Welfare has prepared a National Action Plan (NAP) which covers the existing coverage of milk potential villages, farmer members, farmers income, growth of milk

production, milk procurement, and existing milk chilling and processing infrastructure. Milk production and productivity were enhanced by ensuring the availability of veterinary services such as artificial insemination, cattle feeds supply and farmer education. (Action plan, 2018).

The Dairy cooperatives of Karnataka have played an important role in the expansion of milk and dairy production in India Karnataka with milk production of 4.10 metric tons is the 11th largest milk producing state, constituting about 5 per cent of the country's total milk production. Further, Karnataka ranks 3rd in India in the procurement of milk by the Milk Producers' Co-operative Societies (MPCSs). Functions throughout the year in two shifts and helps the farmers to produce more milk. In Karnataka there is 1,33,00000 house holds seeking employment as per 2011 censuses in this 60% of households got the employment directly and indirectly in this connection milk cooperatives play a significant role in proving supplement income and employment (Mr.Sreenivasaih.K, 2016).

Growth of Milk Cooperatives in India

Table 1 shows growth of Milk Production of Indian Dairy during past years. The National Dairy Development Board initiatives have improved the operations of the Cooperative milk unions.

Table 1
Annual Milk Production and per capita availability of milk in India

Year	Production of Milk (Million Tons)	Per capita availability of milk(G/day)
2014-15	146.3	322
2015-16	155.5	337
2016-17	165.4	355
2017-18	176.3	375
2018-19	187.7	394

Source: Animal Husbandry Statistics, DAHD&F,GOI

Production of milk in India is increasing the growth rate of Indian dairy industry during previous years has been impressive, at more than 5% per annum. It is also observed that per

capita availability of milk is also improved, various schemes introduced by the Government are effective and improved performance of Dairy cooperatives..

Karnataka has large network of dairy cooperatives and Karnataka Milk Federation is the largest cooperative dairy federation in South India, owned and managed by milk producers of Karnataka. KMF has over 2.39 million milk producers in over 15,223 dairy cooperative societies at village level, functioning under 14 District Cooperative Milk Unions in the Karnataka state .The Karnataka Milk Federation is the second largest dairy co-operative in India, the KMF has an economic and political significance. It brings together more than 18 lakh milk producers from different parts of Karnataka The increase in procurement, sources in the KMF say, began after the State government announced a financial incentive of ₹2 a litre for farmers in September 2008. (KMF turnover , 2018-19)(KMF website)

Table 2

Total Annual Turn over of KMF and Unions

Year	Annual Turn over
2015-16	11,779 crores
2016-17	13,133 crores
2017-18	13,550 crores
2018-19	15,500 crores

Source: KMF website

Karnataka produced 6.34 million tonnes of milk in 2015-16,with an annual turnover of about Rs 155,000 crores in 2018-19. Between 2017-18 and 2018-19, the annual turnover increased by almost 2,000 crores. As the federation's turnover increased, so did their payment to farmers. When farmers were receiving a daily payment of Rs 14.62 crores in 2015-16, by the year 2018-19, the KMF's daily payment to farmers increased to Rs 18.28 crores.

Statement of the problem

In India majority of the population is depend upon agriculture for their livelihood and most of them are residing in rural areas, as the agriculrure in India is mainly depend on monsoon and traditional system of farming , agriculture is not profitable , sometime farmers will not get accurate price for their produce and lack of warehouse facilities to store the products, in this situation dairy business is a supplementary source of income able to meet their livelihood and plays a vital role in solving financial problems by increasing their income level. Even though dairy farming is increasing income level of farmers they are unable to conduct dairy activities in large scale due to financial and investment constraints , due to lack of awareness, traditional

methods of maintenance of animals and superstitious belief of the farmers leads to many diseases in animals. By keeping all these things in mind the study has been undertaken to assess the farmers need to create awareness about available facilities from the Dairy cooperatives, Department of Animal Husbandary, Banking and Insurance companies, so study has been conducted taking Shikaripur taluk as a case study.

Need of the Study

Dairy farming plays a vital role in rural development as a supplementary source of livelihood to the majority of the farmers, So this study is conducted to analyse contribution of dairy farming to the rural people and economy, also tries to find out the role of cooperatives in the socio economic life of the farmers and tries to analyse the available facilities.

Review of literature

Many scholars have attempted to study the impact of milk cooperatives on milk production and impact of milk cooperatives on rural development is another aspect has been covered by few researchers. Koli (1996) in a study of Gokul Cooperative Dairy in Kolhapur District of Maharashtra found that the cooperative had played an important role in securing fair price to milk producers, in providing various inputs and service to them and in increasing rural development of co-operatives across various sectors in India. Management of milk collection, procurement, processing, marketing and other similar activities for milk and milk products under District Cooperatives would be an economic viable proposition. Establishment of milk producers cooperative societies in rural areas had positive impact on marketable surplus of milk (Singh and Rai 1998) and provided more employment to young milk producers (Kakade and Bagade 2001). Sing & Pundir (2002:32) come to the conclusion by detailed review of literature on impact of dairy cooperatives on rural development that “despite certain weaknesses and failures, the Anand Pattern milk cooperatives have had, by and large, a positive impact on milk production, producer price of milk, and socio-economic development of villages under their jurisdiction. At the national level, Operation Flood has enabled India to attain self-sufficiency in milk and milk products and created a strong foundation for future growth and development of India’s dairy industry”. The livestock plays important role in drought prone area particularly dairying some of the studies have shown that about 65 per cent of the rural poor have livestock for income and drought insurance in semi-arid tropics of India (Walker and Rayan, 1990).

Objectives of the Study:

The specific objectives of the present study are as follows:

1. To highlight the Role of Dairy industry in India’s rural economy.
2. To examine the contribution of Dairy cooperatives to rural development.
3. To study the villages situated in Shikaripur Taluka of Shimoga District in Karnataka State to assess the contribution of selected three primary milk producers cooperative societies.

Methodology and Data Source.

The present study is based on both primary data and secondary data. In the back-drop of pre-stated objective, primary data is collected through field survey and interviews and the secondary data is collected from the reports of KMF annual reports and audited Accounts of the Milk Cooperatives, Reports of Department of Animal Husbandry and Websites. There fore 3 milk cooperatives of villages situated in Shikaripur Taluka of Shimoga District karnataka State have been selected and a total of 40 milk producers from 3 villages were chosen randomly, The datas were scrutinized, tabulated and analysed, the study comprises the analysis of primary data related to demography of the sample, change in income, change in education and change in standard of living of the farmers.

Limitations of the study

The study has certain limitations, the study confined to Shikaripur taluk of Shimoga District only, since the researcher hails from the same area and analysis is made on the basis of response given by milk producers, some respondents may not give accurate data due to lack of knowledge of research.

Profile of the study area

Shikaripur taluk is one of the important fertile area of the Shivamogga district and it is semi malenadu, agriculture is the main occupation of the people, Dairy industry is an addition to the economy of Shikaripur, after the establishment of Shimoga Milk Union LTD., (SHIMUL) affiliated to Karnataka Milk Federation, KMF industry is able to solve the partial and undisguised unemployment problem of the poeple, There are number of Milk producers Co-operative Societies are working in Shikaripur Taluk and contributing to the economic develoment, whereas three of them have been selected for present study.

Table 3 shows the profile of the Milk Cooperatives selected for study.

Table 3
Profile of Milk Co-operative Societies

Serial Number	Particulars	Milk Producers Cooperative Society Ltd, huliginakoppa	Milk Producers Cooperative Society Ltd, Muthagi	Milk Producers Women Cooperative Society Ltd, Sheerihalli
1.	Year of establishment	1991-92	1994-95	2005-06

2.	Share holders	224	154	105
3.	Share capital	Rs.1,11,100	Rs.57,710	63,100
4.	Working capital	Rs. 27,89,952	Rs. 15,44,164	21,87,000
5.	Annual turn over	Rs 1,08,48,307	Rs 58,69,214	72,14,000
6.	Reserve Fund	Rs. 6,60,861	Rs. 1,16,433	Rs.5,29,355
7.	Net profit	Rs. 2,74,756	Rs. 5,15,181	Rs.1,74,516
8.	Collection of milk per day	800 litres	600 to 700 litres	700 to 800 litres
9.	Computerised system	Yes	Yes	Yes
10	Audit Grade	B	B	B

Source: Audited books of the Milk Cooperatives societies of chosen villages.

The profile of the respective milk cooperative has been demonstrated. Milk producers Co-operative Society Huluginakoppa village Shikaripur taluk, the village comprises 300 houses, where as 814 cows and buffalos maintained, numbers of share holders are 224, nearly 75% of the people are engaged in milk business, The net profit earned by the unit in the year 2018-19 is Rs.2,74,756. There are three workers working in this unit. One is Secretary, another one milk tester and one is working as assistant, majority of the milk is transferred to KMF. This unit also provides the cattle-feed and animal-health services to the shareholders and guidance for the maintenance of animals, the villages consists of anganavadi ,primary as well as high school and a PU College.

Milk producers Co-operative Society Muthhagi village Shikaripur taluk. The village comprises 252 houses, where as 450 cows and buffalos are maintained, the total numbers of share holders are 154, more than 60% of the people are engaged in milk business. The net profit earned in the year 2018-19 is Rs.1,74,516. There are only two worker working in this unit one is Secretary and an assistant, This unit also provides cattle feed, animal health services and guidance for the maintenance of animals to the shareholders, the village consists of anganavadi as well as primary school.

Milk Producers Women Co-operative Society Sheerihalli village Shikaripur taluk, The village comprises 143 houses, where as 605 cows and buffalos are maintained, The total numbers of share holders are 105, nearly 73% of the people are engaged in milk business. The net profit earned by this unit in the year 2018-19 is 1,74,516. There are two workers working in the unit. One is Secretary and another one is an assistant, majority of the milk is transferd to KMF, this unit also provides cattle feed and animal health services to the shareholders and guidance for the maintenance of animals, the villages consists of anganavadi as well as primary school.

Analysis of Contribution of Cooperatives to Rural Development:

The analysis of data collected from the members of primary milk cooperatives situated in villages have been presented in this section with considering the factors such as age, education, religion, category, family size, land-holding and milk-income, contribution of milk cooperatives in terms of increase in income, inter generational change in education and their standard of living.

Table 4 shows the distribution of milk producers on the basis of age, education, family size, source of income, category and land holdings.

Table 4
Demographic Profile of Sample

Serial Number	Age	Number of Milk producers	Percentage
1	Below 30	00	00
2	31 to 40	12	30
3	41 to 50	20	50
4	51 above	08	20
	Total	40	100
On the basis of Education			
1	Below SSLC	22	55
2	SSLC to PUC	16	40
3	Graduation	02	05
	Total	40	100
On the basis of Family size			

1	2 members	02	5
2	3 to 4 members	22	55
3	5 and more	16	40
	Total	40	100
On the basis of Source of Income			
1	Agriculture	28	70
2	Employment	04	10
3	Business	06	15
4	Others	02	05
	Total	40	100
On basis of category			
1	S C	06	15
2	ST	02	05
3	OBC	32	80
Land holdings			
1	Land less	02	05
2	Below 2 acre	28	70
3	2 to 5 acre	10	25

Source: Survey data

40 milk producers have been selected for study purpose from three villages of Shikaripur Taluk reveals that the sample consists of members of primary milk cooperatives, has been analyzed here by demonstrating demographic profile. The maximum sample (50%) is in the age group of 41 years to 50 years, 30% in the age group of 31 to 40 years age and remaining 20% belongs to above 50 years. As for as education is concerned 55% are below SSLC, 40% are studied up to PUC and around 5% are studied graduation. The family size of sample represents only 5% are 2 family members, 55% of them having more than 3 family members, 40% having more than 5 members. The social stratification of sample comprises 80% belongs to OBC (lingayath and

others) 15% SC and 5% ST. As far as land-holding is concerned 5% are landless, 70% of them have a land below 2 acre and 25% of them have up to 5 acre. Out of sample 70% respondent's families are dependent on agriculture as an occupation with considering milk income, out of them maximum respondents are getting Rs.501 to Rs.6000 per week. The sample is covering only Hindu families.

Summary of findings

1. In 78% households, women are taking care of animal-husbandry.
2. 15% families have been shifted from BPL to APL due to participation in dairy development process.
3. 100% members are agreed that their income has increased due to their milk business with cooperatives.
4. 70% of them agreed that their economic condition and standard of living has increased owing to their milk business with cooperatives.
5. 100% respondents agreed that fixed market is available for milk owing to milk cooperatives.
6. 62% respondents agreed that they have purchased home appliances because of their milk business with cooperatives.
7. 72% people agreed that the development of village is due to milk cooperatives, 80% people agreed that the dairy units can play vital role in rural development.
8. 60% people told that their standard of living has been increased due to milk business with cooperatives.
9. 50 % people told that they are sending their children to taluka place or district for studies and they are able to meet their education expenditure.
10. 70% of respondents agreed that with the effect of milk business with the cooperative opening Accounts in the banks, aware of banking facilities, and making use of these facilities.
11. Milk cooperatives and department of animal husbandry are providing health services for maintainance of livestock such as free health services, medicines, artificial insemination, cattle feed, free health camps, vaccination, programmes etc.
12. Now the farmers are aware and utilising Insurance facilities also.

10. Conclusion:

Cooperative societies play a vital role in the development of villages, they contribute positively and significantly to the income and employment of rural farming households, especially the marginal and poor farmers, thereby providing them livelihoods and sustenance. Dairying helps in equitable distribution of income and employment among the rural farming households, thereby reducing the disparity in holding of resources by the rural communities, So positive policy making and democracy for development is welcome in the form of cooperatives, by which eradication of poverty might be possible. Dairying helps to boost the nutritional level and hence the food security of the rural farming households. The primary milk cooperatives in

Shikaripur taluk of Shimoga district have proved that if the small are networked they will be both beautiful and sustainable. For the Rural, Downtrodden, Poorest of the Poor, Dairying is the Reliable and Assured Income Generating Activity.

Bibliography

Action plan. (2018). Retrieved from <http://AHVS.kar.in>.

Dr.A.Sailam. (2011). *"Non farm sector and rural development"*. Nagercoil , India: Novel corporation ,Chennai India.

Dr.Shrikrishna S Mahajan, S. P. (2012). "Role of Primary Milk Cooperatives in Rural Development in India " A case study of Kalanakwadi Village (Kolhapur District). *"New challenges before the Indian Dairy Industry"* .

KMF turnover . (2018-19). Retrieved from <https://www.kmfhandini.coop>.

Mr.Sreenivasaih.K, D. C. (2016). "Role of Milk Cooperatives in Village Development of Karnataka State". *IOSR Journal of Business and Management* , 23-29.

Sathish Belhekar, S. D. (2016). Role of Dairy Industry in Rural Development in India. *Indian Journal of Research , PARIPEX* .

Sudan, F. K. (2018). Role of Dairy Cooperatives in Achieving the Economic Dimention of the SDGs. *UNTFSSSE Draft paper "Implimentating the Sustainable Development Goals What Role for Social and Soidarity Economy* .

Sudan, F. K. (2018). Role of Dairy Cooperativesin Achieving the Economic Dimentons of the SDGs. *UNTFSSSE Call for paper-- 2018 "Implementing the Sustainable Development Goals : What Role for Social and Solidarity Economy?"*

Vinayak patil, B. S. (2019). Comparitive economics of rural and periurban dairy farming in Kalaburgi District of Karnataka. *Journal of Applied and Natural Science* , 762.

Source: Panchayat Samiti and Office of Animal Husbandry Department of Shikaripur Taluk.