

A Study on Cooperative Societies in Economic Development: Special Reference to Kumaun Division of Uttarakhand

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Abstract

This study examines the impact of cooperative societies on economic development in the Kumaun Division of Uttarakhand, India. Using primary data collected from 150 respondents across the Almora, Nainital, and Udham Singh Nagar districts, this study analyzes the role of cooperatives in promoting financial inclusion, agricultural productivity, and rural entrepreneurship. Descriptive statistics, ANOVA, and post-hoc tests revealed significant differences in cooperative performance across districts, with cooperatives in Udham Singh Nagar demonstrating relatively stronger economic contributions. The findings suggest that, while cooperatives have been instrumental in enhancing livelihoods and economic resilience, their effectiveness varies based on geographical conditions, institutional support, and infrastructure accessibility. This study provides recommendations for strengthening cooperative movement in the region through policy interventions, capacity building, and enhanced technological integration.

Keywords: Cooperative societies, economic development, Kumaun Division, Uttarakhand, rural development

1. Introduction

Cooperative societies have emerged as crucial institutional mechanisms for economic development, particularly in rural and semi-urban areas, fostering collective action and providing accessible financial services. In India, the cooperative movement has a long history, dating back to the early 20th century, and has evolved significantly over time, playing a pivotal role in the country's agricultural and rural development strategies (Mathur, 2019).

The cooperative structure is particularly relevant in the context of the Kumaun Division of Uttarakhand, which is characterised by its mountainous terrain, diverse agro-climatic conditions, and predominantly agrarian economy. The region is comprised of six districts: Almora, Bageshwar, Champawat, Nainital, Pithoragarh, and Udham Singh Nagar. For this study, we focus on three key districts—Almora, Nainital, and Udham Singh Nagar—which represent varying levels of economic development, topographical features, and cooperative penetration.

The mountainous nature of Kumaun Division presents unique challenges for economic activities and financial service delivery. Cooperatives in this region have historically served as crucial institutions to address these challenges by pooling resources, providing credit facilities, marketing agricultural produce, and promoting local entrepreneurship (Singh 2022). However, despite their potential importance, empirical research on the effectiveness of cooperative societies in this specific geographical context remains limited.

1.1 Statement of the Problem

Although cooperatives are often promoted as vehicles for inclusive growth and poverty alleviation, their actual performance and contribution to economic development vary significantly across regions. Despite the presence of numerous cooperative institutions in the Kumaun Division, their impact on local economic development has not been adequately studied. This research gap limits the formulation of evidence-based policies to strengthen the cooperative movements in the region.

1.2 Research Objectives

This study aims to:

- Assess the role of cooperative societies in promoting economic development in the Kumaun Division
- Compare the performance and impact of cooperatives across three districts: Almora, Nainital, and Udham Singh Nagar
- Identify factors influencing the effectiveness of cooperatives in different geographical and socio-economic contexts
- Formulate recommendations for enhancing the contribution of cooperatives to regional economic development

1.3 Research Questions

This study addressed the following research questions:

- a) How do cooperative societies contribute to the economic development of the Kumaun Division?
- b) What are the significant differences in cooperative performance across the Almora, Nainital, and Udham Singh Nagar Districts?
- c) What factors enhance or constrain cooperatives' effectiveness in promoting economic development?
- d) How can the cooperative movement be strengthened to better support economic development in the region?

1.4 Significance of the Study

This study contributes to the literature on cooperative economics and rural development by providing empirical evidence from a unique geographical context. These findings have practical implications for policymakers, cooperative administrators, and development practitioners working in mountainous regions with similar socioeconomic characteristics. By identifying successful cooperative models and implementation challenges, this study offers valuable insights into strengthening the cooperative sector in Uttarakhand and similar regions.

2. Literature Review

2.1 Conceptual Framework: Cooperatives and Economic Development

Cooperatives represent unique economic entities characterised by member ownership, democratic governance, and mutual benefit principles. The International Cooperative Alliance defines a cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise" (International Cooperative Alliance, 2022).

The theoretical perspectives on cooperatives in economic development span multiple paradigms. The institutional economics perspective emphasises cooperatives as mechanisms for reducing transaction costs and market failures in rural economies (Ostrom 2018). Meanwhile, the social capital framework views cooperatives as institutions that build trust, networks, and shared norms that facilitate economic activities (Putnam, 2020).

2.2 Empirical Studies on Cooperative Impact

Recent empirical studies have demonstrated the varied impact of cooperatives on economic outcomes. Agarwal (2021) found that agricultural cooperatives in Punjab significantly enhance farm productivity through improved access to inputs and technology. Kumar and Sharma (2023) documented the positive effects of dairy cooperatives on household income and asset accumulation in Gujarat.

However, the results are not universally positive. Mehta et al. (2022) identified limitations in the impact of credit cooperatives in Maharashtra, with benefits accruing disproportionately to larger and more affluent farmers. Similarly, Rana and Patel (2021) highlighted the governance challenges that limit cooperative effectiveness in several northern Indian states.

2.3 Cooperatives in Uttarakhand: Historical Context

The cooperative movement in Uttarakhand dates back to the early 20th century, when it initially focused on agricultural credit societies. After independence, cooperatives expanded to include multipurpose service societies, marketing cooperatives, and consumer cooperatives (Pande, 2021). Following Uttarakhand's formation as a separate state in 2000, the cooperative sector received renewed policy attention, with the state government implementing various schemes to strengthen cooperative institutions (Government of Uttarakhand 2018).

2.4 Research Gap

While studies on cooperatives in various Indian states exist, research specifically examining the cooperative impacts in Uttarakhand's Kumaun Division remains limited. The few available studies either focus on specific cooperative types (primarily credit and dairy) or are primarily descriptive, rather than analytical. The current study addresses this gap by providing a comprehensive analysis of different cooperative types across multiple districts using rigorous statistical methods to assess their economic development impact.

3. Research Methodology

3.1 Research Design

This study employed a mixed-method research design that combined quantitative data analysis with qualitative insights. The quantitative component utilises structured questionnaires to collect primary data from cooperative members, whereas the qualitative dimension incorporates interviews with cooperative officials and observations of cooperative operations.

3.2 Sampling Method and Sample Size

A multi-stage sampling technique was employed.

- First stage: Purposive selection of three districts (Almora, Nainital, and Udham Singh Nagar) representing varying topographical and developmental characteristics
- Second stage: Random selection of 10 cooperatives from each district, encompassing different cooperative types (credit, agricultural, dairy, consumer, and multipurpose)
- Third stage: Random selection of 5 members from each cooperative, resulting in a total sample of 150 respondents (50 per district)

3.3 Data Collection Instruments

Primary data were collected using a structured questionnaire that was administered through face-to-face interviews. The questionnaire comprised the following sections:

- Respondent demographics and socio-economic characteristics
- Cooperative membership details and participation levels
- Benefits received from cooperatives
- Perceived impact on various economic dimensions
- Challenges and suggestions for improvement

Additionally, semi-structured interviews were conducted with 15 cooperative officials (five per district) to gather insights into operational aspects, challenges, and future prospects.

3.4 Data Analysis Methods

The collected data were analysed using IBM SPSS Statistics (Version 26). The following analytical methods were used:

- Descriptive statistics:** Mean, standard deviation, frequency distributions, and percentages to characterize the sample and summarize key variables
- One-way ANOVA:** To test for significant differences in cooperative performance and impact across the three districts
- Post hoc tests:** Tukey's HSD test to identify specific group differences when ANOVA results indicated significant inter-district variations
- Correlation analysis:** To examine relationships between cooperative characteristics and economic impact indicators

3.5 Ethical Considerations

The study adhered to ethical research standards, including informed consent from all participants, confidentiality of data, voluntary participation, and transparency of the research objectives. Necessary permissions were obtained from the relevant cooperative departments and authorities before data collection commenced.

4. Results and Analysis

4.1 Demographic Profile of Respondents

The demographic characteristics of the 150 respondents are summarised in Table 1.

Table 1: Demographic Characteristics of Respondents

Characteristic	Almora (n=50)	Nainital (n=50)	Udham Singh Nagar (n=50)	Overall (N=150)
Gender				
Male	68% (34)	62% (31)	70% (35)	66.7% (100)
Female	32% (16)	38% (19)	30% (15)	33.3% (50)
Age Group				
18-30 years	12% (6)	16% (8)	18% (9)	15.3% (23)

31-45 years	46% (23)	42% (21)	48% (24)	45.3% (68)
46-60 years	34% (17)	32% (16)	26% (13)	30.7% (46)
Above 60 years	8% (4)	10% (5)	8% (4)	8.7% (13)
Education				
Illiterate	8% (4)	6% (3)	4% (2)	6.0% (9)
Primary	18% (9)	16% (8)	14% (7)	16.0% (24)
Secondary	36% (18)	34% (17)	32% (16)	34.0% (51)
Higher Secondary	28% (14)	30% (15)	32% (16)	30.0% (45)
Graduate & above	10% (5)	14% (7)	18% (9)	14.0% (21)
Primary Occupation				
Agriculture	64% (32)	52% (26)	46% (23)	54.0% (81)
Animal husbandry	12% (6)	10% (5)	8% (4)	10.0% (15)
Service	8% (4)	14% (7)	16% (8)	12.7% (19)
Business	10% (5)	16% (8)	22% (11)	16.0% (24)
Others	6% (3)	8% (4)	8% (4)	7.3% (11)

(Researcher's Compilation)

The demographic data revealed several patterns. Males constitute approximately two-thirds of the cooperative members across all districts. The predominant age group was 31-45 years, representing 45.3% of the respondents. Educational attainment varied, with most respondents having secondary (34%) or higher secondary (30%) education. Agriculture remains the primary occupation across all districts, although its prevalence decreases from Almora (64% in) to 46% in Udham Singh Nagar (46%), reflecting varying levels of economic diversification.

4.2 Cooperative Membership Characteristics

Table 2: Cooperative Membership Characteristics

Characteristic	Almora (n=50)	Nainital (n=50)	Udham Singh Nagar (n=50)	Overall (N=150)
Type of Cooperative				
Credit	36% (18)	32% (16)	28% (14)	32.0% (48)
Agricultural	28% (14)	24% (12)	26% (13)	26.0% (39)
Dairy	18% (9)	20% (10)	22% (11)	20.0% (30)
Consumer	8% (4)	12% (6)	12% (6)	10.7% (16)
Multipurpose	10% (5)	12% (6)	12% (6)	11.3% (17)
Duration of Membership				
< 5 years	22% (11)	24% (12)	28% (14)	24.7% (37)
5-10 years	34% (17)	36% (18)	32% (16)	34.0% (51)
11-15 years	28% (14)	24% (12)	22% (11)	24.7% (37)
> 15 years	16% (8)	16% (8)	18% (9)	16.7% (25)
Participation in Cooperative Activities				
High	24% (12)	30% (15)	34% (17)	29.3% (44)
Medium	46% (23)	44% (22)	48% (24)	46.0% (69)
Low	30% (15)	26% (13)	18% (9)	24.7% (37)

(Researcher's Compilation)

Credit cooperatives represent the largest category (32%), followed by agricultural cooperatives (26%). Membership duration was distributed across categories, with the 5-10 year range being the most common (34%). Participation levels were predominantly medium across districts, although Udham Singh Nagar showed higher rates of high participation (34%) than Almora (24%).

4.3 Economic Benefits of Cooperative Membership

Respondents rated the various economic benefits received through cooperative membership on a 5-point Likert scale (1= no benefit, 5= very high benefit). The mean scores were calculated for each benefit category across districts.

Table 3: Economic Benefits from Cooperative Membership (Mean Scores)

Benefit Category	Almora	Nainital	Udham Singh Nagar	Overall	F-value	p-value
Access to credit	3.64	3.82	4.18	3.88	7.236	0.001*
Input availability	3.42	3.68	3.94	3.68	5.127	0.007*
Marketing support	2.86	3.24	3.72	3.27	12.453	0.000*
Price realization	2.94	3.18	3.64	3.25	9.328	0.000*
Technical knowledge	3.12	3.34	3.68	3.38	4.864	0.009*
Skill development	2.76	3.08	3.46	3.10	8.172	0.000*
Employment opportunities	2.58	2.84	3.26	2.89	7.463	0.001*
Income enhancement	3.24	3.48	3.92	3.55	8.942	0.000*
Overall economic impact	3.18	3.46	3.88	3.51	10.327	0.000*

*Significant at $p < 0.01$

(Researcher's Compilation)

The ANOVA results indicate significant differences across districts for all benefit categories ($p < 0.01$). Udham Singh Nagar consistently showed the highest mean scores across all categories, followed by Nainital and Almora. Access to credit emerged as the most substantial overall benefit (3.88), while employment opportunities showed the lowest mean score (2.89).

4.4 Post Hoc Analysis of District-wise Differences

To identify specific inter-district differences, Tukey's honest significant difference post-hoc test was conducted for each benefit category.

Table 4: Tukey's HSD Post Hoc Test Results (Mean Differences)

Benefit Category	Almora vs. Nainital	Almora vs. Udham Singh Nagar	Nainital vs. Udham Singh Nagar
Access to credit	-0.18	-0.54*	-0.36*
Input availability	-0.26	-0.52*	-0.26
Marketing support	-0.38*	-0.86*	-0.48*
Price realization	-0.24	-0.70*	-0.46*
Technical knowledge	-0.22	-0.56*	-0.34
Skill development	-0.32	-0.70*	-0.38*
Employment opportunities	-0.26	-0.68*	-0.42*
Income enhancement	-0.24	-0.68*	-0.44*
Overall economic impact	-0.28	-0.70*	-0.42*

*Significant at $p < 0.05$

(Researcher's Compilation)

Post hoc analysis revealed several patterns.

- Significant differences exist between Almora and Udham Singh Nagar for all benefit categories
- Differences between Nainital and Udham Singh Nagar are significant for most categories except input availability and technical knowledge
- Differences between Almora and Nainital are only significant for marketing support

This pattern suggests a clear gradient, with cooperative benefits increasing from Almora to Nainital to Udham Singh Nagar, likely reflecting the differences in infrastructure, topography, and overall economic development.

4.5 Factors Influencing Cooperative Performance

Respondents rated various factors affecting cooperative performance on a 5-point Likert scale (1= no influence, 5= very high influence).

Table 5: Factors Influencing Cooperative Performance (Mean Scores)

Factor	Almora	Nainital	Udham Singh Nagar	Overall	F-value	p-value
Leadership quality	4.26	4.38	4.42	4.35	1.284	0.280
Member participation	4.18	4.24	4.32	4.25	0.874	0.419
Financial resources	4.36	4.40	4.48	4.41	0.762	0.469
Government support	4.24	4.32	4.38	4.31	0.946	0.391
Market linkages	3.98	4.16	4.44	4.19	5.873	0.004*
Transport infrastructure	3.76	4.02	4.38	4.05	8.426	0.000*
Technology adoption	3.68	3.94	4.22	3.95	7.128	0.001*
Training & capacity building	3.82	4.04	4.24	4.03	4.362	0.014*
Financial management	4.08	4.16	4.28	4.17	1.576	0.210
Conflict resolution	3.92	3.98	4.06	3.99	0.738	0.480

*Significant at $p < 0.05$

(Researcher's Compilation)

Interestingly, factors related to internal governance (leadership, member participation, and financial management) showed high mean scores across all districts without significant inter-district differences. However, factors related to the external environment and infrastructure (market linkages, transport infrastructure, and technology adoption) show significant differences across districts, with Udham Singh Nagar consistently rating their influence higher.

4.6 Challenges Facing Cooperatives

The respondents identified key challenges facing cooperative societies in their respective districts.

Table 6: Key Challenges Facing Cooperatives (% of Respondents Identifying)

Challenge	Almora	Nainital	Udham Singh Nagar	Overall
Inadequate capital	78%	74%	68%	73.3%
Limited market access	84%	72%	60%	72.0%
Poor infrastructure	82%	76%	54%	70.7%
Low member participation	62%	58%	56%	58.7%
Lack of professional management	68%	64%	60%	64.0%
Political interference	70%	72%	74%	72.0%
Inadequate training	74%	70%	64%	69.3%
Regulatory constraints	58%	56%	60%	58.0%
Competition from private sector	52%	66%	78%	65.3%
Limited technology adoption	76%	68%	58%	67.3%

(Researcher's Compilation)

Challenge perceptions varied across districts. Almora respondents emphasised infrastructure and market access limitations, while Udham Singh Nagar respondents highlighted competition from the private sector as their primary concern. Political interference has consistently been identified as a significant challenge across all the districts.

4.7 Impact on Sustainable Development Goals

Respondents rated cooperative contributions to various Sustainable Development Goals on a 5-point scale (1= no contribution, 5= very high contribution).

Table 7: Cooperative Contribution to SDGs (Mean Scores)

SDG	Almora	Nainital	Udham Singh Nagar	Overall	F-value	p-value
No Poverty	3.28	3.42	3.76	3.49	5.324	0.006*
Zero Hunger	3.22	3.38	3.64	3.41	4.182	0.017*
Gender Equality	2.94	3.18	3.46	3.19	5.873	0.004*
Decent Work and Economic Growth	3.08	3.36	3.72	3.39	8.127	0.000*
Industry, Innovation and Infrastructure	2.68	2.96	3.36	3.00	8.834	0.000*
Reduced Inequalities	3.12	3.28	3.54	3.31	4.271	0.016*
Sustainable Communities	3.34	3.52	3.78	3.55	4.628	0.011*
Responsible Consumption and Production	3.22	3.36	3.64	3.41	4.092	0.019*

*Significant at $p < 0.05$

(Researcher's Compilation)

Cooperatives are perceived to make the strongest contributions to "Sustainable Communities" (3.55) and "No Poverty" (3.49) goals. Significant inter-district differences existed for all SDGs, with Udham Singh Nagar consistently showing higher perceived cooperative contributions across all categories.

5. Discussion

5.1 Interpreting Key Findings

This study reveals several important patterns regarding cooperative performance and impact in Kumaun Division.

Geographical Gradient in Performance: A consistent pattern emerges across analyses, with cooperatives in Udham Singh Nagar demonstrating stronger performance and greater economic impact than those in Nainital and Almora. This likely reflects Udham Singh Nagar's geographical advantages—being located in the plains with better infrastructure, connectivity, and agricultural conditions than the mountainous districts of Nainital and Almora.

Differential Impact Areas: While cooperatives provide significant benefits across multiple economic dimensions, their strongest contributions appear to be financial inclusion (access to credit) and agricultural input supply. Marketing support and employment generation showed comparatively lower impacts, suggesting areas for potential improvement.

Infrastructural Determinants: The analysis of the factors influencing cooperative performance highlights the critical role of infrastructural elements, particularly transport connectivity, market linkages, and technology access. These factors showed significant inter-district variations, explaining much of the observed performance differential.

Common Challenges: Despite differing contexts, certain challenges—particularly inadequate capital, political interference, and limited professional management—have emerged as common constraints across all districts. This suggests the need for system-wide reforms rather than district-specific interventions.

Member Participation Dynamics: Medium participation levels predominate across districts, although Udham Singh Nagar shows higher participation rates. This correlates with better cooperative performance and underscores the importance of active member engagement in cooperative success.

5.2 Theoretical Implications

The findings align with and extend existing theoretical frameworks in several ways.

- Institutional Theory Validation:** The significant impact of leadership quality, member participation, and governance factors supports institutional theories that emphasise the importance of organizational design and rules in cooperative performance.
- Social Capital Considerations:** The correlation between participation levels and cooperative performance validates social capital theories, highlighting the role of networks, trust, and collective action in cooperative success.
- Geographic Context Specificity:** The clear performance gradient across districts underscores spatial theories that emphasise how geographical conditions moderate institutional effectiveness. This extends the

existing theoretical understanding by highlighting how the same cooperative model performs differently across topographical contexts.

d) **Infrastructure-Performance Nexus:** The significant influence of infrastructural factors on cooperative performance adds nuance to existing theories by highlighting how external enablers interact with organizational design to determine outcomes.

5.3 Policy Implications

The findings have several policy implications for strengthening cooperatives in the Kumaun Division.

a) **District-Specific Approaches:** Given significant inter-district variations, a one-size-fits-all policy approach is unlikely to be effective. Policies should be tailored to address the specific constraints in each district: infrastructure in Almora, market linkages in Nainital, and private sector competition in Udham Singh Nagar.

b) **Infrastructure Investments:** For mountainous districts, particularly Almora, complementary investments in road connectivity, digital infrastructure, and market facilities would significantly enhance cooperative performance.

c) **Capacity Building Focus:** The consistent identification of management quality and training limitations suggests the need for enhanced capacity-building programs, particularly focusing on professional management skills, financial literacy, and technological capabilities.

d) **Value Chain Integration:** The relatively weaker performance in marketing support indicates the need for policies promoting better integration of cooperatives into broader value chains, potentially through public-private partnerships and e-commerce platforms.

e) **Governance Reforms:** To address political interference concerns, policy reforms that strengthen cooperative autonomy and establish clearer regulatory boundaries could enhance operational effectiveness.

6. Conclusion and Recommendations

6.1 Summary of Findings

This study examined the role of cooperative societies in promoting economic development across three districts of the Kumaun Division of Uttarakhand. The findings reveal that cooperatives significantly contribute to economic development through multiple channels, particularly financial inclusion, input supply, and income enhancement. However, their effectiveness varies considerably across geographical contexts, with plain districts demonstrating stronger cooperative performance than mountainous areas.

The analysis identifies key factors that influence cooperative performance, including leadership quality, financial resources, infrastructure access, and market linkages. Common challenges across districts include inadequate capital, political interference, and limited professional management, although the relative importance of specific constraints varies with location.

6.2 Recommendations

Based on these findings, we offer the following recommendations for strengthening cooperative movements in the Kumaun Division:

For Policymakers:

- Develop district-specific cooperative development strategies addressing the unique constraints in each area
- Increase infrastructure investments in mountainous districts to enhance market access and reduce transaction costs
- Implement governance reforms to reduce political interference while maintaining appropriate regulatory oversight
- Create specialized financial products and credit guarantees to address capital constraints
- Establish public-private partnerships to enhance market linkages and value chain integration

For Cooperative Management:

- Strengthen member participation through enhanced communication, transparent operations, and meaningful engagement opportunities
- Invest in professional management capacity and staff training programs

- c) Diversify service offerings beyond traditional credit and input supply to include marketing, value addition, and technology services
- d) Adopt digital technologies for improved record-keeping, financial management, and member services
- e) Develop strategic partnerships with other market actors, including private businesses and NGOs

Research and Development Institutions

- a) Conduct product and process innovation research tailored to mountain agriculture and small-scale production systems
- b) Develop and disseminate appropriate technologies enhancing productive efficiency in mountain contexts
- c) Design capacity-building modules addressing specific skill gaps identified in cooperative management
- d) Establish monitoring and evaluation systems to track cooperative performance and development impact

6.3 Limitations and Future Research Directions

This study had several limitations. The sample size, while adequate for statistical analysis, could be expanded in future research to enhance its representativeness. The cross-sectional design captures a snapshot of cooperative performance but limits the understanding of temporal dynamics. Additionally, the study focused on member perspectives and would benefit from incorporating more extensive data on cooperative financial performance and organizational indicators.

Future research could address these limitations by:

- a) Conducting longitudinal studies tracking cooperative performance and impact over time
- b) Expanding geographical coverage to include all six districts of the Kumaun Division
- c) Incorporating mixed methods approaches combining quantitative analysis with in-depth case studies of high-performing cooperatives
- d) Examining the interaction between cooperatives and other institutions in the local development ecosystem
- e) Investigating the potential of new cooperative models, including producer companies and digital cooperatives, in the mountainous context

6.4 Concluding Remarks

Cooperative societies remain vital for inclusive economic development in the Kumaun Division of Uttarakhand. However, realising their full potential requires acknowledging their context-specific nature and addressing the unique challenges that they face in different geographical settings. Through targeted policy interventions, management improvements, and innovative approaches, cooperatives can enhance their contribution to sustainable economic development in this mountainous region.

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