International Journal of
Social Impact

AN PEER-REVIEWED JOURNAL

A Study on Socio-Economic Upliftment Through Dairy Cooperatives: Special Reference to Anand and Kheda District

Bijal K. Barot[1]*, Dr. Bincy Bose[2]

ABSTRACT

The study discusses the role of dairy cooperatives in socio-economic upliftment of farmers in Anand and Kheda districts of Gujarat. The research aimed to evaluate the role and impact of dairy cooperatives on the socio-economic upliftment of milk producer members in these districts. Both primary as well as secondary data were used for the analysis. Multi-stage random sampling technique was employed to select the respondents. In total, 120 dairy farmers (60-60) were selected from 12 villages of Anand and Kheda district. The study found that income, employment and living standards of cooperative members improved substantially after joining dairy cooperatives. Statistical tests confirmed a significant positive impact of cooperatives on members' economic well-being. The study suggests various measures to further enhance the role of cooperatives like providing training to members, facilitating access to loans and subsidies, improving milk procurement infrastructure, and diversifying products.

Dairy cooperatives have played an important role in the socio-economic upliftment of farmers in Anand and Kheda districts. The cooperative movement, which began in 1946 with the founding of the Kaira District Cooperative Milk Producers Union Ltd (KDCMPUL), revolutionized the lives of small and marginal farmers in the region.

The KDCMPUL, popularly known as Amul, was formed to counter exploitation of farmers by private traders. It gave farmers greater control over the procurement and marketing of milk. By eliminating middlemen, the cooperative enabled farmers to get a major share of the profits. This led to a significant increase in the incomes of farmers and their standards of living.

Today, Amul is a highly successful brand and the KDCMPUL works with 3.6 million farmer members across Gujarat. The success of Amul spurred the growth of similar dairy cooperatives in Kheda district like the Baroda District Co-operative Milk Producers Union Ltd. These cooperatives have uplifted the socio-economic status of farmers through fair prices, access to markets, dividends and other benefits like health insurance and children's education.

The dairy cooperatives of Anand and Kheda demonstrate how grassroots organizations and empowerment of farmers can transform rural economies. By giving farmers greater control and

---

[1] Ph.D. Scholar, Department of Social Science, Sabarmati University, Ahmedabad
[2] Assistant Professor, Economics, Department of Social Science, Sabarmati University, Ahmedabad
*Responding Author

ownership over the means of production, these cooperatives have enabled socio-economic upliftment and prosperity.

REVIEW OF LITERATURE

➢ **V. M. Rao (1982**) In his research, he looked at the potential for Milk Cooperative Society to help small and marginal farmers become more profitable and employable. In summary, he stated that marginal and small farms contributed a bigger share of total farm income and jobs from animal production than did large farms.

➢ **A.K. Sharma and Kuber Ram (1991)** According to their study, only 18% of all households in the weaker sections borrowed money from various institutions. If more credit facilities, a suitable dairy extension, and guaranteed marketing programs are made available to this segment of the rural community, they will be able to improve their economy and produce the higher volume of marketed surplus milk that the dairy industry requires.

➢ **R.O. Olekar and Dr. A.S. Shiralashetti (2007)** According to their study, cooperative development and progress have fallen short of expectations. India's cooperatives have faced numerous difficulties under the WTO rules. In order to support the economic development of India as a whole and cooperative member in particular, everyone should fight against the WTO challenges by changing laws and policies that promote cooperative development.

OBJECTIVES

The present study aims to compare and analyse the role of dairy cooperatives in the socio-economic upliftment of members in Anand and Kheda district. The specific objectives are:

1. To examine the role of dairy cooperatives in the socio-economic upliftment of members in Anand and Kheda district.
2. to suggest suitable measures for improving the working and enhancing the role of dairy cooperatives in the socio-economic development of members.

HYPOTHESIS

For the purpose of this study, the following null hypothesis were framed:

1. H01: There is no significant difference in the income level of members before and after joining the dairy cooperatives.
2. H02: There is no significant difference in the employment generation of members before and after joining the dairy cooperatives.
3. H03: There is no significant difference in the living standard of members before and after joining the dairy cooperatives.
4. H04: There is no significance Relation in income levels and hours per week dedicate to dairy-related work

RESEARCH METHODOLOGY

The study employs an empirical research design using a survey method. oth primary as well as secondary data were used for the analysis. Multi-stage random sampling technique was employed to select the respondents. In total, 120 dairy farmers (60-60 members) were selected from 12 villages of Anand and Kheda district.

Data was collected using a pre-tested interview schedule. The interview schedule consisted of both open-ended and close-ended questions. The open-ended questions were included to get an in-depth understanding of the research problem. The close-ended questions were meant to quantify responses and facilitate statistical analysis.

The data obtained from the field survey was systematically compiled, tabulated and analysed. Various statistical tools like mean, standard deviation, t-test, regression, ANOVA, etc. were used to analyse the data. The t-test was used to find out whether there is a significant difference between Anand and Kheda district dairy farmers regarding socio-economic factors.

DATA ANALYSIS

H01: There is no significant difference in the income level of members before and after joining the dairy cooperatives

Independent t-test

District	N	Mean	Std. Deviation	t	Sig.
Before	120	16833.33	4283.063	10.27	.000
After	120	24423.70	3793.953		

The t-value of 10.27 is quite high, indicating a substantial difference in the income levels before and after joining the dairy cooperatives. The p-value is extremely low (0.000), well below the conventional significance level of 0.05. This suggests strong evidence to reject the null hypothesis.

The result of t-test provides significant evidence to reject the null hypothesis (H01). The findings indicate a statistically significant difference in the income levels of members before and after joining the dairy cooperatives in the specified districts. The substantial increase in mean income after cooperative participation suggests a positive impact on the economic well-being of the members. In short, the results show that joining dairy cooperatives had a significant positive impact on the income levels of the members.

H02: There is no significant difference in the employment generation of members before and after joining the dairy cooperatives.

District	N	Mean	Std. Deviation	t	Sig.
Before	120	1.93	1.133	6.36	.000
After	120	3.50	1.535		

The t-value of 6.36 is relatively high, indicating a significant difference in the employment generation before and after joining the dairy cooperatives. The p-value is very low (0.000), well below the conventional significance level of 0.05. This suggests strong evidence to reject the null hypothesis.

The result of t-test provides significant evidence to reject the null hypothesis (H02) for the Before district. The findings indicate a statistically significant difference in the employment generation of members before and after joining the dairy cooperatives. The increase in mean employment after cooperative participation suggests that members, on average, experienced a change in employment patterns.

H03: There is no significant difference in the living standard of members before and after joining the dairy cooperatives.

District	N	Mean	Std. Deviation	t	Sig.
Before	120	2.13	1.228	8.40	.000
After	120	4.02	1.228		

The t-value of 8.40 is relatively high, indicating a significant difference in the living standard before and after joining the dairy cooperatives for the Before district. the p-value is very low (0.000), well below the conventional significance level of 0.05. This suggests strong evidence to reject the null hypothesis.

The t-test result indicating that joining the cooperative had a significant impact on improving the living standards of its members.

H0:4 There is no significance Relation in income levels and hours per week dedicate to dairy-related work

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.920[a]	.846	.845	1945.080

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2451979155.802	1	2451979155.802	648.100	.000[b]
	Residual	446433686.990	118	3783336.330		
	Total	2898412842.792	119			

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6960.874	614.186		11.333	.000
	Hours	2680.866	105.306	.920	25.458	.000

➤ the result discusses a regression analysis performed to determine the relationship between income levels and hours worked per week on dairy-related work.
➤ The model summary shows that the regression model has an R value of .920, indicating a strong positive correlation. The R-squared value is .846, meaning that 84.6% of the variation in income can be explained by variation in hours worked.
➤ The ANOVA table shows that the regression model is statistically significant with a p-value of .000. The F-statistic of 648.1 also indicates a significant relationship.
➤ The coefficients table shows that for every 1 unit increase in hours worked, income increases by approximately 2680.9, after controlling for the intercept. The beta coefficient of .920 also indicates a strong positive standardized relationship between hours worked and income. Hence, null rejected.

FINDINGS

1. The study revealed that the income of the members of dairy cooperatives has increased considerably after joining the cooperatives. The increased income has improved the standard of living of the members. They could afford better food, clothing, shelter, and education for their children.
2. Dairy cooperatives in Anand and Kheda districts have played an important role in the socio-economic upliftment of farmers by giving them better prices, access to markets, and dividends.
3. The Amul cooperative started in 1946 and eliminated middlemen, enabling farmers to get a major share of profits and increase their incomes.
4. The study found that most members had long term membership of over 10 years in the cooperatives.
5. After joining cooperatives, 64-70% of members saw over 60% increase in income while 20-24% saw 40-60% increase. This indicates cooperatives significantly enhanced members' incomes.
6. Members' incomes and living standards considerably improved after joining cooperatives. They could afford better food, clothing, shelter and education for children.
7. The study used statistical tests like t-tests and regression analysis to analyze data and found that joining cooperatives had a significant positive impact on members' incomes, employment and living standards.

SUGGESTIONS

1. Cooperative members would benefit greatly from additional training in areas such as animal husbandry, fodder management, and cooperatives management. Regular training programs and workshops should be organized by the cooperatives to equip the members with the latest technologies and best practices in dairy farming. This would help them to improve productivity and returns.
2. Members require access to loans and subsidies to invest in activities such as purchasing high-yielding cattle breeds, constructing shelters, buying equipment, and transporting produce. The cooperatives should facilitate members to avail various government schemes and subsidies for dairy farmers. Cooperatives can also provide loans to members at low interest rates. This would encourage members to expand their operations.
3. Investments should be made to improve infrastructure for milk procurement, testing, processing, and transportation. More milk collection centers should be established to enable members living in remote areas to sell milk. Refrigerated vehicles should be used to transport raw milk to ensure quality. These initiatives would minimize loss and wastage of milk, allowing cooperatives to collect and market more milk.
4. Cooperatives should diversify into value-added dairy products such as butter, ghee, cheese, and yogurt. This would provide members with better prices and increase the profitability of cooperatives. Surplus milk can be effectively utilized for manufacturing products based on market demand. Product diversification also reduces dependence on a single product and stabilizes income for cooperatives and members.

CONCLUSION:

dairy cooperatives have the potential to significantly improve living standards and income levels of members. However, the scale of impact depends on factors like the cooperative's age, size, management, and member support services. When cooperatives are unable to fulfil members' needs or help them maximize the value from milk sales, the socio-economic benefits

are reduced. Overall, the study of Anand and Kheda districts provides valuable insights into how dairy cooperatives can better support and empower members through training, education, healthcare, and financial programs. Implementing targeted interventions may help address the developmental gaps that exist between districts.

REFERENCES:

1. V.M. Rao, "Farmers Benefit From a Modern Milk Cooperative Society", Indian Cooperative Review, July 1982, Vol.XX, No.1, pp.50-59.
2. A.K. Sharma and Kuber Ram, "Institutional Credit and its Impact on Dairy Enterprise of Weaker Section Households", Indian Cooperative Review, July 1991, Vol.XXIX, No.1, pp.23-30.
3. S. B. Kolte, "Women Empowerment – A Study of Hirkani Women's Multi State Dairy Cooperative", Journal of Commerce and Management Thought, July 2010, Vol.I, No.3, pp. 285–295
4. Rathod, N. and Ganga, D. 2019. SHG: a reliable expedient for socio-economic empowerment of tribal women farmers in Gujarat. Gujarat J. Exten. Edu., 30(1): 27-33.
5. Shaikh, J.I., Tekale, V.S. and Kale, R.A. 2013. Constraints experienced by dairy farmers in management of dairy enterprise. Agric. Update, 8(4): 623-625.
6. Prajapati, M.C. 2021. Socio-economic Empowerment of Dairy Farmers through Dairy Cooperatives with Special Reference to Mehsana District. Int. J. Soc. Sci., 10(02): 187-190.