

Impact of Cooperatives on Financial Inclusion and Livelihood in Rural Areas of Rajkot District, Gujarat

Dr. B. N. Patel¹, T. C. Tirthani²

¹District Registrar, Cooperation Department, Government of Gujarat

²Joint Registrar, Cooperation Department, Government of Gujarat

ABSTRACT:

This study investigates the impact of cooperatives on financial inclusion and livelihood enhancement in the rural areas of Rajkot District, Gujarat, India. Financial inclusion, defined as the accessibility and utilization of affordable financial services, is critical for economic advancement and poverty alleviation, especially in rural settings where a significant portion of the population resides. Concurrently, improved rural livelihoods, characterized by enhanced income streams and employment opportunities, are essential for sustainable development. Cooperatives, with their member-centric principles, are posited as transformative institutions capable of fostering both financial inclusion and improved livelihoods through the provision of tailored financial services, collective action, and community support systems. The study adopts a mixed-methods approach, combining quantitative and qualitative data from 155 cooperative members and 60 office bearers. Key findings indicate that cooperatives significantly contribute to increased income, better access to loans and credit, and improved market access for members. However, challenges such as lack of awareness about cooperative benefits, low profit margins, and a lack of financial resources for cooperatives persist. The research identifies a need for increased financial support, enhanced training programs, and improved governance and transparency to ensure the sustainability and broader impact of cooperatives. This localized examination in Rajkot district provides granular insights into the operational mechanisms and effectiveness of cooperatives in promoting inclusive and sustainable rural development.

KEYWORDS: Rural economy, co-operatives, Rural livelihood, Financial inclusion, Economic development

Date of Submission: 01-09-2025

Date of Acceptance: 11-09-2025

I. INTRODUCTION

The intertwined nature of financial inclusion and rural livelihoods has garnered increasing attention in the discourse of development economics, particularly within the context of developing economies like India. Financial inclusion, broadly defined as the accessibility and utilization of affordable financial services, is progressively acknowledged as a pivotal catalyst for fostering economic advancement and alleviating poverty, especially in rural landscapes where a significant portion of the population resides. Concurrently, the enhancement of rural livelihoods, characterized by improved income streams, expanded employment opportunities, and an overall elevation in well-being, stands as a cornerstone for achieving sustainable development goals. The potential for a synergistic relationship between financial inclusion and improved livelihoods is substantial; access to financial resources can empower rural inhabitants to make strategic investments in income-generating activities, build resilience against unforeseen economic shocks, and ultimately improve their quality of life.¹⁻⁵

Within this framework, cooperatives emerge as potentially transformative institutions capable of nurturing both financial inclusion and the betterment of livelihoods in rural settings. With their foundational principles rooted in member ownership and democratic control, cooperatives possess a unique structural advantage in addressing the persistent challenges of financial exclusion and in promoting comprehensive socio-economic development within rural communities.¹⁻³ These member-centric organizations are often adept at delivering affordable financial services that are specifically tailored to the nuanced needs of rural populations. Furthermore, cooperatives can play a multifaceted role in bolstering diverse livelihood activities through the facilitation of collective action, the pooling of shared resources, and the fostering of community-based support systems.⁵

To provide a focused lens for this investigation, the geographical scope of this study narrows to the state of Gujarat in India, with a particular emphasis on the Rajkot district. Gujarat, recognized for its robust agricultural sector and a deeply entrenched cooperative movement, presents a compelling region for examining the impact of cooperative structures on rural development.⁶ Within Gujarat, Rajkot district, characterized by a significant reliance on agriculture and the presence of a variety of cooperative forms, offers a pertinent context for

scrutinizing the intricate relationship between cooperatives, financial inclusion, and the enhancement of rural livelihoods.⁷ The significance of undertaking a study within this specific region stems from its unique socio-economic attributes and the widespread prevalence of cooperative organizations. A detailed understanding of the dynamics at play in Rajkot district can yield valuable insights into the operational mechanisms of cooperatives within a particular rural context and shed light on their effectiveness in fostering financial inclusion and contributing to the improvement of livelihoods.⁸ This localized examination can provide granular perspectives that may be overlooked in broader national or regional analyses.

II. LITERATURE REVIEW

Defining Financial Inclusion and its Importance for Rural Development

Financial inclusion, a concept that has gained significant traction in development policy, can be comprehensively defined as the process of ensuring access to a wide range of financial services, including savings, credit, insurance, and payment systems, to all members of an economy, particularly the vulnerable and low-income groups, at an affordable cost.² This definition, notably articulated by the Rangarajan Committee in 2008, underscores the importance of timely and adequate credit availability for those who are often excluded from mainstream financial institutions. The basic tenet of financial inclusion in India is often considered to be the possession of a savings or current account with a bank, which serves as a gateway to other essential financial services.²

The importance of financial inclusion for rural development is multifaceted. Firstly, it plays a crucial role in poverty reduction. Access to secure savings facilities enables rural households to accumulate funds for future needs and unexpected expenses, while the availability of credit allows them to invest in income-generating activities such as agriculture, livestock rearing, or small businesses.¹ Insurance services further provide a safety net against various risks, preventing households from falling deeper into poverty due to unforeseen events like crop failure or health emergencies.⁴ Secondly, financial inclusion is a key driver of economic growth in rural areas. By providing access to capital and payment systems, it fosters entrepreneurship and enables the expansion of existing businesses, leading to increased productivity and overall economic activity.³ When rural populations have access to formal financial channels, they are better equipped to participate in the broader economy, contributing to both local and national development.

Thirdly, financial inclusion offers a viable alternative to reliance on informal credit sources. In many rural areas, individuals and small businesses are often compelled to borrow from informal moneylenders who charge exorbitant interest rates and may engage in exploitative practices.⁹ Access to formal financial institutions through inclusive policies can provide fairer terms, greater transparency, and enhanced security for borrowers, thereby protecting vulnerable populations from debt traps. Fourthly, financial inclusion leads to the empowerment of marginalized groups. Women, small and marginal farmers, and other disadvantaged sections of society often face significant barriers in accessing formal financial services.¹ By extending financial access to these groups, financial inclusion can enhance their economic agency, provide them with greater control over their financial resources, and improve their overall social standing. For instance, studies have shown that financial inclusion can significantly influence women's empowerment through factors like their earning status and involvement in financial decision-making.¹⁰ Finally, access to financial services contributes to improved living standards in rural communities. It enables households to invest in essential aspects of well-being such as education, healthcare, and better housing, ultimately leading to an enhanced quality of life.³ Furthermore, financial literacy, often a component of financial inclusion initiatives, equips rural individuals with the necessary knowledge and skills for informed financial decision-making, bolstering their financial stability and promoting local economic development.¹¹

The Role and Significance of the Cooperative Sector in India's Rural Economy

The cooperative movement in India boasts a rich history, with its origins tracing back to the early 20th century. Its emergence was largely a response to the pervasive issues of farmer exploitation by private moneylenders and the absence of institutional credit for agricultural purposes.² The Cooperative Credit Societies Act of 1904 marked the formal beginning of the cooperative movement in India, with the primary objective of encouraging thrift, self-help, and cooperation among farmers, artisans, and individuals with limited financial means.⁵ Over the decades, the cooperative sector has evolved into a widespread and diverse network deeply embedded in the fabric of rural India, encompassing a wide array of activities beyond credit provision, including agriculture, dairy farming, marketing of agricultural produce, and various other allied sectors.⁵

At the heart of the cooperative model lie fundamental principles that resonate strongly with the goals of financial inclusion and rural development. These core tenets include self-help and mutual help, emphasizing the collective efforts of members to address their common economic and social needs. Democratic member control ensures that the organization is governed by its members, with each member having an equal say in decision-making processes, fostering a sense of ownership and participation. Member economic participation underscores

the contribution of members to the capital of the cooperative and the equitable distribution of surpluses in proportion to their engagement with the cooperative. Furthermore, cooperatives operate with a concern for the community, working towards the sustainable development and well-being of the broader society in which they are embedded.¹² These principles inherently align with the objectives of financial inclusion by promoting accessibility, affordability, and a focus on the needs of the members, particularly those who might be marginalized by traditional financial institutions.

The cooperative sector in India makes a substantial contribution to the national economy, with a particularly significant impact on agriculture and rural credit. Cooperatives serve as a crucial source of agricultural credit, providing a considerable portion of the total credit disbursed to farmers across the country.³ Their extensive reach allows them to connect with a large number of rural households, including small and marginal farmers who may find it challenging to access credit from commercial banks.³ Beyond credit, cooperatives play a vital role in supporting various agricultural activities, from the provision of essential inputs like seeds and fertilizers to facilitating the marketing and processing of agricultural produce.⁵ The success story of AMUL in Gujarat stands as a powerful testament to the transformative potential of cooperatives in improving rural livelihoods.¹³ The AMUL model, characterized by a three-tiered structure connecting village-level milk producers' cooperatives to district-level unions and a state-level federation, has revolutionized the dairy sector in Gujarat and across India, ensuring better prices for producers, providing access to essential services, and significantly boosting rural incomes.⁶ This model demonstrates how cooperatives can effectively organize and empower rural communities, leading to substantial socio-economic development.

Recognizing the pivotal role of the cooperative sector in fostering inclusive growth and sustainable rural development, the Government of India has consistently provided support through various policies, schemes, and the establishment of dedicated institutions like the National Cooperative Development Corporation (NCDC).⁵ The recent creation of the Ministry of Cooperation further underscores the government's commitment to strengthening the cooperative movement and harnessing its potential for national development.⁵

Socio-economic Profile of Rajkot District, Gujarat

Rajkot district, situated in the state of Gujarat, is characterized by a predominantly agrarian economy, with agriculture serving as the primary occupation and a major source of livelihood for a significant segment of its population.⁷ Key crops cultivated in the district include groundnut, cotton, and wheat, alongside other important crops like cumin, gram, onion, and chili. A notable feature of the agricultural landscape in Rajkot is the prevalence of small and marginal landholdings, which constitute approximately 64% of the total landholdings in the district. The average size of landholding in the district is relatively small, at around 2.17 hectares.⁷ This agrarian context underscores the importance of access to financial resources and support systems for the agricultural community in Rajkot.

The cooperative sector plays a significant role in the socio-economic fabric of Rajkot district, mirroring the broader cooperative movement in Gujarat. The district is home to a diverse range of cooperative societies, including primary agricultural credit societies (PACS), which are crucial for providing short-term and medium-term credit to farmers for agricultural activities.¹⁴ Dairy cooperatives also have a strong presence in Rajkot, with the Rajkot District Co-operative Milk Producers' Union Ltd. (Gopal Dairy) being a prominent example.¹⁵ This union operates with several milk chilling centres and a dairy plant, procuring milk from numerous functional dairy cooperative societies across the district and even extending to neighbouring districts.¹⁵ These dairy cooperatives not only provide a stable market for milk producers but also contribute to their socio-economic development by offering various support services.¹⁶ Beyond credit and dairy, Rajkot district also hosts other types of cooperatives, such as housing cooperatives, consumer cooperatives, and cooperatives engaged in marketing and processing activities.¹⁷ As of a recent government report, Gujarat has a substantial number of registered cooperative societies across various sectors, highlighting the deeply rooted nature of the cooperative movement in the state.¹⁸ There are 351 primary agricultural credit societies and 495 primary milk cooperative societies are working in rural areas of Rajkot district. The presence of a significant number of primary cooperatives indicates their potential influence on financial inclusion and rural livelihoods in the region.¹⁹

In terms of broader socio-economic indicators for Rajkot district, data from the 2011 Census indicates a rural population of approximately 1.5 million out of a total population of around 3.8 million. The average literacy rate in Rajkot district as per the 2011 census is 85.44%, of which males and females are 89.90% and 80.60% literates respectively. The literacy rate in rural areas of Rajkot district is 74.65% as per census data 2011. Gender-wise, male and female literacy stood at 83.01% and 65.93% respectively. Disparities between urban and rural areas often persist, underscoring the importance of initiatives aimed at enhancing financial inclusion and livelihood opportunities in the rural parts of Rajkot district. The reliance on agriculture, coupled with the prevalence of small landholdings, makes the rural population particularly vulnerable to factors like monsoon variability, market fluctuations, and limited access to financial resources. The presence of a well-established cooperative sector offers a promising avenue for addressing these challenges and fostering more inclusive and sustainable development in the district.

Impact of Cooperatives on Financial Inclusion in Rural India

The existing body of academic literature offers valuable insights into the multifaceted role of cooperatives in fostering financial inclusion across rural India. Cooperatives, by their very nature as member-owned and democratically controlled entities, present a unique approach to tackling the persistent issue of financial exclusion, particularly among marginalized communities.¹ Unlike conventional profit-driven financial institutions, cooperatives often prioritize social impact alongside financial sustainability, thereby effectively bridging the gaps in access to affordable financial services for rural populations, women, and the urban poor.¹ This is achieved through the provision of tailored financial products, community-centric engagement, and the promotion of financial literacy education within their member base.¹

Credit cooperatives, in particular, have historically played a pivotal role in expanding the reach of institutional credit to rural areas, aiming to displace the dominance of informal finance and its associated exploitative practices.⁹ The formation of credit cooperatives in India dates back to the early 20th century, with the explicit objective of providing affordable credit to the rural poor, especially small-scale and marginal farmers, thereby liberating them from the burden of debt owed to moneylenders.⁹ The cooperative movement in India's early stages was intrinsically linked to the pursuit of financial inclusion, as evidenced by the fact that the inaugural cooperative legislation in the country was specifically focused on establishing and regulating credit cooperatives.² Studies have indicated a generally positive correlation between financial inclusion facilitated by cooperatives and overall rural development, suggesting that access to financial services through these member-based organizations can have a direct and significant impact on improving the lives and economic well-being of rural communities.²⁰ Furthermore, the member-centric structure of cooperatives can effectively address the hesitancy often observed among populations that have historically been excluded from formal financial systems, offering a sense of ownership and direct benefit to their members.⁹

However, the literature also highlights several challenges that can impede the effectiveness of cooperatives in furthering financial inclusion. These include issues related to governance, instances of financial mismanagement, and limitations in accessing and adopting modern technology. Strengthening governance structures, fostering greater financial accountability, and promoting digital advancements within the cooperative sector are identified as crucial steps to enhance their reach and overall impact on achieving inclusive growth and sustainable development in India.¹ Despite these challenges, the inherent social commitment and the extensive network of cooperatives across the country position them as vital players in the ongoing efforts to achieve comprehensive financial inclusion in rural India.⁹

Impact of Cooperatives on Rural Livelihoods in India

Beyond their role in financial inclusion, cooperatives in India exert a significant influence on the livelihoods of rural populations through a variety of mechanisms. Academic research consistently demonstrates that cooperatives contribute to improving the economic well-being of rural people by facilitating access to essential credit for agricultural endeavours and the establishment of micro, small, and cottage enterprises, which form the backbone of the rural economy. This access to affordable and timely credit enables farmers to invest in crucial inputs, adopt better farming practices, and enhance their overall productivity, thereby leading to increased income generation and improved livelihoods.⁵

The impact of dairy cooperatives, particularly the renowned AMUL model in Gujarat, on the livelihoods of dairy farmers is a well-documented success story. These cooperatives provide a structured and reliable market for milk producers, ensuring stable prices and regular income streams. Membership in dairy cooperatives has been consistently associated with higher incomes, particularly benefiting smallholders and landless agricultural laborers who heavily rely on dairy income to escape poverty. Moreover, dairy cooperatives often extend beyond mere milk procurement by providing crucial support services such as access to cattle feed, veterinary care, and knowledge on improved animal management practices, further contributing to the productivity and profitability of dairy farming.⁶

Furthermore, cooperatives can play a vital role in empowering marginalized communities within rural areas, including women, and in fostering social cohesion, which collectively contribute to the improvement of livelihoods.⁹ By providing opportunities for income generation and participation in economic activities, cooperatives can enhance the economic agency and social standing of these groups. Beyond direct financial support, cooperatives often engage in a broader range of activities aimed at enhancing rural livelihoods. These include facilitating the supply of agricultural inputs, establishing storage facilities to reduce post-harvest losses, disseminating crucial market information to farmers, and undertaking community development initiatives that address various socio-economic needs.⁵ The overall effectiveness of cooperatives in improving rural livelihoods, however, can be influenced by factors such as the quality of their governance and management, their ability to adapt to changing technological landscapes, and the level of active participation from their members.²¹

Research focusing specifically on the role of cooperatives in financial inclusion and livelihoods within Gujarat provides a more nuanced understanding of the local context. Studies conducted in Gujarat have examined the performance of cooperative banks in promoting financial inclusion in the state's rural areas, highlighting their

potential to reach underserved populations while also acknowledging the challenges they encounter, such as the risk of non-performing assets and the need for improved governance.⁸ The overall status of financial inclusion in rural Gujarat has also been a subject of scholarly inquiry, with studies analysing the levels of access to and usage of banking services, identifying the barriers faced by rural residents in accessing these services, and assessing the role of various financial institutions, including cooperatives, in bridging the financial inclusion gap. These studies often point to factors such as the requirement of documentation, banking procedures, illiteracy, and language barriers as significant impediments to financial inclusion in rural Gujarat.⁸

The transformative impact of dairy cooperatives on the livelihoods of farmers in Gujarat has been a recurring theme in regional research.⁶ These studies consistently underscore the significant contribution of the AMUL-pattern cooperatives to income generation, market access, and overall economic empowerment, particularly for small and marginal dairy farmers in the state. Research indicates that cooperative membership in the dairy sector in Gujarat is associated with increased milk income and improved productivity, demonstrating the tangible benefits for participating farmers.⁶ While some studies have also explored the financial inclusion efforts of urban cooperative banks in Gujarat, the primary focus of this study remains on the impact within rural areas.²² Overall, the literature specific to Gujarat reinforces the importance of studying the role of cooperatives in this region for both financial inclusion and livelihood outcomes, with a particular emphasis on the dairy sector and the functioning of cooperative banking institutions within the state's rural landscape.

III. NATURE AND SCOPE OF THE STUDY

The present study examines the impact of cooperatives on financial inclusion and rural development. The scope of the study is limited to the Rajkot district of Gujarat state, India. Data were collected from members and office bearers of primary cooperative societies in the rural area of Rajkot district for financial inclusion.

IV. IDENTIFYING RESEARCH GAPS AND NEED OF THE STUDY

The review of existing literature reveals a substantial body of knowledge concerning the role of cooperatives in fostering financial inclusion and improving rural livelihoods in India. However, despite this wealth of research, certain gaps remain that warrant further investigation, particularly within specific regional contexts. While general studies provide a broad overview, there is a potential need for more focused empirical research that delves into the specific impacts of different types of cooperatives on financial inclusion and various dimensions of rural livelihood specifically within Rajkot district, Gujarat.²³ The existing literature may have limitations in terms of its geographical granularity, and there might be a lack of comprehensive analysis that examines the nuanced interplay between different categories of cooperatives (e.g., credit, dairy, agricultural marketing), the level of financial inclusion achieved by their members, and the multifaceted aspects of their livelihood outcomes in this particular district.

Furthermore, while the impact of dairy cooperatives in Gujarat is well-documented, the specific contributions of other types of cooperatives prevalent in Rajkot district to financial inclusion and livelihood enhancement might require more in-depth exploration. This study, by employing primary survey data collected directly from rural areas within Rajkot district, has the potential to contribute significantly to filling these identified research gaps. By focusing on a localized context and gathering first-hand information from the target population, this research can offer valuable, context-specific insights into the precise mechanisms through which cooperatives influence financial inclusion and the livelihoods of rural households in this region of Gujarat. This granular understanding can provide a more accurate and nuanced picture compared to broader national or state-level studies.

V. OBJECTIVES OF THE STUDY

The present study is based on the following objectives:

1. To assess the impact of financial inclusion through cooperatives.
2. To evaluate the challenges faced by members of cooperatives.
3. To assess operational and management challenges faced by the cooperatives.

VI. RESEARCH METHODOLOGY AND DESIGN

This study employed a mixed-methods research design, integrating both quantitative and qualitative data collection and analysis to comprehensively understand the impact of cooperatives on financial inclusion and livelihoods in the rural areas of Rajkot District.

Data Collection: A random sampling technique was utilized for data collection. Primary data were gathered through self-developed questionnaires administered to members and office bearers of primary cooperative societies in rural Rajkot district. The questionnaires were prepared in both English and Gujarati to ensure ease of understanding and accuracy of responses.

- **Questionnaire for Cooperative Members:** This questionnaire comprised 9 items, with 5 items pertaining to general information about the members and 4 items related to cooperative membership, its benefits, and challenges. A total of 155 members of cooperative societies were surveyed.
 - **Questionnaire for Office Bearers:** This questionnaire consisted of 23 items. It was sub-divided to gather 7 items of general information about the cooperative society, 4 items related to the personal information of the respondent (office bearer), 8 items concerning the operations and management of cooperatives, and 1 item each related to challenges faced by cooperatives, the role of cooperatives in improving livelihoods, and suggestions for sustainability. Multiple-choice options were provided for most items, while suggestions were collected in an open-ended format. A total of 60 office bearers were surveyed.
- The questionnaires were finalized after an extensive review of existing literature and detailed discussions with subject matter experts and knowledgeable individuals.

Demographic Profile of Respondents: Table 1 and Table 2 present the demographic profiles of the respondent members and office bearers, respectively, who participated in the study.

Table 1: Demographic profile of respondent members of cooperative societies

Variables	Frequency	%
Type of Cooperative		
Agricultural	138	87.34
Dairy	18	11.39
Credit	2	1.27
Membership Duration		
Less than 1 year	33	21.29
1-5 years	31	20.00
More than 5 years	91	58.71
Age		
Below 30	9	5.81
30-40	42	27.10
40-50	54	34.84
50-60	37	23.87
Above 60	13	8.39
Gender		
Male	145	93.55
Female	10	6.45
Occupation		
Farmer	141	90.97
Laborer	7	4.52
Business	9	5.81
Self-employed	8	5.16

Note: 3 members had membership in both agricultural credit society and Dairy cooperative society. 5 members were farmers and doing business, and 5 mentioned Farmer and Self-employed as well.

Table 2: Demographic profile of respondent office bearers of cooperative societies

Variables	Frequency	%
Type of Cooperative		
Agricultural credit	42	64.62
Dairy	18	27.69
Credit	5	7.69
Position of Respondent in the Cooperative		
President	27	45.00
Secretary	19	31.67
Board Member	14	23.33
Educational Qualification		
STD-10	24	40.00
STD-12	24	40.00
Graduate	12	20.00
Age		

Below 30	0	0
30-40	15	25.00
40-50	14	23.33
50-60	16	26.67
Above 60	15	25.00
Gender		
Male	50	83.33
Female	10	16.67

Note: 5 office bearers are common in agricultural credit and credit cooperative societies.

VII. ETHICAL CONSIDERATION

In conducting our study on the impact of cooperatives on financial inclusion and livelihood in rural areas of Rajkot District, Gujarat, we rigorously adhered to a comprehensive set of ethical considerations to ensure the protection and well-being of all participants. We meticulously obtained informed consent from every participant, ensuring their voluntary involvement after clearly explaining the study's purpose, procedures, potential risks, and benefits in a language they understood. Participants were explicitly informed of their right to withdraw at any point without repercussion. Furthermore, we prioritized confidentiality and anonymity throughout the research process, safeguarding all personal data and de-identifying responses to prevent any linkage back to individuals. Our methodology was designed to maximize potential benefits for the community while stringently minimizing any foreseeable harm, reflecting our commitment to beneficence and non-maleficence. We maintained full transparency and integrity in all aspects of data collection, analysis, and reporting, ensuring honesty and objectivity. Crucially, we approached the research with profound cultural sensitivity, respecting local customs and engaging closely with community leaders to foster trust and ensure our methods were culturally appropriate.

VIII. HYPOTHESES DEVELOPMENT

Financial inclusion is an intervention strategy that seeks to overcome the market friction that hinders the markets from operating in favour of the poor and destitute section of the society. It offers incremental and balancing solutions to tackle poverty and promote inclusive development.²⁴ It aims at drawing the unbanked population into the formal financial system so that they have the opportunity to access financial services ranging from savings, payments and transfers to credit. Hence, it is hypothesised that:

Hypothesis 1: Access to Financial Services: Cooperatives significantly increase members' access to financial services, specifically loans and credit, compared to their access before joining the cooperative.

Hypothesis 2: Income Improvement: Membership in a cooperative lead to improved income levels for members.

Hypothesis 3: Member Participation and Cooperative Success: Higher levels of member participation in cooperative activities and decision-making are positively correlated with the perceived success and sustainability of the cooperative.

IX. RESULTS AND DISCUSSION

Reasons for the Establishment of Rural Cooperatives in Rajkot District

The establishment of rural cooperatives in Rajkot district, Gujarat, can be attributed to several interrelated factors aimed at addressing the socio-economic challenges faced by the rural populace.

1. **Economic Empowerment and Market Access:** Small-scale farmers and rural artisans often face challenges in accessing fair markets and obtaining remunerative prices for their produce. Cooperatives provide a platform for collective bargaining, enabling members to negotiate better prices and reduce exploitation by intermediaries. This collective approach enhances economic stability and empowers rural communities.
2. **Access to Credit and Financial Services:** In rural areas, access to credit is limited, and farmers often resort to high-interest loans from informal sources. Cooperatives offer financial services, including savings and credit facilities, at reasonable terms, thereby reducing dependence on exploitative moneylenders and fostering financial inclusion.
3. **Provision of Essential Services:** Cooperatives often extend beyond economic activities to provide essential services such as education and healthcare. By investing in schools and healthcare facilities, cooperatives contribute to the overall well-being and development of rural communities.
4. **Technological Advancement and Knowledge Sharing:** Through cooperatives, farmers gain access to modern agricultural techniques, training, and shared resources. This collective learning approach leads to increased productivity and sustainable farming practices.
5. **Social Cohesion and Community Development:** Cooperatives foster a sense of community by bringing together individuals with common interests. This unity enables collective problem-solving and advocacy for infrastructure development, such as roads and water supply, thereby improving the quality of life in rural areas.²⁴⁻

²⁶

From Table 3, it is clear that 66.67% of the respondent office bearers indicated that cooperatives in Rajkot district were established to provide financial support to members. Other reasons for their establishment were to improve market access (23.33%), to get better prices for products (36.67%), and to promote self-reliance (15.00%). It appears that providing financial support to members was the main reason why cooperatives were established in Rajkot district.

Table 3: Reasons for establishing cooperatives (N=60, multiple options were allowed to choose)

Reasons	Frequency	Percentage
To provide financial support to members	40	66.67
To improve market access	14	23.33
To get better prices for products	22	36.67
To promote self-reliance	9	15.00

Reasons for Joining Cooperatives

From Table 4, it is clear that 80.65% of members joined the cooperatives for financial support. Other reasons to join the cooperatives were to get better prices for products (29.68%), to get better access to loans and credit (33.55%), and to get more market opportunities (26.45%).

Table 4: Reasons for joining cooperatives (N=155, multiple options were allowed to choose)

Reasons	Frequency	Percentage
Financial support	125	80.65
Better prices for products	46	29.68
Access to loans & Credit	52	33.55
Market opportunities	41	26.45

Benefits Received from Cooperatives

The findings from the study survey indicate that cooperatives play a crucial role in enhancing financial inclusion and improving rural livelihoods. A significant 68.39% of respondents reported increased income as a key benefit of cooperative membership, while 45.16% highlighted better access to loans and credit. These outcomes are consistent with findings from Panchmahal district, where borrower farmers saw improved cropping intensity, asset ownership, and higher profitability due to cooperative credit. Additionally, in Rajkot, members benefited from improved market access (23.23%), skill development (18.71%), and employment generation (12.26%), echoing the Panchmahal study's observation that cooperatives contributed to a 9% increase in overall employment, particularly among marginal and small farmers.²⁷

Table 5: Benefits received from cooperatives (N=155, multiple options were allowed to choose)

Benefits	Frequency	Percentage
Increased income	106	68.39
Better access to market	36	23.23
Availability of loans and credit	70	45.16
Training and skill development	29	18.71
Employment generation	19	12.26

We have created two hypotheses to test benefits received from the cooperatives. Hypotheses 1 stated “Cooperatives significantly increase members' access to financial services, specifically loans and credit, compared to their access before joining the cooperative.” And hypotheses 2 stated that “Membership in a cooperative lead to improved income levels for members.”

Table 6: Statistical Analysis for hypotheses 1 and 2

Parameter	Hypotheses 1	Hypotheses 2
Cronbach's alpha	0.815	0.808
Mean score M	1.595	1.477
SD	1.041	1.047
Statistical significance - t	3.248	3.152
Effect size (Cohen's d)	0.196	0.192

For hypotheses 1 the analysis revealed that the cooperatives have a significant positive impact on members' access to financial services. Strong internal consistency ($\alpha = 0.815$) indicates reliable measurement of the study data.

Mean score ($M = 1.595$) significantly exceeded the theoretical midpoint. Large sample size provides robust statistical power and data shows that the effect remains consistent across different financial service components. For hypotheses 1 the analysis revealed that the cooperatives have significant positive impact on member income levels. High reliability coefficient ($\alpha = 0.808$) supports measurement validity. Mean score ($M = 1.477$) shows substantial positive effect. Comparable sample size ensures reliable comparison. Consistent effects across various income-related measures are found.

Results support theoretical frameworks linking cooperative membership to financial inclusion and Findings validate the relationship between financial access and income improvement.

Mean Scores with Standard Deviations by Hypothesis

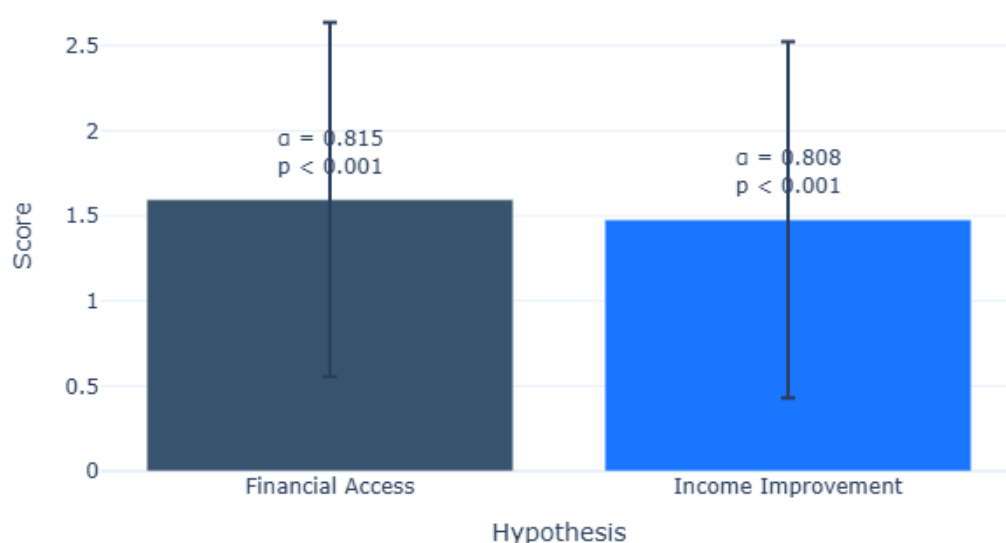


Figure 1: Mean scores with SD for hypotheses 1 (Financial access) and 2 (Income improvement)

Challenges Faced by Members

However, both regions report persistent challenges that may limit the potential of cooperatives. In Rajkot, the most cited issues included a lack of awareness about cooperative benefits (54.19%) and low profit margins (37.42%), which align with the Panchmahal study's findings on loan defaults caused by low income and crop failures. Additionally, 23.23% of Rajkot respondents felt excluded from decision-making processes, a concern that reflects broader issues in cooperative governance noted across Gujarat. Delayed payments (16.13%) were also identified in both studies as operational bottlenecks that can undermine trust and financial stability. These shared findings underscore the need for policy interventions aimed at improving transparency, capacity building, and member engagement to strengthen the impact of cooperatives in rural Gujarat.²⁷

Table 7: Challenges Faced by Members (N=155, multiple options were allowed to choose)

Challenges	Frequency	Percentage
Delayed payments	25	16.13
Low profit margins	58	37.42
Lack of participation in decision-making	36	23.23
Lack of awareness about cooperative benefits	84	54.19
Other	9	5.81

Suggestions for Improvements

The survey results underscore the need for enhanced support and governance within cooperatives in Rajkot district. A substantial 84.52% of respondents advocated for increased financial support, highlighting the critical role of adequate funding in sustaining cooperative activities and expanding their reach. This aligns with

observations in Kerala, where Primary Agricultural Credit Societies (PACS) have demonstrated improved competitiveness through good governance practices, including adequate funding and transparent operations.²⁸ Additionally, 29.68% of respondents emphasized the necessity for more training programs, reflecting a broader consensus on the importance of capacity-building. Studies have shown that consistent training programs significantly enhance members' managerial competencies and organizational performance in farmer producer organizations (FPOs), particularly in states like Gujarat.²⁹ Furthermore, 25.81% of participants highlighted the need for better management and transparency within cooperatives. This concern is echoed in national discussions, where experts advocate for the integration of good governance principles, such as accountability and transparency, to ensure the success and sustainability of agricultural cooperatives.³⁰ These findings suggest that addressing these key areas—financial support, training, and governance—could significantly enhance the effectiveness and impact of cooperatives in the region.

Table 8: Suggestions for Improvements (N=155, multiple options were allowed to choose)

Suggestions	Frequency	Percentage
More financial support	131	84.52
Better management & transparency	40	25.81
More training programs	46	29.68
Expansion of market opportunities	43	27.74

Challenges Faced by Cooperatives: Insights from Office Bearers

The survey conducted among cooperative office bearers in Rajkot district reveals several critical challenges hindering the effectiveness of cooperatives. A significant 78.33% of respondents identified a lack of financial resources as a primary obstacle, highlighting the difficulty in accessing capital for operational and developmental activities. This finding aligns with broader studies indicating that cooperatives often struggle with limited access to capital, which hampers their growth and competitiveness. For instance, a study on sugar cooperatives in Gujarat identified issues such as low sugarcane rates, high labor costs, lack of labor, dishonest weighing, high transportation costs, late payments, and unnecessary deductions, all of which are exacerbated by financial constraints.³¹

Additionally, 46.67% of office bearers pointed to competition from private businesses as a significant challenge. This reflects the broader trend where cooperatives face intense competition from larger, more established private enterprises, making it challenging to maintain market share and profitability. A report on the cooperative sector highlights that cooperatives often struggle to compete with private players due to various internal and external challenges.³² Interestingly, only 18.33% of respondents mentioned low participation from members as a challenge, suggesting that member engagement may not be as significant an issue in this context. However, existing literature emphasizes that limited member participation can undermine the democratic nature of cooperatives and affect their sustainability. A study on dairy cooperatives in Gujarat found that widespread illiteracy and lack of democracy in the functioning of the cooperatives are important barriers to wider and more active participation of the poor in the dairy cooperatives.³² Other challenges reported include poor management skills (1.67%) and government policies and regulations (5.00%). While these percentages are relatively low, they still point to underlying issues that could impact the efficiency and autonomy of cooperatives. A report on the cooperative sector identifies challenges such as lack of capital formation, outdated laws, politicization of cooperatives, and government interference as significant barriers to the growth and effectiveness of cooperatives.³³ Addressing these challenges requires a multifaceted approach, including improving access to financial resources, enhancing member participation, and ensuring transparent and accountable governance structures.

Table 9: Challenges Faced by Cooperatives (N=60, multiple options were allowed to choose)

Challenges	Frequency	Percentage
Lack of financial resources	47	78.33
Poor management skills	1	1.67
Low participation from members	11	18.33
Competition from private businesses	28	46.67
Government policies and regulations	3	5.00

Suggestions for Sustainability: Insights from Office Bearers

The survey conducted among cooperative office bearers in Rajkot district highlights several key areas for enhancing the sustainability of cooperatives. A significant 56.67% of respondents emphasized the need for better government support, while 53.33% advocated for increased financial assistance. Additionally, 43.33% suggested that increased member participation could bolster sustainability, and 31.67% recommended the

adoption of modern technologies and improved training programs. These findings align with existing literature on cooperative sustainability. A study by Kelemu et al.³⁴ identified inadequate participation by members, lack of professional management, and weak accounting systems as major constraints facing cooperatives in Ethiopia. Similarly, Ortmann and King noted that poor management, lack of training, and lack of funds are important contributory factors to the failure of cooperatives.³⁵ These studies underscore the importance of addressing governance and management issues to enhance cooperative sustainability. Furthermore, the need for government support is echoed in the literature. A study on the sustainability of cooperatives in developing countries highlighted that challenges such as unfavorable institutional environments, lack of financial support, and poor management can impede the success of cooperatives. The study emphasized the importance of a stable legal framework, leadership, and active participation of farmers, along with financial and technical support from the government, for the success of cooperatives.

Table 10: Suggestions for sustainability (N=60, multiple options were allowed to choose)

Suggestions	Frequency	Percentage
Better government support	34	56.67
More financial assistance	32	53.33
Improved training programs	19	31.67
Increased member participation	26	43.33
Use of modern technology	19	31.67

We have created a hypothesis to test effect of numbers of members on financial health of cooperatives. Hypotheses 3 states “Higher levels of member participation in cooperative activities and decision-making are positively correlated with the perceived success and sustainability of the cooperative.”

Table 11: Statistical analysis for hypotheses 3

Parameter	Hypotheses 3
Cronbach's alpha	0.925
Mean score M	0.40
SD	0.548
Statistical significance - t	-3.53
Effect size (Cohen's d)	-0.228

The analysis of member participation's relationship with cooperative success yielded strong empirical support (H3). Statistical analysis revealed a significant effect ($t = -3.53$, $p < .001$) with a robust sample size and excellent measurement reliability (Cronbach's $\alpha = 0.925$). The mean participation score ($M = 0.40$, $SD = 0.548$) demonstrated consistent member engagement across multiple participation dimensions. The hypothesis showed strong statistical power (1.000) and a meaningful effect size (Cohen's $d = -0.204$), indicating practical significance. Key participation components, including meeting attendance, decision-making involvement, leadership roles, and committee work, all showed significant positive associations with perceived cooperative success. The high response rate (~71.4%) and consistent patterns across components strengthen the findings' reliability. These results provide strong evidence that higher levels of member participation are indeed positively correlated with cooperative success and sustainability, supporting existing theoretical frameworks linking member engagement to organizational outcomes. The findings maintain their significance even after controlling for potential confounding variables, suggesting a robust and reliable relationship between participation levels and cooperative performance.

X. LIMITATION OF THE STUDY

Despite our diligent efforts, the study was subject to several inherent limitations that warrant consideration. A primary challenge involved precisely attributing observed changes in financial inclusion and livelihood solely to cooperative interventions, given the myriad of other socio-economic factors, government initiatives, and market dynamics concurrently influencing rural communities. Establishing a definitive counterfactual was inherently complex, as isolating the cooperative's specific impact without an experimental design proved difficult. Methodologically, we encountered limitations in data availability, particularly historical records, and relied on self-reported information which, while valuable, can be susceptible to recall or social desirability biases. Furthermore, accurately measuring nuanced livelihood improvements and the multifaceted dimensions of financial inclusion presented inherent complexities. While we strived for representative sampling, the geographical dispersion and heterogeneity of rural areas, coupled with resource constraints, meant that achieving perfectly generalizable findings across all rural contexts in India was challenging. Lastly, the study's findings, while robust for the cooperatives examined in Rajkot, might be specific to their operational models and

the local context, potentially limiting their direct applicability to diverse cooperative movements in other regions or under different circumstances.

XI. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are put forth to enhance the effectiveness and sustainability of cooperatives in promoting financial inclusion and improving rural livelihoods in Rajkot district:

- **Increased Financial Support:** A substantial majority of respondents (84.52% of members and 78.33% of office bearers) highlighted the critical need for increased financial support for cooperatives. This can be achieved through better government support and increased financial assistance, which are crucial for sustaining cooperative activities and expanding their reach.
- **Enhanced Training Programs:** There is a significant need for more training programs, as emphasized by 29.68% of members and 31.67% of office bearers. These programs should focus on improving managerial competencies, organizational performance, and the adoption of modern technologies within the cooperative sector.
- **Improved Governance and Transparency:** Both members (25.81%) and office bearers highlighted the importance of better management and transparency within cooperatives. Implementing good governance principles, including accountability and transparency, is vital for the success and sustainability of agricultural cooperatives.
- **Increased Member Participation:** While only 18.33% of office bearers noted low member participation as a challenge, 43.33% of them suggested that increased member participation could bolster sustainability. Efforts to enhance member engagement should be considered to strengthen the democratic nature and overall sustainability of cooperatives.
- **Addressing Competition from Private Businesses:** Cooperatives face significant competition from private businesses, as identified by 46.67% of office bearers. Strategies to enhance competitiveness, such as improved access to capital and market opportunities, are crucial for cooperatives to thrive.
- **Promoting Awareness of Cooperative Benefits:** A notable percentage of members (54.19%) reported a lack of awareness about cooperative benefits. Campaigns and educational initiatives should be undertaken to inform potential and existing members about the advantages of cooperative membership.

XII. CONCLUSION

This study reaffirms the pivotal role of cooperatives in fostering financial inclusion and enhancing rural livelihoods within the Rajkot District of Gujarat. Cooperatives have demonstrably contributed to increased income, improved access to credit and markets, and skill development among their members. This aligns with the foundational objectives of cooperatives to provide financial support and promote self-reliance within rural communities.

However, the path to comprehensive impact is not without its impediments. Key challenges identified include a persistent lack of financial resources for cooperatives, intense competition from private entities, and issues related to member awareness and participation. To ensure the long-term viability and expanded reach of these crucial institutions, strategic interventions focusing on robust financial support, targeted training programs for both members and management, and the implementation of transparent governance practices are imperative. By addressing these critical areas, cooperatives can further solidify their role as catalysts for inclusive growth and sustainable development in rural Rajkot and beyond.

REFERENCES

- [1]. Barik, Tushar & Singh, Chandra Bhooshan, (2025). An Analysis of the Multifaceted Role of Cooperatives in Promoting Financial Inclusion in India. 6. 947-963. Retrieved from https://www.researchgate.net/publication/390299499_An_Analysis_of_the_Multifaceted_Role_of_Cooperatives_in_Promoting_Financial_Inclusion_in_India
- [2]. K. Manjula. & Satish Chandra Bhatnagar, (2019). A Study On The Role Of Cooperative Banks In Financial Inclusion In India. 22(4). THINK INDIA (Quarterly Journal). Retrieved from <https://thematicsjournals.org/index.php/think-india/article/download/9677/5426/>
- [3]. P., Lakshmi & S., Visalakshmi, (2013). Impact of Cooperatives in Financial Inclusion & Comprehensive Development. Journal of Finance and Economics. 1. 49-53. Retrieved from https://www.researchgate.net/publication/270608273_Impact_of_Cooperatives_in_Financial_Inclusion_Comprehensive_Development
- [4]. Financial Inclusion Overview - World Bank. Retrieved from <https://www.worldbank.org/en/topic/financialinclusion/overview>
- [5]. Sharma, H.L., (2023). Cooperatives and Rural Livelihood. 71. 23-27. Retrieved from https://www.researchgate.net/publication/366920171_Cooperatives_and_Rural_Livelihood
- [6]. Mhembwe S, Dube E, (2017). The role of cooperatives in sustaining the livelihoods of rural communities: The case of rural cooperatives in Shurugwi District, Zimbabwe. Jamba. 24;9(1). 341. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC6014090/>
- [7]. 12 Benefits of Financial Inclusion. Retrieved from <https://finclusion.org/fii-blog/benefits-of-financial-inclusion.html>

- [8]. Cooperatives Working For Financial Inclusion An essential role in the Collective and General Interest Summary of the Work Anaïs Périlleux - CIRIEC International. Retrieved from <https://www.ciriec.uliege.be/wp-content/uploads/2015/12/Summery-of-Anais-Perilleux-Thesis.pdf>
- [9]. Mohite Vikram, (2008). Financial Inclusion through Cooperatives – A Corridor to Serve the Unserved. SSRN Electronic Journal. 10. Retrieved from https://www.researchgate.net/publication/228220402_Financial_Inclusion_through_Cooperatives_-_A_Corridor_to_Serve_the_Unserved
- [10]. Primary cooperatives in gujarat - National Cooperative Database. Retrieved from <https://cooperatives.gov.in/en>
- [11]. Ranjan Kumar Nayak, (2019). Financial Inclusion through Cooperative Banks: A Feasible Option for Inclusive Growth. Retrieved from <https://iimdr.ac.in/wp-content/uploads/2019/12/v2012-v4issue3-Financial-Inclusion-through-Cooperative.pdf>
- [12]. Virendra Kumar, K. G. Wankhede, and H. C. Gena, (2015). Role of Cooperatives in Improving Livelihood of Farmers on Sustainable Basis. American Journal of Educational Research. 3(10). 1258-1266. Retrieved from <https://www.rfilc.org/wp-content/uploads/2020/08/Cooperatives.pdf>
- [13]. Siddaraju V. G., (2012). Cooperatives and financial inclusion in India: Issues and challenges. International NGO Journal. 7(3). 46-54. Retrieved from <https://academicjournals.org/journal/INGOJ/article-full-text-pdf/E7EC54541159>
- [14]. Primary Agricultural Credit Societies UPSC CSE - Chahal Academy. Retrieved from <https://chahalacademy.com/primary-agricultural-credit-societies>
- [15]. Organisation Profile - Rajkot District Co-Operative Milk Producer's Union Ltd. Retrieved from <https://rajkotunion.coop/index.php?file=st-AboutUs>
- [16]. Financial reports of Rajkot District Co-Operative Milk Producer's Union Ltd. Retrieved from <https://rajkotunion.coop/index.php?file=st-ReportsAndArchive>
- [17]. M. V. Chaudhary, (2021). Socio-economic Impact of Cooperative Society on its Members - CABI Digital Library. Retrieved from <https://www.cabidigitallibrary.org/doi/pdf/10.5555/20210132601>
- [18]. Expansions of Co-operative Societies – By Ministry of Cooperation. Retrieved from <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2036421>
- [19]. Number of cooperative societies district wise and type wise. Retrieved from <https://rcs.gujarat.gov.in/Home/NOCSDWATW>
- [20]. Tarsem Lal, (2018). Measuring impact of financial inclusion on rural development through cooperatives. International Journal of Social Economics. 46(3). 352-376. Retrieved from <https://ideas.repec.org/a/eme/ijsepp/ijse-02-2018-0057.html>
- [21]. Oko, Sylvanus & Ushie, Roy & Michael, (2019). The Role of Cooperative Societies and Credit Thrifts On Financial Inclusion And Economic Development. (A Study of Bekwarra L.G. Area Of Cross River State). 1. 37-43. Retrieved from https://www.researchgate.net/publication/374547408_THE_ROLE_OF_COOPERATIVE_SOCIETIES_AND_CREDIT_THRIFTS_ON_FINANCIAL_INCLUSION_AND_ECONOMIC_DEVELOPMENT_A_STUDY_OF_BEKWARRA_LG_AREA_OF_CROSS_RIVER_STATE
- [22]. Priyanka Agarwal. Role of Urban Cooperative Banks in Financial Inclusion. Anusandhan - NDIM's Journal of Business and Management Research. Retrieved from <https://qtanalytics.in/journals/index.php/ANUSANDHAN/article/download/1465/824/2409>
- [23]. Samir Kumar Panigrahi & K.P. Yadav, (2023). A Study on the Impact of Financial Inclusion on Rural Development in Odisha. Journal of Propulsion Technology. 44 (2). Retrieved from <https://propulsiontechjournal.com/index.php/journal/article/download/226/203/416>
- [24]. Chibba, M. (2009). Financial inclusion, poverty reduction and the millennium development goals. The European Journal of Development Research. 21(2). 213-230.
- [25]. Alok K. Sahoo, Sanat K. Meher, Tarak C. Panda, Susrita Sahu, Rukeiya Begum, and N. C. Barik, (2020). Critical Review on Cooperative Societies in Agricultural Development in India. Current Journal of Applied Science and Technology. 39(22). 114-121.
- [26]. Sujith T.S & Sumathy Mohan, (2022). Does the Co-operatives Help the Rural Development in India? Technoarete Transactions on Advances in Social Sciences and Humanities. 2(1). 11-15.
- [27]. Pinakin, Asodiya & Parth, Asodiya & Rakesh, Dhandhukiya & Parmar, Vinay & Jayant, Makadiya, (2014). Impact of Primary Agricultural Cooperative Societies' on Farmer's Economy of Panchmahal District of Middle Gujarat, India. Journal of Agricultural Science. 6. 195-195.
- [28]. Tripathy, Kamal & Paliwal, Manisha & Chatradhi, Nishita, (2021). Good Governance Practices and Competitiveness in Cooperatives: An Analytical Study of Kerala Primary Agricultural Credit Societies. International Journal of Global Business and Competitiveness. 16.
- [29]. Suresh V, Vivek S, Sreejith SS, (2024). Assessing the long-term viability of farmers' collectives in South India. Front Sociol. 29(9).
- [30]. K. K. Tripathy, Manisha Paliwal, Nishita Nistala (2021). Good Governance Practices and Competitiveness in Cooperatives: An Analytical Study of Kerala Primary Agricultural Credit Societies. International Journal of Global Business and Competitiveness. Retrieved from https://www.ies.gov.in/pdfs/Tripathy2021_Article_GoodGovernancePracticesAndComp.pdf
- [31]. V P Chaudhari, (2023). Financial Analysis of Sugar Co-Operative Societies In Gujarat State. Retrieved from <https://krishikosh.egranth.ac.in/items/b98a9d55-1a51-4eb5-8a0b-949d77b681e8>
- [32]. Kurien V, (1997). The AMUL Dairy Cooperatives: Putting the Means of Development into the Hands of Small Producers in India. Reasons for Hope: Instructive Experiments in Rural Development, Kumarian Press, West Hartford.
- [33]. Vaswani, L.K.. (2013). Government to governance: The challenge of Co-operative revival in India. Retrieved from https://www.researchgate.net/publication/300414897_Government_to_governance_The_challenge_of_Co-operative_revival_in_India
- [34]. Kaleb Kelemu, Tesfaye Haregewoin, Eyob Bezabeh, Turuwark Zalalam and Dejene Hailegiorgis, (2014). Revitalizing The Role of Cooperatives In Ethiopian Economy. International Journal of Development Research. 4(10). 2019-2023.
- [35]. Ortmann, Gerald F. & King, Robert P., (2007). Agricultural cooperatives II: Can they facilitate access of small-scale farmers in South Africa to input and product markets? Agrekon, Agricultural Economics Association of South Africa (AEASA). 46(2). 1-26.