

Role and Efficacy of Dairy Co-operatives With Specific Reference to Dairy Farmers of Bilaspur District in Chhattisgarh State

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Abstract

An associated activity with agriculture, dairy farming provides agricultural households in India with a consistent income throughout the year. Dairy farming is regarded as a significant productive activity since milk is the second-largest agricultural commodity contributing to Gross Value Added (GVA), behind rice. Notwithstanding this, India's dairy business still faces a number of challenges since it is dispersed over the whole nation in many micro-units and is very chaotic. The cooperative approach and active operation of dairy cooperatives under milk-producing unions have greatly aided the Indian dairy industry's transformation, which has fueled its rapid expansion to face the difficulties ahead. It is also evident that the dairy industry promotes women's entrepreneurship. The fields of milk production, processing, and marketing research, however, require further attention. In order to determine their contribution to milk production, revenue, and job opportunities, we evaluated the achievements of the member and non-member divisions of the milk producers in this study.

Keywords - Dairy Cooperative Societies, Production, income, employment, Producers' Union

Introduction

The dairy industry, which is the second-largest agricultural product that generates Gross Value Added (GVA), is one of the important industries in Indian agriculture. The only other major crop after rice is dairy, which gives farmers and their families a steady stream of income during the year. Nearly 167 million metric tonnes of milk are produced worldwide, and India produces

20% of that amount. India's milk output is expanding at a pace of 4.5%, compared to the global average of 1.8%. India provides 1% of this total, or 1.8%. The greatest crop in India is milk, which is valued 6.5 lakh crore, more than rice and wheat combined. The Government of India and the United Nations' World Food Program collaborated to begin the cooperative movement, which is also known as "operation flood," in July 1970. In order to assist the modernisation of the dairy industry, Operation Flood and dairy cooperatives became the greatest rural employment creation programs in India. The dairy industry's recent modernisation has allowed it not only to fulfill the nation's need for milk and milk products, but also to take advantage of possibilities on the worldwide market and create more jobs for women and young people.

Notwithstanding these successes, the Indian dairy business is incredibly chaotic, with countless little and micro-units dispersed all throughout the nation. Although the sector is undergoing changes that have the potential to completely overhaul the dairy farming industry, more effort is still required in the fields of milk production, processing, and marketing research. The district milk producers' union is owned by the district dairy co-operative societies (DCS), which are in turn owned by farmer members under the three-tier arrangement used by the dairy cooperative movement in India. Finally, the federation is jointly owned at the national level by the district unions. Chhattisgarh Cooperative Dairy Federation is the name of the organization in the state of Chhattisgarh. The expansion of the dairy industry is being supported in part by the cooperative movements, which have had a good influence on milk producers in terms of things like income, employment, and milk output. In order to determine how much they contributed to milk production, revenue, and employment, we compared the performance of the member and non-member divisions of the dairy industry in the current investigation.

Review of literature

According to Popker et al. (2014), a sizable portion of this population of cattle is kept and raised in rural regions. In the last decade of the nineteenth century, the co-operative movement for milk was established in India with the dual goals of defending farmers from the grasp of private money lenders and enhancing their economic standing. Out of 14 societies with 1027 members, 90 milk-supplying members from seven dairy primary societies were taken into account to evaluate the socioeconomic position of milk producers. Schedule questionnaires were used to gather primary data, and only milk-supplying members were chosen at random for the survey's purposes. The findings indicate that the majority of members earn between Rs. 5000 and Rs. 10,000 per month, with 55.6% of them falling within that range. Nearly 77.8%

of respondents, according to the poll, said they were satisfied with their dairy company, but 60% said the next generation of their family shouldn't go on running it.

The study by Kumawat et al. (2014) aims to show that a Holstein Friesian cow produced more milk than regional animals did. Approximately 45% of the total dairy animals were Holstein Friesian cows, and 30% were Jersey cows. The anticipated annual maintenance costs were Rs. 57075.81 for each animal and Rs. 1769350.03 for each dairy farm. On sample dairy farms, the cost of feed and fodder accounted for the largest portion of the overall maintenance cost, or 59.52 percent, followed by labor costs (33.95 percent), fixed costs (25.31 percent), and other costs (1.15 percent). Average net profit per litre of milk was Rs. 8.28, while average cost of production per litre of milk was Rs. 14.27. At the aggregate level, the input-output ratio was calculated to be 1.58.

Despite having the greatest cattle population in Africa, the dairy industry in Ethiopia has not evolved to the level that is expected, according to Mihret et al. (2017). The cow breeds utilized in conventional dairy production techniques have weak genetic potential and produce little milk each lactation. Additionally, the nation's milk marketing system is mostly informal, milk consumption is low even by African standards, and the quality of the inputs used in dairy production, including as diets, veterinarian services, and AI services, is subpar. Additionally, the quality of milk and milk products falls short of the norm on a global scale. Numerous issues that fall under the categories of technological, institutional, policy, and socio-economic provide challenges to the industry. However, despite its relatively small contribution to the national economy (GDP), the industry still has a significant impact on income creation, household nutrition, and

The effect of Self Help Group activities on the socioeconomic position of dairy farmers in Assam's Kamrup area is discussed by Rahman et al. in their 2017 study. To gather data, 100 members and 100 nonmembers from the nearby villages were randomly chosen from 20 dairy Self Help Groups that had been chosen at random. Financial institutions gave loans to members while refusing to give loans to non-members. Similar to this, SHG members received instruction in dairy farming while non-members waited until the time of the probe to receive any training. Compared to non-members, SHG members' cows had higher milk production. Less media attention was given to respondents, both members and nonmembers. The socioeconomic status of SHG members was improved through the empowerment of members

through group activities such meetings, trainings, interactions with change agents, and casual discussions with other members.

According to Upadhyay et al. (2018), dairy farming is a lucrative industry, but it is possible to increase profits if you join a cooperative group, where you may benefit from things like higher pricing, better veterinarian care, and simple loan options. As a result, dairy farming is demonstrated to be a reliable source of income and may be considered a means of reducing unemployment and poverty. It is also very helpful for women since they may earn extra money for family expenses, which raises their level of life and helps the financial situation of their home. Numerous recommendations have been made to the government and cooperative societies regarding the training of dairy farmers, the development of the market, and the need to provide facilities to the farmers for the development of the dairy industry. Dairy farmers were experiencing difficulties with the market, prices, and technology, which helped them run their businesses more effectively and inspired others to join the dairy industry.

According to Kord (2020), increased wealth, urbanization, health consciousness, and awareness, as well as a decline in rural employment, particularly in crop farming, have all contributed to an increase in dairy farming in emerging nations like India. According to a study, the majority of rural families in Aligarh district's villages are made up of dairy farmers. Both male and female household members of farmers exercise authority over agriculture in general and livestock husbandry in particular. One of the key measures of human growth is education level. The revenue and size of the landholding of dairy producers are indicators of their economic standing. One of the key factors influencing the growth of dairy farming in the research region is farmer income or money for investment. The households who practice dairy farming prioritize a variety of activities, including agriculture (crop farming), dairy farming, agricultural labor, and business.

Research Methodology

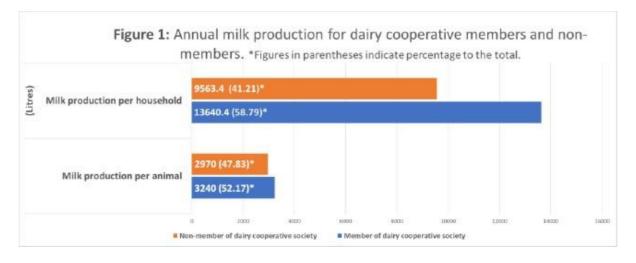
Twelve dairy cooperative societies were chosen for the present investigation, and 180 respondents were picked from these cooperatives using the proportionate probability approach. Bilaspur was the final selection. An equal number of 180 non-members were also chosen in order to compare the members with the non-members. 360 respondents' primary data were gathered using a thorough questionnaire created especially for the task. To make data analysis and interpretation easier, the acquired data were methodically assembled and summarized.

Results and Analysis

To examine the effect of the dairy cooperative society on milk production, revenue, and employment, the performance of members and non-members was compared. The information is displayed and examined below.

a) Annual milk output for both members and non-members of dairy cooperatives

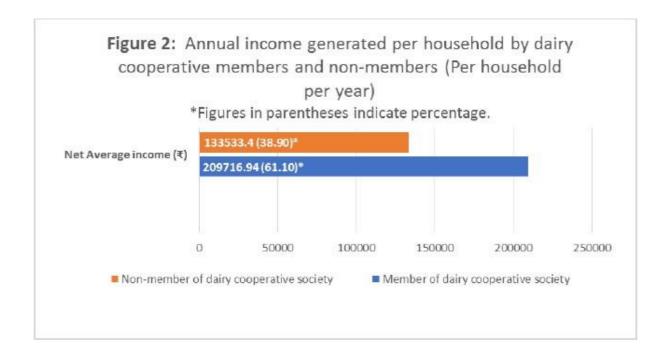
Both research participants and non-participants were shown to have either cows, buffaloes, or both. According to the data gathered, each household possessed an average of 4.21 and 3.22 animals, respectively, for members and non-members. In comparison to non-members, cooperative society members produced around 270 liters more milk per cow per year, or 8.33% more. Similar to this, the amount of milk produced by each home was around 29.89% more than that of a non-member (Figure 1).



The efficiency of the member and non-member sectors of the milk producers was contrasted, and the results showed that the dairy cooperative society's influence was substantial in helping members produce more milk than non-members.

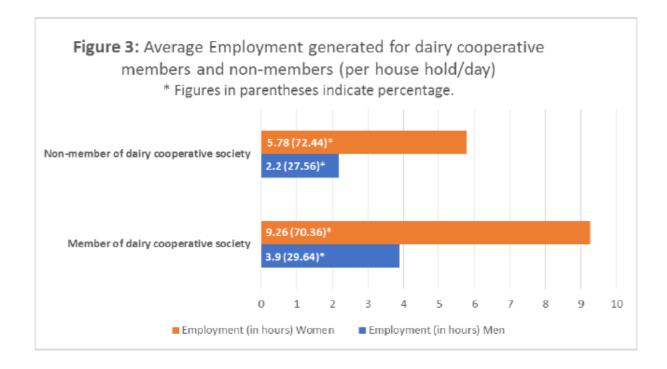
b) The amount of money that dairy cooperative members and non-members earn annually per home (per household)

The data reveals that the revenue produced per family in a year by members of the dairy cooperative society was about 2,09,716.94, while the comparable amount was approximately 1,33,533.40 for non-members. According to the data, members' earnings are 36.33% higher than those of non-members.



c) Average Employment Produced (per Household/Day) for Dairy Cooperative Members and Non-Members

Below are the findings in relation to employment generation for both member and non-member groups. The employment related to dairy cooperative society members was determined to be 3.90 hours for males and 9.26 hours for women (in terms of average man-hours created per day per family). In members of the dairy cooperative society, a total of 13.16 hours of employment were produced per home per day. On the other hand, non-members revealed that the average number of man-hours produced each day per home was 2.20 for males and 5.78 for women. In the case of non-members, a total of 7.98 hours of work were produced per home each day (Figure 3).



According to the research, members of the dairy cooperative society have 39.36% more employment opportunities than non-dairy cooperative members, which is important information on the influence of the society on the creation of jobs. Additionally, the members maintain the milk cows for a total of 13.16 hours each day, which includes feeding, milking, cleaning, and other tasks. Women made up more than 70.36 percent of the time used by members overall compared to males, who made up 29.64 percent. In contrast, the non-member used just around 7.98 hours per day to carry out the different tasks, with women accounting for roughly 72.44% of the total time spent as opposed to males (27.56%).

Findings of the study

The findings of the present study demonstrate that, in comparison to non-members, the dairy cooperative society the subject of our investigation has made good and substantial contributions to the improvement of its members. In other words, we may claim that non-members did not enjoy the cooperative society's advantages to the same extent that members did.

We found that the member groups of the cooperative society demonstrated an increase in their average yearly milk production as well as an increase in the amount of revenue produced by each home and the number of job possibilities. The study's participant groups had a significantly more even distribution of income. This research demonstrates that the group of

members has 36.33% more income, but the uniformity of this money's distribution is the second factor.

Additionally, women made up about 70.36% and 72.44% of the total time spent on milk production activities for members and non-members, respectively. However, since the member's group put in more work hours, it was observed that the member's group's women had higher levels of self-confidence due to their ability to generate independent income, which raised their social self-esteem. This demonstrates how the dairy cooperative society is crucial in enhancing the social self-esteem of the women who participate via work.

Technology is being used by dairy as a tool for district- and grassroots-level growth and development that is more rapid. The management of Dairy made a further risky step in bringing about a paradigm change in technology with the deployment of Automatic Milk Collection Station and Bulk Milk Coolers at the village level in response to the larger rise in membership and milk procurement. One of the newest pieces of technical equipment employed in the Milk Procurement System is the Bulk Milk Cooler, or BMC for short.

By offering training, one such area where the competence has to be increased so that the advantages are successfully passed on to all the members, the company may further raise the levels of output, revenue, and employment creation. For instance, improving the net returns in milk production may be achieved by teaching people to decrease input costs via efficient resource usage. If effective, this will boost member engagement and satisfaction, which should encourage members to devote themselves more fully to cooperative organizations.

Additionally, collaborations with regional banks will increase the funding required for the members to grow their dairy farms. This will provide constant yearly revenue and savings as well as enhance the output, income, and returns of each member farm. Profits may then be successfully used to build infrastructural facilities and create fixed assets. In order to increase earnings even more, emphasis should also be paid to product diversity, quality enhancement, and fixed cost reduction.

The company may gain by educating the public about the value and practicality of goods like tetra packs. The corporation may increase customer satisfaction by focusing on enhancing the home delivery system for milk and related items, which should lead to business development

and expansion.

Conclusion

Overall, it can be said that by registering the dispersed dairy units in the study region as members, the Dairy is playing a significant role in organizing them. They are successfully giving their members the technical assistance and feedback they need, as well as securing their support, to help them develop socially and economically. Additionally, the spread of information and technology via proper extension efforts will encourage more non-members to join dairy cooperatives right once so they can start benefiting.

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