Social Capital and Member Empowerment: An Empirical Study among Cooperatives in Kerala

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ABBREVIATIONS

TRT	Trust
SNT	Social Networks
NAV	Norms and Values
CIS	Communication and Information Sharing
LNG	Leadership and Governance
SCL	Social Capital
EMP	Member Empowerment
MSA	Member Satisfaction
SEM	Structural Equation Modeling
APL	Above Poverty Line
BPL	Below Poverty Line
K-W Test	Kruskal-Wallis Test
K-S Test	Kolmogorov-Smirnov Test
SC	Scheduled Caste
ST	Scheduled Tribe
OBC	Other Backward Class
CMIN	Chi-Square Minimum
DF	Degrees of Freedom
NPAR	Number of Parameters
SPSS	Statistical Package for Social Sciences
AMOS	Analysis of Moment Structures
SE	Standard Error
c.r.	Critical Ratio
CFI	Comparative Fit Index
GFI	Goodness of Fit Index
IFI	Incremental Fit Index
NFI	Normed fit index
RMSEA	Root Mean Square Error of Approximation
SRMR	Standardized Root Mean Square Residual
AVE	Average Variance Extracted
HTMT Ratio	Heterotrait-Monotrait Ratio
Sig.	Significance Level
MSV	Maximum Shared Value
MaxR(H)	Maximum Reliability
CR	Composite Reliability
NABARD	National Bank for Agricultural and Rural Development
SD	Standard Deviation
NCDC	National Cooperative Development Corporation
SHGs	Self-Help Groups
ICM	Institute of Cooperative Management

ILO	International Labour Organization
CDD	Community Driven Development
TRC	Truth and Reconciliation Commission
SCHIs	Social Capital Health Index
ESN	Enterprise Social Networks
EU	European Union
RFCs	Rural Financial Cooperatives
ICT	Information Communication Technology
PACS	Primary Agricultural Credit Societies
SET	Social Exchange Theory
NGIs	Non-Governmental Institutions
NGO	Non-Governmental Organization
PRIs	Panchayati Raj Institutions

ABSTRACT

This research aims to determine the level of social capital formation among cooperative members in Kerala and tries to examine the role of influencing factors such as trust, social networks, norms and values, communication and information sharing and leadership and governance on the formation social capital. The study further attempted to determine the role of social capital in empowering and satisfying cooperative members and the mediating effect of member empowerment between social capital and member satisfaction. This study also identified the change in empowerment attained by cooperative members after becoming a member in a cooperative society.

The present study is a descriptive and quantitative one based on primary and secondary data. The research considered the members of primary cooperatives in Kerala as the population. By employing a multi-stage sampling technique the research identified diary cooperatives, miscellaneous non-credit cooperative societies, credit and thrift societies, primary agricultural credit cooperatives, miscellaneous credit cooperative societies, educational and training cooperatives and consumer cooperatives as the proxies of cooperative sector and collected primary data from 756 members who are spread across three districts in Kerala using a structured questionnaire. The secondary sources of data were collected from various books, journals, reports and databases. Based on the requirements, the study employed a comprehensive set of statistical tools including frequency distributions, mean scores, standard deviation, Kolmogorov-Smirnov test, Kruskal Wallis H test, Mann-Whitney U test, Wilcoxon Signed Rank test and Structural Equation Modeling (SEM) to analyse the data.

This study unravels that there is a high level of social capital generation among cooperative members in Kerala. The results clearly clarifies that the influencing factors has a significant role in the formation of social capital among cooperatives and the social capital so formed leads to member empowerment and member satisfaction. It is also evident from the findings that member empowerment partially mediate between social capital and member satisfaction. The investigation further reveals that there is a change in the level of empowerment of members. Therefore, this study affirms that, social capital is also a crucial determinant of cooperative and member development along with financial, human and physical capital.

സംഗ്രഹം

കേരളത്തിലെ സഹകരണ സംഘാംഗങ്ങളിൽ സാമൂഹിക മൂലധനം എത്രത്തോളം രൂപപ്പെട്ടിട്ടുണ്ടെന്ന് തിരിച്ചറിയുകയും, അതിന്റെ രൂപീകരണത്തിൽ വിശ്വാസം, സാമൂഹിക ബന്ധങ്ങൾ, മാനദണ്ഡങ്ങളും മൂല്യങ്ങളും, ആശയവിനിമയവും വിവരപങ്കിടലും, നേതൃത്വം, ഭരണനിർവഹണം തുടങ്ങിയ ഘടകങ്ങൾ വഹിക്കുന്ന പങ്ക് വിശകലനം ചെയ്യുന്നതുമാണ് ഈ ഗവേഷണത്തിന്റെ ലക്ഷ്യം. കൂടാതെ, സാമൂഹിക മൂലധനം സഹകരണ സംഘാംഗങ്ങളുടെ ശക്തീകരണത്തിലും സംതൃപ്തിയിലും വഹിക്കുന്ന പങ്കും, സാമൂഹിക മൂലധനവും അംഗങ്ങളുടെ സംതൃപ്തിയും തമ്മിലുള്ള ബന്ധത്തിൽ അംഗങ്ങളുടെ ശക്തീകരണം ഒരു ഇടനിലക്കാരന്റെ സ്ഥാനമെങ്ങനെ വഹിക്കുന്നു എന്നും ഈ പഠനം പരിശോധിക്കുന്നു. സഹകരണ സംഘത്തിൽ അംഗങ്ങളായശേഷം സംഘാംഗങ്ങൾ നേടിയ ശക്തീകരണത്തിലെ മാറ്റവും ഈ ഗവേഷണം തിരിച്ചറിഞ്ഞിട്ടുണ്ട്.

നിലവിലെ പഠനം വിവരണാത്മകവും കണക്കുകൂട്ടലിനെ അടിസ്ഥാനമാക്കിയതുമാണ്. കേരളത്തിലെ പ്രാഥമിക സഹകരണ സംഘങ്ങളിലെ അംഗങ്ങളെ പഠന ജനസംഖ്യയായി പരിഗണിച്ചു. ബഹുസ്ഥരീയ സാമ്പിളിങ് രീതിയിലൂടെ ഡയറി സഹകരണ സംഘങ്ങൾ, ക്രെഡിറ്റ്-നോൺക്രെഡിറ്റ് സഹകരണ സംഘങ്ങൾ, കാർഷിക ക്രെഡിറ്റ് സഹകരണ സംഘങ്ങൾ, വിദ്യാഭ്യാസ-പരിശീലന സഹകരണ സംഘങ്ങൾ, ഉപഭോക്തൃ സഹകരണ സംഘങ്ങൾ എന്നിവയെ സഹകരണ മേഖലയെ പ്രതിനിധീകരിക്കുന്ന ഘടകങ്ങളായി തെരഞ്ഞെടുത്തു. തുടർന്ന്, മൂന്നു ജില്ലകളിലായി 756 അംഗങ്ങളിൽ നിന്ന് ഒരു ചോദ്യാവലി വഴി പ്രാഥമികവിവരങ്ങൾ ശേഖരിച്ചു. ദ്വിതീയവിവരങ്ങൾ പുസ്തകങ്ങൾ, ജേണലുകൾ, റിപ്പോർട്ടുകൾ, ഡാറ്റാബേസുകൾ മുതലായവയിൽ നിന്നാണ് ലഭിച്ചത്. തുടർന്ന് ആവശ്യങ്ങൾക്കനുസൃതമായി, ഫ്രീക്വൻസി ഡിസ്ട്രിബ്യൂഷൻ, ശരാശരി, സ്റ്റാൻഡേഡ് ഡിവിയേഷൻ, കൊൽമൊഗൊറോവ്-സ്മിർനോവ് ടെസ്റ്റ്, ക്രുസ്കൽ- വാലിസ് എച്ച് ടെസ്റ്റ്, മാൻ-വിറ്റ്നി യു ടെസ്റ്റ്, വിൽകോക്സൺ സൈൻഡ് റാങ്ക് ടെസ്റ്റ്, സ്ട്രക്ചറൽ ഇക്വേഷൻ മോഡലിങ് എന്നീ സ്ഥിതിവിവരശാസ്ത്ര ഉപകരണങ്ങൾ ഉപയോഗിച്ച് വിവരങ്ങൾ വിശകലനം ചെയ്തു.

ഈ പഠനം കേരളത്തിലെ സഹകരണ സംഘാംഗങ്ങളിൽ സാമൂഹിക മൂലധനം ഉയർന്ന തോതിൽ സൃഷ്ടിക്കപ്പെടുന്നുവെന്ന് വ്യക്തമാക്കുന്നു. കൂടാതെ സാമൂഹിക മൂലധനത്തിന്റെ രൂപീകരണത്തിൽ വിശ്വാസം, സാമൂഹിക ബന്ധങ്ങൾ, മാനദണ്ഡങ്ങളും മൂല്യങ്ങളും, ആശയവിനിമയവും വിവരപങ്കിടലും, നേതൃത്വം, ഭരണനിർവഹണം മുതലായ ഘടകങ്ങൾ നിർണായകമായ പങ്ക് വഹിക്കുന്നുവെന്നും ഫലങ്ങൾ സൂചിപ്പിക്കുന്നു, ഇങ്ങനെ രൂപപ്പെടുന്ന സാമൂഹിക മൂലധനം സംഘാംഗങ്ങളുടെ ശക്തീകരണത്തെയും, സംതൃപ്തിയെയും പ്രോത്സാഹിപ്പിക്കുന്നുണ്ട്. കൂടാതെ, അംഗങ്ങളുടെ ശക്തീകരണം സാമൂഹിക മൂലധനത്തിന്റെയും അംഗങ്ങളുടെ സംതൃപ്തിയുടെയും ഇടയിൽ ഭാഗികമായ ഇടനിലക്കാരന്റെ പങ്ക് വഹിക്കുന്നുവെന്നും കണ്ടെത്താനായി. പഠനത്തിന്റെ ഫലങ്ങൾ, അംഗങ്ങളുടെ ശക്തീകരണ നിലയിൽ മാറ്റം സംഭവിച്ചിട്ടുണ്ടെന്നും വ്യക്തമാക്കുന്നു. അതിനാൽ, സാമ്പത്തിക മൂലധനം, മാനവ മൂലധനം, ഭൗതിക മൂലധനം എന്നിവയ്ക്കൊപ്പം സാമൂഹിക മൂലധനവും സഹകരണ സംഘങ്ങളുടെ വികസനത്തിനും അംഗങ്ങളുടെ പുരോഗതിക്കുമുള്ള നിർണായക ഘടകമാണെന്ന് ഈ ഗവേഷണം ഉറപ്പിക്കുന്നു.

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Chapter I

Introduction

1.1 Background of the Study

The cooperative movement has always been the mainstay of inclusive economic growth and social transformation, especially in developing countries such as India. Cooperative societies are founded on the concepts of participatory democracy, collectivism and a people-centred approach to development. These institutions provide a tool that allows people, especially those belonging to weaker social and economically disadvantaged groups to come together and strive to achieve common economic, cultural and social goals. In India, the cooperative sector gained considerable momentum in the early twentieth century as a reaction to indebtedness among the rural population and the predatory activities of moneylenders. Since then, cooperatives have expanded their activities in various fields, including agriculture, credit, consumer services, dairy, fisheries and housing. However, cooperative success cannot be ensured exclusively by institutional structures or the intervention of policies; the performance of these organisations is eventually determined by the quality of the social relationships which nourish them. The intangible asset known as social capital is a part of this social fabric or web of norm sharing, trust and interpersonal ties. The phenomenon of social capital has been demonstrated to have a significant impact on promoting cooperative performance through the development of member commitment, cooperation, accounts and resilience.

In Kerala, the cooperative sector has a unique niche in the state's socio-economic system. The cooperative movement was rooted in Kerala, owing to its high literacy levels, politically progressive culture and history of social activism. Cooperatives in Kerala are well entrenched in local communities and have added value to the state's success in terms of financial inclusion, women's empowerment, food security and rural employment among others. The cooperatives in Kerala covers a wide range of economic activities starting with primary agricultural credit societies in isolated villages, cooperative banks in cities and federations at apex level. The peculiar feature of such organisations is not only their widespread nature in terms of the sector they represent but also their level of neighbourhood involvement and collective

proprietorship. In spite of this legacy, many cooperatives currently grapple with reduced participation of their members, leadership vacuums and misuse of governance. These barriers and weakness in performance support the idea of reconsidering internal cooperative processes, especially the creation of social capital and its sustainable development. Knowledge of the nature of the influence of variables such as trust formation, interpersonal communication, social networks, shared norms and values and leadership on social capital generation can be critical to strengthening cooperative resilience and member-driven performance.

Although the importance of social capital as a major element of participatory governance and collective efficacy, drawing on the experience of building cooperatives is fairly established, empirical studies on its development and effects in the cooperative sector have been limited particularly with reference to Kerala. Existing research usually covers financial performance, organizational structures or policy systems, neglecting the social fabric supporting cooperative operations and functioning. This study attempts to fill this gap by examining the key determinants of the formation of social capital and its effectiveness in empowering cooperative organization members. The study not only has a scholarly contribution to make to knowledge about social capital in cooperative development, but also it has implications to policymakers, cooperative administrators and development professionals in the state of Kerala and throughout India.

1.2 The Concept of Social Capital among Cooperatives

Hanifan (1916) coined the concept of social capital almost one century ago. Social capital serves as a theoretical and practical analytic device that helps regard the ways in which a network of relationships facilitates collective action and institutional performance. Its idea derives in the works of Pierre Bourdieu (1986), James Coleman (1988) and Robert Putnam (1993). When broadly defined, social capital refers to things that are contained in social relationships that can be tapped in varying degrees to achieve individual or collective goals. Physical capital is used to describe physical assets, human capital is used to describe skills and knowledge and social capital is used to describe the play of space in relation to each other, displaying trust, norms of reciprocity, information exchange and civic participation. Social capital is highly applicable, especially in cooperatives, which are member-owned and member-run

organizations where the strength of performance is determined by the type of interaction between members and not just the bosses or market forces (Fukuyama, 1995).

Cooperatives thrive in an environment with voluntary time, skills and resource contributions towards a common cause. The idea of voluntary participation lies in the trust, norms and values shared by others, interpersonal networks and a sense of community. Trust decreases the cost of transactions, cooperation and opportunistic behaviour among members (Putnam, 1993). The other fundamental dimension of social capital is norms and shared values, which define behavioural expectations according to the cooperative mission and thus foster internal integration and ethical devotion (Coleman, 1988). The mechanisms of communication, which are often informal, work as a channel for distributing knowledge, conflict solving and strengthening the group identity. Thus, social capital is not only a predecessor and product of continuous membership and participation in cooperatives, but also democratic (Narayan & Pritchett, 1999).

Both bridging and bonding forms of social capital have been found to be easily developed within the structure of cooperation due to the nature of the relationships arising between the participants in such a structure. Bonding social capital refers to associations with homogenous groups, such as close-knit cooperatives of farmers and specific credit unions serving a specific group of people. Bridge social capital, on the other hand, connects dissimilar groupings and enables access to extraneous information and resources. These two dimensions are essential to cooperative development because bonding capital enhances internal solidarity and loyalty, whereas bridging capital increases innovation, strategic collaborations and social legitimacy (Woolcock & Narayan, 2000). Leadership and governance systems also strengthen social capital, urging the participation of members in decision-making and sustaining transparent and inclusive processes (Chloupkova et al., (2003). Leaders who are social brokers can increase trust through networks and equilibrate personal and group interests.

This leads to tangible organisational benefits as social capital is developed in cooperatives in many ways. Empirical work has shown that a high value of social capital can be associated with better financial performance, better service delivery,

more member satisfaction and a better capacity to handle crises (Uphoff, 2000). Strong social capital facilitates the survival and long-term development of a cooperative, as the latter can stampede on collective action, deal with conflicts and exploit local knowledge (Dasgupta & Serageldin, 2000). The role of social capital as an empowerment facilitator is also given, where members experience a higher voice, control and access to resources. Cooperatives can also be an instrument of empowerment in rural and marginalised societies, where social capital is constructed and mobilised. When members sense that their roles are important and trust the relationships they develop, they tend to be involved and dedicated to the cooperative's long-term goals.

Although the appreciation of social capital is rising, there is a significant challenge in operationalising and measuring social capital in cooperatives. Social capital is conceptually intangible, contextual and multidimensional, making quantification difficult. However, there are several ways to quantify it, such as trust scales, participation indices and network analysis platforms. In India, where cooperative activities intersect with caste, class and gender issues, measuring social capital is not a simple exercise. A case in point is the Indian state of Kerala, where the growth of the cooperative movement is always high, and the indicators of human development are great. It depicts how the embedded customs and traditions of participation determine institutional performance. As cooperatives face new challenges in economic and social activities, maintaining social capital is a primary aspect of their performance and sustainability.

1.3 Evolution of Cooperative Societies in India and the Role of Social Capital

The cooperative movement in India is a historic developmental phenomenon that was institutionalised against the backdrop of compulsive British colonial elements of extractive labour and economic exploitation. In 1904, the Cooperative Credit Societies Act provided a legislative foundation for rural thrift societies, which were designed to alleviate indebtedness and limit usurious moneylending. The Cooperative Societies Act of 1912 further extended the remit of cooperatives to marketing, housing and production sectors. By the beginning of the twentieth century, cooperatives were a tool of local economic self-reliance and rural development that appealed to the Gandhian ideas of sufficiency in village economies. The institutionalisation of

cooperatives in the national developmental system further occurred after independence, with constitutional recognition accorded to them through Article 43B and their inclusion in the Five-Year Plans.

After Independence, the scale of cooperative operations in India increased rapidly. Cooperatives were the brainchild of policymakers who wanted a third tier of institutionalisation. Examples include how the agricultural sector used cooperatives to distribute inputs, fertilisers, seeds and the consumer cooperatives that reduced inflation and led to the fair distribution of key goods. Dairy cooperatives, the most significant of which is AMUL, headed by Mr. Verghese Kurien Ph. D., reshaped the dairy industry with the help of the Operation Flood Programme. Simultaneously, the National Cooperative Development Corporation (NCDC) was established in 1963 to provide funding and policy direction. Despite these developments, the cooperative sector continues to experience challenges such as political interference, corruption, lack of individual participation and unprofessional management. These challenges highlight the dependence of cooperatives on social funds. Social capital, defined as the sum total of relationships among people, social networks, norms and trust (Putnam, 1993), supports cooperative behaviour by minimising transaction costs through various mechanisms. In most Indian villages, informal systems and kinships are the social grounds for cooperatives located in a village, enabling mutual aid, knowledge distribution and group decision-making. Thus, social capital plays the role of an organization's skeleton to achieve cooperation.

However, social capital is not always a contributing factor to this. In some circumstances, the development of bonding social capital, which is solidarity that is endogenous and based on homogeneous groups creates nepotism, exclusion and a narrow level of diversity. Regional caste cooperatives or cooperatives ruled by local elites have shown the characteristic of marginalising marginalised groups. Thus, the opposing types of bridging social capital that connect diverse groups and promote inclusion are irreplaceable in democratic and fair functioning.

As participatory development, self-help groups (SHGs) and community-based enterprises have gained momentum, the use of social capital has become a more in-demand feature of development projects. As demonstrated by the examples of women, tribal and digital cooperatives, trust, shared norms and communication are strong

enough to encourage innovation, resilience and social justice. Individually, the Kudumbashree programme in Kerala exemplifies a palpable transformation that collective solidarity and women's empowerment programmes can bring in terms of gender-based empowerment (Pragabhaldas, 2017). With India moving to a new state of a knowledge-based economy exemplified in a digitalised and urbanised society, sustainability of cooperation would rely on the strategic disposition of social capital. Encouraging inclusive leadership participation in governance and value-driven education at the cooperative level increases social capital and sustains long-term sustainability. The destiny of cooperative societies will, therefore, be evaluated in the end not only with the help of economic indicators but also with the capacity of the social bonds created between members of the same society.

1.4 Dimensions of Social Capital in the Indian Cooperative Framework

Social capital can be described as a complex construct that consists of various interrelated aspects that support the operation of institutional cooperatives and the sustainability of cooperative institutions. In the Indian cooperative system, social capital facilitates cooperation, trust, collective action and democratic processes. Based on the study by Nahapiet and Ghoshal (1998), scholars have formalised a class of social capital into three categories: structural, relational and cognitive. Structural social capital consists of the real networks and connections between cooperative members; relational social capital emphasises trust, norms and mutual performance as a result of social interaction; and cognitive social capital is a question of common goals, values and understanding frameworks through which members can coordinate their actions. These dimensions also have a dynamic relationship in India that influences member behaviour, decision-making processes and organisational performance (Woolcock & Narayan, 2000).

Formal and informal networks binding a group of cooperative members are important as they indicate the presence of structural social capital. These networks provide platforms for communication, coordination and the distribution of information. Indian Cooperatives often have members who belong to the same geographical and social surroundings as farmers, women, labourers and artisans, thus utilising the structures that are up in the community. This is illustrated in cases where Primary Agricultural Credit Societies (PACS) have an efficient performance in villages where there are

traditional kinships and other community bonds that ease information sharing and participation (Mushonga, Arun and Marwa, 2019). The presence of these networks with varying depths of social stratification usually dictates the extent and openness of cooperatives. Structural social capital also creates organisational unity, as it gives members a way of raising their concerns and opinions and contributing to planning (Grootaert and Van Bastelaer, 2002).

Probably the most important dimension of Indian cooperatives is relational social capital, which is based on trust and mutual obligations. Member-member and member-leader trust reduce transactional costs and allow cooperation without involving much formal enforcement (Fukuyama 1995). In the Indian context, trust is most often based on shared socio-cultural identities, such as caste, religion and language. Although this can strengthen the bonds of similar groups of people, it can lead to the rejection of minority communities. The presence of relational trust in effective cooperatives is due to transparent governance, accountability and decision-making processes. The cooperative ethos incorporates reciprocity and mutual aid norms and is passed through rituals, a common past and shared experiences (Putnam, 2000). Such informal rules intensify members' loyalty and long-term commitment to an institution.

Cognitive social capital in Indian cooperatives summarises the collective vision, goals and interpretative schemes that far and wide harmonise the interests of individual members and lead to collective action. Unity and purpose are enhanced when the members of the cooperatives have a common idea of the mission of the organisation, which could be self-help, economic inclusion or community development. Cognitive synchronisation increases the efficiency of decision-making and reduces conflicts. India is a diverse nation in terms of caste, class and level of education, producing different expectations; therefore, the growth of cognitive social capital is required in India. Shared knowledge among members is developed through training programs, capacity building activities and participatory meetings. For example, the Kudumbashree mission in Kerala focus on gender equality and social justice as shared principles underlying mutual action (Pragabhaldas, 2017). Therefore, building cognitive capital is key to developing a healthy institutional culture.

Another layer, as highlighted in the Indian cooperative literature is bonding and bridging social capital. Bonding capital denotes the insular affiliations between homogenous participants that strengthen cohesion but can create a sense of claustrophobia. Bridging capital, on the other hand, refers to outwards-oriented connections which bind different factions together and allow access to outside information, resources and markets (Woolcock and Narayan, 2000). Traditionally, Indian cooperatives have relied on bonding capital, notably in rural and agrarian settings. Nevertheless, modern challenges, namely competition, digitalisation and changes in policies, stimulate the creation of bridging capital in the form of relationships with NGOs, government agencies and non-governmental institutions (NGIs). Bridging capital leads to innovation, inclusiveness and resilient adaptive capacity, making cooperatives resilient and relevant in the changing socio-economic environment (Chloupkova et al., 2003).

Various forms of social capital, including structural, relational, cognitive, bonding and bridging, play a significant role in the Indian cooperative system. These dimensions have unique but interlinked roles in improving cooperative performance, empowering members and ensuring institutional sustainability. Although structural capital offers the skeletal structure on which interaction may occur, relational and cognitive capital add trust and a communality of purpose. The importance of identifying these dimensions is that policymakers and leaders of cooperation can find strengths and gaps in social capital and formulate specific interventions. In a diverse and complex society such as India, where cooperative societies are sometimes a lifeline for rural and marginalised communities, a more complex social capital is not an option but a need for equitable and participatory development.

1.5 Social Capital and Cooperative Sector: A Kerala Perspective

Kerala has been consistently used as a model in the Indian context relating to human development, social inclusion and grassroot participation which makes Kerala a special place to study the role of social capital in the cooperative sector. The presence of a long and strong history of cooperative development has been heavily reliant on either the socio-political consciousness of the state, high levels of literacy or an egalitarian spirit. The Kerala institutions are spread across credit, dairy, housing, agriculture and consumer services sectors. In addition to enhancing economic

development, these cooperatives increase community building, local empowerment and participatory democracy (Velayudhan and Chandrasekharan Pillai, 1992). Unlike in most other areas, where cooperative practitioners and researchers tend to characterise cooperatives as either state-led, elite-controlled or a combination of the two. Kerala exhibits the opposite, where cooperative trends have been notably characterised by the vigorous participation of members, as well as their social embeddedness, thus making it an excellent field to study social capital.

The effectiveness and viability of Kerala's cooperatives are associated with the high levels of social capital that exist in the society of Kerala. Noting that social capital, which has trust, social networks, common expectations and norms and a culture of reciprocity to socialise the activity has a hidden infrastructure (Putnam, 2000), i.e., coordination, which can be complex and such coordination is observed through communication. Transactions of cooperative members who are members of compact social networks come at a lower transaction cost, with willing participation and enhanced accountability. The repayment level of credit societies, for example, is unusually high due to very low defaults, not only because of financial control but also because of the confidence of the members. Confidence serves as a guarantee, as non-financial collateral to the members and encourages social discipline and the strength of membership (Tharakan, 2004). Such trust relationships reduce institutional risks and enhance organizational resilience.

The key explanatory factors are the legacy of social reform movements and political mobilisation in Kerala. Feudal hierarchies were broken through the interventions undertaken by Sree Narayana Guru and Ayyankali, as well as through the communist-led land reforms of the 1950s which championed egalitarian values (Jeffrey, 1992). These movements resulted in collective consciousness and community-based institutions, such as cooperatives, which reinforced social inclusivity. Further state investments in education and health stimulated the generation of socially conscious people who appreciate collectivism and participation in the public sphere. Thus, cooperative societies in Kerala operate not only as economic organisations but also as community organisations supported by solidarity, common concern and civic trust. This new socio-political legacy has made social capital not just a by-product but a necessary source of success in cooperation (Heller, 1999).

Trust and cooperation have at times been undermined by political interference, excessive bureaucratisation and even internal conflicts. Political polarisation has the potential to divide social capital into the switching of factions and as such, it destroys the spirit of working together that is prevalent in cooperatives (Velayudhan and Chandrasekharan Pillai, 1992). Therefore, cooperative leaders and policymakers must base the proactive management and institutionalisation of social capital on inclusive governance, transparency, capacity-building programs and participatory leadership. 'Kudumbashree', a self-help network of women, sponsored by the state and functioning in a cooperative manner, demonstrates how well-directed interventions can be used both in strengthening bonding and bridging social capital, thus leading to economic empowerment and gender (Pragabhaldas, 2017).

The state of Kerala offers a fascinating case study through which the role of social capital in maintaining community-based economic institutions can be examined. A socio-cultural and political history allows it to produce a storehouse of trust, norms and social networks that have consistently reinforced the ethos of cooperation in the region, where social capital is built organically as well as institutionally. Kerala has shown its potential to transform a wider context despite or irrespective of perennial struggles to control political influence and maintain participatory purity. In Kerala, the cooperative movement is a particularly rich source of lessons on using social capital strategically to build inclusive, resilient and community-based economies.

1.6 Building Social Capital through Institutional Mechanisms in Cooperatives in Kerala

The institutionalisation or formal and informal patterns of social capital are inherently associated with the empirical success of cooperatives in Kerala. While in relation to consistent informal associations, spontaneous interpersonal trust alone is a determinant, the Kerala cooperatives have put in place systems of regulation and practices of procedure that maintain social cohesion, action as a unit in common and participatory government. In this context, networks, trust, norms and reciprocity constitute social capital that can be effectively developed systematically through cooperation, as cooperatives are open, transparent and democratic organisations (Putnam, 2000). These principles are operationalised and reinforced through institutional mechanisms in Kerala, such as elected leadership, general body meetings,

audit processes and participatory planning. Membership is therefore not a mere receivership but a participatory one, embedded in mutual trust and shared accountability.

Democratic governance is a major institutional practice that combines various forms of social capital. The concentration of power is limited by the requirement of regular elections to management committees, the adoption of transparent financial reporting and the change of leadership positions required by the Kerala cooperative law, which encourages the involvement of the grassroots. This kind of action plays a vital role in inspiring members to trust and feel legitimacy (Velayudhan and Chandrasekharan Pillai, 1992). In addition, decision-making within a given organisation is characterised by various processes that are open to all members, regardless of their social or economic status. This collaborative governance develops cognitive social capital by establishing a common vision of what should be achieved within the organisation and simultaneously strengthens relational capital through trust in leadership and institutions. It is also because of the high political awareness and literacy levels in Kerala that, these democratic tools are effectively practiced (Heller, 1999).

Structural training, education and capacity-building programs are critical tools for generating social capital. Organisations such as the Kerala State Cooperative Union and the Institute of Cooperative Management (ICM) impart training on the concepts of cooperatives rights and responsibilities, as well as leadership training to the members. These programs lower information imbalances, harmonise cognitive expectations and promote co-learning. Such training is useful for women's cooperatives and self-help groups (SHGs), which combines economic activities with social empowerment and group solidarity (Pragabhaldas, 2017). Members who have been empowered in such a capacity-building process experience higher levels of trust, reciprocity and sustainable viability of cooperatives in the long run.

Other institutional safeguards that strengthen social capital include transparency and accountability. Periodic auditing, publication of financial accounts and well-defined grievance-redressal systems increase cooperative credibility, minimise instances of corruption and mismanagement and build institutional confidence, a mainstay of social capital in bureaucratic organisations (Fukuyama, 1995). Practical observation shows that cooperatives incorporating such practices are more successful in retaining

their members and sustaining better economic well-being. For example, in urban credit cooperatives, the nurturing of member responsibility and checks and balances are advanced within the organisation; therefore, member activities and vitality are greater. An additional layer of institutional oversight is the existence of a Registrar of Cooperatives in Kerala which helps sustain internal discipline and authority (Francois and Zabojnik, 2005). Such protective measures can uphold the member-oriented quality of cooperatives, thus supporting the principles of equity, responsibility and collective accountability.

The Kerala model is also characterised by networked institutionalism, as cooperatives are consolidated with other related social establishments, including Panchayati Raj institutions, NGOs and local societies of development. These inter-institutional connections result in bridging social capital, wherein cooperatives are provided with external resources, ideas and support systems. Microcredit, assistance in infrastructure and training services were provided through relationships built between Kudumbashree units and the local government, which directly contributing to the increase in the social networks of the members across communities (Isaac and Harilal, 1997). This intersectoral partnership increases performance and promotes innovation, inclusiveness and fluent learning in the educational process. Using these institutional ecosystems, the cooperatives of Kerala may stay socially engraved by supporting new demands, such as digitalisation, rivalry in the market and leadership changes in generations. Consequently, creating social capital using institutional means is an active method of developing resilience and change in Kerala's cooperative sector.

1.7 Comparative Analysis of Social Capital in Cooperatives: Kerala vs. Other Indian States

Social capital is a central element in the functioning of cooperatives globally, with both advantages and disadvantages. It is regionally specific and depends on heterogeneous socioeconomic landscapes, governance systems, path dependence and the culture of the institutes. In Kerala, cooperatives are fortunate to have had a solid foundation of literacy, political awareness and community bonds that have encouraged a participatory spirit, whereby members actively participate in the decision-making and development of institutions. In contrast, the cooperative societies in many other Indian states are more top-to-bottom structures, most times

characterised by bureaucratism, elite domination and poor participation by members (Velayudhan and Chandrasekharan Pillai, 1992). Variations in the quantity of social capital (exerted through trust, networks, reciprocity and norms) make a significant difference in the efficacy, sustainability and developmental effects of cooperatives in a country.

Kerala has a model of cooperation that is strong in both types of social capital bonding and bridging. Social capital through bonding is present in the intra-communal trust that typifies most cooperatives, where trust is developed through historical kinship, caste solidarity and membership in a religious group. Social bridging capital has been developed through connections with Panchayati Raj Institutions (PRIs), self-help groups, local self-governments and civil society organisations, such as Kudumbashree (Pragabhaldas, 2017). This dual process of capital formation makes Kerala's cooperatives inclusive, innovative and open to socioeconomic challenges and changes. States like Uttar Pradesh or Bihar, in contrast, have a high level of bonding capital inside homogeneous caste or religious groups but low bridging capital. The lack of good bridging structures in such areas usually creates islands of cooperative culture which are characterised by exclusivism and political clientelism (Baviskar & Attwood, 1995). In the absence of sufficient bridging linkages, cooperatives in these situations find it hard to be linked to greater developmental networks and markets.

Another essential aspect of social capital is trust and participatory governance which vary strongly across regions. In Kerala, the feature of trust in cooperative leadership is emphasised by the frequency of elections, strict auditing and open governance processes. Democratic practices are institutionalised and members are empowered by raising awareness and training processes. This culture has been developed to create a feeling of ownership and joint responsibility (Heller, 1999). On the other hand, however, in a collection of states in northern and central India, cooperatives frequently became a part of a political machine, making the participation of members weak and eroding the level of trust. In Maharashtra, despite the fact that sugar cooperatives play a role in rural development, most of them have been accompanied by political elites and have epitomised financial mismanagement (Mezzadri, A., 2014). Social capital in these situations then becomes stratified and clientelist, leading to the accrual of benefits to a few people at the expense of the wider membership. These deviations

show that the quality of social capital largely depends on how institutional mechanisms and sociopolitical cultures influence it positively or negatively.

Gender equality is another aspect that make the Kerala model of cooperatives unique compared to others because the Kerala model promotes literacy and women's participation in cooperatives. Strong deliberative engagement and informed decision-making in cooperatives are easy when literacy is high and there is active citizenry capable of engaging with politics. In Kerala, women acquire a more visible position with the help of gender-centric programs such as Kudumbashree and women's credit societies (Pragabhaldas, 2017). Gender inclusivity enhances relational and cognitive social capital by fostering empathy, equity and shared interests. Even in various other Indian states, the role of women is limited, mostly due to patriarchal values, poor literacy and a lack of institutionalisation. When the entry of women and other marginalised sections is not allowed within cooperative networks, it decreases the dynamism of collective actions and cripples cooperation.

A comparative study shows that the cooperatives of Kerala state have better and balanced social capital owing to effective socio-cultural parameters, a progressive institutional framework and a superior system of governance. The rest of the Indian states, despite being rich in cultural diversity and social relationships, tend to be poor in developing inclusive and sustainable social capital within cooperatives due to institutional obstacles such as political interference, social exclusion and insufficient institutional capabilities. To combat such disparities, intentional policy actions are needed to democratise cooperative governance, increase cooperative member education and develop bridging links within communities and sectors. The Kerala model can provide valuable lessons for institutionalising social capital through participatory approaches to the development of a framework. Such imitation and localisation of these elements could be detrimental to strengthening cooperative movements in India.

1.8 The Interplay between Social Capital and Member Empowerment in Indian Cooperatives

The trend in the literature on cooperatives shows that it is within their internal nature that member empowerment is closely related to the social capital and its quality, as well as the level thereof. In the Indian context, social capital should not be viewed as

an accidental social construct but as a strategic resource that makes productive engagement, quality decision-making and, by extension, resource allocation a viable possibility. The conditions under which empowerment can take place and can be continued are provided in the analytic framework suggested by Putnam (2000), which consists of trust, reciprocity, shared values and interpersonal networks. This assertion is supported by empirical work that the notion of member empowerment is a process through which cooperators gain the skills, confidence and institutional reach needed to shape organizational outcomes, claim their entitlements and act on their behalf. This is of particular significance in rural and marginalised settings, as it defines the destinies of cooperatives and their effectiveness in relation to their social and economic missions.

A notable process that makes social capital locked in with empowerment is participatory governance, based on trust. When there is mutual trust between the members of the cooperative and between the members and their leadership, it increases the probability of open communication, minimises suspicion and facilitates transparency, which are essential prerequisites of healthy democratic participation. However, a lack of trust can turn active members into inactive members, which translates into the weakening of the democratic spirit of a cooperative. Kerala is a good example of this; high trust levels between the members of the cooperative system, achieved on the back of open processes and a long tradition of community-based solidarity have allowed women and other groups at the margins to take up leadership roles in enterprises and even to influence cooperative policy, as demonstrated by the Kudumbashree projects (Pragabhaldas, 2017). In comparison, in areas where social capital is dissipated through elite capture or political interference, empowerment remains incomplete.

Cognitive social capital is more powerful, which includes values, objectives and shared understandings which are absorbed by members. When co-players envision financial inclusion, agricultural productivity or social justice, they cooperate more willingly, take initiatives and collectively solve problems. When they do, empowerment is more than individual agency; it is collective efficacy, i.e., the belief of individuals in the organisation in their ability to achieve their shared goals as set out in the collective voice. Empowerment is further consolidated through training

programs, awareness campaigns and general capacity-building activities that reinforce and strengthen cognitive alignment. Here, the coherent vision of the sugar cooperative in Maharashtra and the dairy cooperative in Gujarat mobilised a great number of farmers to act, negotiate the market and influence state policy (Baviskar & Attwood, 1995).

The availability of external resources also broadens the boundaries of empowerment due to the networking and bridging roles played by social capital. This version of empowerment contains both the internal processes and the potential of cooperators to cooperate with the agencies of the government, NGOs, financial institutions and other players. These external linkages provide access to credit, training and investments, such as infrastructure and expand the economic horizons of members beyond subsistence. The Kerala cooperatives are an example of effective bridging. The thick networks between themselves and the local self-government bodies and development agencies will increase member empowerment. In contrast, isolated cooperatives, especially those with low bridging capital, tend to be trapped in parochial limits, which restrict economic and social mobility.

Social capital and empowerment are a two-way street; good social capital will lead to building empowerment and in succession, empowered members will play a role in maintaining good social capital. Successful cooperatives tend to have a virtuous cycle; that is, the presence of strong social networks leads to empowerment, which in turn helps the cooperative maintain trust, normative cohesion and recruitment which consequently increases the cooperative's social capital. The interruption of such cycles, as is the case with politicised or bureaucratised institutions, as in some parts of Uttar Pradesh and Rajasthan, leads to a sharp decrease in social capital and political empowerment, which makes these institutions stagnate or even fail (Mezzadri, A., 2014). Maintaining and nourishing the interaction of social capital and empowerment thus requires policy changes that enhance inclusiveness, transparency and renewal of grassroots leaders as well as investments in the social fabric that unites the members.

1.9 Social Capital as a Catalyst for Performance and Sustainability in Cooperative Sector Kerala

In the Kerala context, especially due to the cooperative enterprise sector in the state, social capital has emerged as a key factor in performance and sustainability. Social

capital, instead of conventional economic factors of land, labour and financial capital, refers to the intangible resources in the agreements in a two-way relationship which exists in the form of trust, networks, shared values and normative structures (Putnam 2000). Social capital in Kerala resonates as an enabling device for collective action and as a structural safeguard for institutional strength. A culture of participatory democracy and popular responsibility has been cultivated through the historical course of the cooperative movement of the state, which has been influenced by grassroots mobilisation, land-reform enactments and left-oriented political activism (Heller 1999). This can be seen through the cooperative performance indicators in Kerala, which are among the highest in the country. Active and dense networks of trust and cooperation enhance financial inclusion, agricultural assistance and female empowerment. At the individual and group levels, social capital reduces transaction costs, enhances adherence to the rules of governance and solves problems in groups which are parts of transaction costs that directly increase the efficiency of operations and economic sustainability (Grootaert & van Bastelaer 2002). Such is the case with Primary Agricultural Credit Societies (PACS), with their high loan recovery rates that are quite possible due to informal enforcement methods that can be largely explained by the mechanisms of community trust and social policing. These experiences prove that social capital is an asset that improves performance, especially in the presence of resource limitations.

In Kerala, social capital advocates for the strategic sustainability of cooperatives. Cooperatives in Kerala have demonstrated an extremely high degree of institutional persistence despite the changing dynamics of politics and markets. It can be argued that the high continuity can largely be attributed to the fact that they were embedded in strongly coherent and cohesive community formations in the past. Social capital connections with local self-governments, non-governmental organizations and federations are referred to as bridging social capital, which provides cooperatives with an opportunity to access external resources, markets and support policies (Velayudhan and Chandrasekharan Pillai, 1992). At the same time, bonding social capital interpersonal relationships and cultural solidarity maintain their inner unity and loyalty. These interconnections will help cooperatives cushion themselves against shocks, diversify their operations and remain relevant over time.

Notably, social capital is not a fixed resource in Kerala but a self-reinforcing resource. Social capital is replenished and reinforced through cooperative norms, education and participatory governance mechanisms. Accountability is facilitated by institutional processes that involve general body meetings, open audit systems, rotations of leaders and rewards dialogue, learning and shared vision (Isaac and Harilal, 1997). These are renewal practices in terms of reinstating trust and social coherence, on which multigenerational sustainability depends. In addition, social capital enables the transmission of knowledge between generations, promoting the fact that younger generations not only receive the operational position but also the friendly spirit of teamwork and mutual assistance. This revolving process can make cooperatives come out of the realm of pure transactions to living institutions of a community which can move with its needs.

Therefore, social capital is the backbone or driving force behind performance and sustainability in the Kerala's cooperative sector. It brings with it the ability to develop trust, active involvement, communal decision-making and strength, making it a valuable intangible asset for the development of cooperation among community members. Although financial resources and state support are still significant factors, it is the power of social capital that separates successful cooperatives from those that fail. The experience of Kerala has shown that anchoring cooperatives to powerful social relationships and inclusive governance provides economic returns as well as social justice, community empowerment and even democratic deepening. Therefore, social capital should be strategically grown, quantified and institutionalised as one of the most important foundations in the policy framework and implementation process in the Indian cooperative system.

1.10 Design of the Study

The current research uses a descriptive approach based on a quantitative design to structurally enquire into the dimensions and the influence of social capital among the cooperatives in Kerala. This design would be suitable because it enables the observation, recording and eventual analysis of the existing situation without interfering with any of the variables, thus enabling a proper assessment of how factors such as trust, communication and information sharing, leadership and governance, social networks, norms and values determine social capital and how social capital

formation among cooperatives leads to members empowerment and satisfaction. It further facilitates the detection of existing trends, comparison of perceptions of various types of cooperatives and determination of associations between specific constructs.

1.11 Research Philosophy

This study is based on the philosophy of science called positivism, which helps explain the interconnection between social capital and cooperative performance in Kerala. Positivism is more systematic and empirical-oriented, as it introduces and gives prominence to the role of observation, quantification and statistical analysis to reveal patterns and associations of variables. The enquiry is grounded within this framework and it uses formatted data collection, especially questionnaires, to extract factual data among cooperative members on trust, communication and information sharing, leadership and governance, social networks, norms and values, member empowerment and satisfaction. Following positivist principles, this study aimed to identify the cause and effect relationships between social capital and the member outcomes and ensure that the results are accurate, reproducible and transferable. This orientation is particularly beneficial for investigating cooperative institutions where evidence-based knowledge is necessary to guide policy and practice.

1.12 Research Approaches

The research method adopted in this study is deductive, which is especially suitable for the research objective of critically testing existing theories and concepts of social capital in the cooperative culture of Kerala. The deductive framework is based on a strong theoretical framework, by heavily relying on previous models of social capital, empowerment and satisfaction and further, to the empirical testing of the constructs using measurable variables. This study theoretically derives hypotheses and finalises research questions by translating current works into hypotheses and final research questions. The current research systematically builds and collects quantitative data to test the relationship between variables such as trust, communication and information sharing, leadership and governance, social networks, norms and values, member empowerment and satisfaction. This method helps to make the enquiry organised and statistically analysed, which makes its clarity, accuracy and rational development of the empirical investigation in the way of theoretical presupposition more definite.

Grounded in positivist philosophy and a quantitative approach and the deductive character of design enables the researcher to conduct a comprehensive study of the pathways and patterns of causation in a real-life cooperative setting and the outcomes of which promote the reliability and validity of the generated knowledge.

1.13 Research Strategy

The research design uses a survey based methodology, which corresponds to the quantitative, descriptive and deductive orientation of the research design. Surveys are beneficial in tapping standardised data of a large population and hence to explore the building of social capital and its effect on various cooperative societies in Kerala. This strategy of using a structured questionnaire as the main data collection tool enables empirical research on variables such as trust, communication and information sharing, social networks, norms and values, leadership and governance, member empowerment and satisfaction. This method allows gathering primary data in a time and cost efficient way and allows the statistical generalisation of results. Moreover, the survey design is appropriate for measuring the member perceptions on social capital and its effects; thus, the design is ideal for presenting patterns, hypothesis testing and inferring conclusions on the topic.

1.14 Rationale of the Study

Throughout history, cooperative enterprises have played a major role in promoting economic growth, inclusivity and governance, especially in rural and semi-urban contexts in India. The Kerala state is well known among Indian states for having a highly developed and strongly rooted cooperative movement spanning agricultural credit, dairying, consumer goods and even housing. However, little attention has been paid to the mechanisms that explain the long-term performance and viability of cooperatives in Kerala. The intangible asset of social capital, although non-economic and extremely influential, is especially prominent in cooperative performance. Unipartite and consisting of trust, networking phenomena, norms of reciprocity and shared values, social capital is invaluable for maintaining the principles of cooperation, that is, mutual voluntary participation and collective ownership (Putnam 2000; Grootaert & van Bastelaer 2002). The present empirical study fills this gap by systematically analysing how social capital is created, utilised and instrumental towards the empowerment of cooperative member satisfaction in the state of Kerala.

The available literature on cooperatives in India mainly focuses on economic indicators, such as credit provision, supply of inputs and market connections. This type of emphasis tends to ignore the sociocultural processes that determine the viability of cooperation. This means that, in Kerala, cooperatives are not just spaces of transactions but also intrinsic parts of life, both drawing on and enriching the general holding of social capital. Social reform movements, high degree of political literacy and advanced community networks in Kerala have allowed for the formulation of participatory institutions based on trust, solidarity and democracy (Heller, 1999; Velayudhan and Chandrasekharan Pillai, 1992). However, the exact directions in which these attributes of social capital can become member empowerment, satisfaction and cooperative performance have not been empirically assessed yet. Therefore, the need to reconceptualise collaborative development through the prism of social capital and examine the potential of this concept to initiate an inclusive and sustainable expansion of the institution is the driving force behind this study.

This study is especially timely because, in modern reality, cooperatives must cope with an increased trust gap, political influence, a lack of established connections with their members and financial fluctuations. A study of the cooperatives in Kerala, whose performance and acceptance are relatively strong, can offer lessons for policy and practice. Organisations like Kudumbashree, which has turned out to be the flagship institution of Kerala, illustrate the transformative power of social capital in terms of the mobilisation of the marginalised populations, improved economic inclusion and strengthening of institutional accountability (Pragabhaldas, 2017). In this regard, the research proposal will attempt to demarcate the composition of social capital in the cooperative domain, leadership effectiveness, communicative practices, shared norms and interpersonal trust and it will culminate in providing an adaptable framework that can be used when developing cooperatives in India and other countries.

This research also helps in the discussions of social capital and its role in development, both methodologically and theoretically. While the scholarly audience has indeed agreed on the salience of social capital, its operationalisation remains problematic due to its abstract and situational nature. Placing the analysis in the context of the Kerala cooperative ecosystem, this study aims to define measurable measures of social

capital and investigate its mediatory impact on main outcomes, such as member empowerment and satisfaction. These observations are expected to improve the conceptual models of the relationship between social capital and institutional performance and elicit additional research on the social aspects of cooperative governance. Overall, the present study is supported by its applicability to practice, theory building and ability to guide evidence-based interventions that support the social infrastructure of such cooperative institutions.

1.15 Research Problem

The academic literature has constantly referred to cooperatives as a key institutional tool for inclusive economic growth, especially in rural and semi-urban India. Their defining features–voluntary membership, democratic control, mutual assistance, and fairways to equitable benefit distribution–make cooperatives a crossroads between economic efficiency and social justice(Paraschou et al., 2025). However, several studies have recognised that cooperatives throughout India still face structural issues in terms of governance inefficiencies, fall in membership, political interference, and financial instability (Baviskar and Attwood, 1995; Mezzadri, 2014).

More recent scholarship points to further evidence that, despite regulatory reform and efforts at digital integration, cooperative institutions in many developing regions still suffer from problems of institutional trust dissolution, elite capture, generational disconnection, and differential engagement during participation across gender and socioeconomic groups(Sharmin & Chowdhury, 2025). Contemporary research has drawn attention to the fact that governance transparency, participatory accountability, and institutional embeddedness remain key factors of cooperative sustainability in the post-2015 development context. These findings indicate that earlier structural explanations are insufficient to capture the dynamics of cooperative performance(Pesci et al., 2024).

The Kerala region has often been visualised as a relatively resilient and participatory cooperative ecosystem in the larger national context, with several institutions showing sustained performance, financial viability, and community participation(Johnston et al., 2024). The critical research question that arises from this juxtaposition is as follows: What are the key factors that allow the Kerala cooperatives to function sustainably and ensure participatory vitality while their counterpart institutions in

other regions grapple with structural stagnation? A closer analysis suggests that the embedded social capital in Kerala's cooperative institutions may be the key to explaining their role of cooperative institutions(Löffel & Gmür, 2024).

Social capital has long been acknowledged as an important intangible asset for community-based enterprises (Putnam, 2000; Grootaert & Van Bastelaer, 2002). Kerala's cooperatives function as economic organisations and institutions embedded in rigorous social networks, civic engagement, and collective consciousness(Saz-Gil et al., 2021). Although descriptive accounts emphasise the importance of social capital in the success of cooperatives, recent empirical literature has emphasised the need for context-specific and quantitatively validated models that can capture the multidimensional nature of social capital and its institutional consequences (Chen et al., 2025). Measurement inconsistencies, conceptual ambiguities, and the use of little advanced statistical modelling in benchmarking the functionality of social capital continue to constrain the systematic understanding of how social capital operates within the confines of the cooperative ecosystem(Pigola et al., 2021).

Another major gap relates to the causal relationship between social capital and cooperative performance. While it is generally recognised that trust and mutual support promote participation and lower transaction costs, the mediating mechanisms by which social capital relates to empowerment and institutional outcomes are theoretically underdeveloped and empirically untested (Moore et al., 2016). Does cooperative governance strengthen because empowered members take an active role in decision-making? Does member satisfaction due to a sense of trust and normative cohesion help sustain social capital? How do institutional processes, which are formal, and relationships, which are informal, reinforce, regenerate, or erode social capital over time?(Kaçani et al., 2024)

Furthermore, emerging debates in institutional theory and collective action research indicate that social capital must be studied in terms of technological change, digital communication networks, and changing generational expectations. However, empirical studies integrating these dimensions with the provision of cooperation remain scarce in Kerala(Rijswijk et al., 2022).

The contemporary relevance of this study becomes particularly significant in the present socio-economic context marked by the rapid digitalisation of financial

services, governance reforms in cooperative institutions, post-pandemic economic restructuring, and heightened demands for transparency and accountability(Rillera Marzo, 2024). Cooperative societies in Kerala are increasingly operating within a dynamic regulatory and technological environment, where institutional trust, participatory engagement, and member empowerment determine long-term sustainability. In this evolving landscape, examining how social capital functions as a resilience-enhancing mechanism is not merely of theoretical interest but also of immediate policy and developmental importance.

In light of these lacunae, the present study aims to systematically analyse the formation, structure, and consequences of social capital in the cooperative sector in Kerala(Kasabov, 2016). Specifically, this study investigates the variables that influence social capital formation among cooperative members, the multidimensionality of social capital, and its extent to empower and satisfy its members. It further examines whether member empowerment mediates the relationship between social capital and member satisfaction to offer a refined causal explanation of how intangible relational assets morph into tangible institutional outcomes(Feng et al., 2015).

The research problem is thus not only theoretically significant but also practically relevant, in the sense that it seeks to develop a validated analytical framework that can be used to formulate cooperative governance strategies in the State of Kerala and in a similar institutional context.

1.16 Research Questions

Analysing social capital in terms of cooperative performance raises a series of interconnected questions that require context-sensitive treatment. Previous literature notes that trust, networks and common norms are essential aspects of successful cooperation (Putnam, 2000; Fukuyama, 1995). Nevertheless, little research has explored how these elements work within the specific socio-political contexts in which cooperatives perform and develop. An informative example is the state of Kerala, guided by the power of strong grassroots movements and progressive governance institutions, the social capital in cooperatives can take special shapes and bear unique responsibilities. Therefore, the first question to be addressed in the current analysis is as follows: What are the essential factors contributing to the development

of social capital among cooperative members in Kerala? To shed light on this process, the authors of the study decompose social capital into measurable dimensions, such as interpersonal trust, institutional trust, networks, communication channels, leadership quality and shared values, as each of them supports not only relative but also cognitive domains of life in cooperation.

The second query from a functional perspective, entails how social capital can be used to enhance the positive impact on cooperative members, specifically in terms of engaging and empowering them: How can social capital be used to empower cooperative members and how does that empowerment contribute to their satisfaction with the cooperative? The intention is to ensure that abstract theoretical constructs are transformed into a visible institutional advantage. Empowerment is interpreted as the ability of members to be active, to decide, to have a fair say in the benefits and to hold the leadership accountable. This is because the cooperative setting, with its democratic value in a participatory governance prospect, is more convenient for investigating the effects of social capital, whether promoting or hampering them. The literature has testified to the existence of more trust in the system, higher participation in governance and more contribution to the development of the system by empowered members (Heller, 1999; Narayan, 1999).

To construct an exhaustive analytical model, this study incorporates the above questions in a cohesive framework by simply asking the third and overall question: Does member empowerment mediate the relationship between social capital and member satisfaction in cooperatives? Social capital and empowerment have been studied to some extent, but they have not always been the focus of a study, as evidenced by the fact that causal relationships and mediating effects have never been relevant factors in many studies. Responding to this question is useful not only for the analysis of cooperation research but also for wider issues concerning development theory and institutional economics. It argues that social capital is dynamic and moves through member empowerment to develop satisfaction and hence cooperative performance. These research questions form the empirical and conceptual basis of the study and it directly lead to the individual objectives. Various objectives derived from the research questions are depicted below.

1.17 Objectives of the Study

This research focuses in explaining the importance of social capital as a determinant to the performance of Kerala's cooperative sector. In this regard, a collection of focused research objectives was formulated. These goals form part of an empirical itinerary bridging the gap between theoretical questions of an abstract nature and strictly evidentiary enquiry. First, the study questions the identity and extent of social capital in cooperative enterprises, thus necessitating the correct identification of the hidden variables that make up social capital among the representatives of the cooperative. The ensuing investigation examines the variation in social capital within various types of demographics such as age, gender, educational qualifications and monthly income and how this is moderated by organizational or contextual factors that determine its development.

The rest of the goals touch on the functional significance of social capital, especially its effects on member empowerment and satisfaction. Such questions require an analysis of the relational dynamics between trust, social networks, norms and values, communication and information sharing, leadership and governance and the manner in which these aspects are crystallised in measurable results of empowerment. In addition, the variables seek to determine the role of member empowerment as a mediating variable between the relationship between social capital and member satisfaction, necessitating a more sophisticated cause-and-effect model of cooperative development.

1. To Measure the level of social capital formation among cooperatives in Kerala.
2. To examine the role of key influencing factors such as trust, social networks, communication and information sharing, norms and values and leadership and governance in the formation of social capital among cooperative members.
3. To determine the role of social capital in empowering and satisfying cooperative members and the mediating role of member empowerment between social capital and member satisfaction.
4. To identify the change in empowerment attained by cooperative members after being a member in the cooperative society.

1.18 Hypotheses of the Study

Based on the above discussions, the study formulated the following hypotheses:

Hypothesis 1: There is no statistically significant differences in the distributions of trust across different age groups

Hypothesis 2: There is no statistically significant differences in the distributions of trust across different categories of gender

Hypothesis 3: There is no statistically significant differences in the distributions of trust across different categories of educational qualification

Hypothesis 4: There is no statistically significant differences in the distributions of trust across different categories of income

Hypothesis 5: There is no statistically significant differences in the distributions of social networks across different categories of age

Hypothesis 6: There is no statistically significant differences in the distributions of social networks across different categories of gender

Hypothesis 7: There is no statistically significant differences in the distributions of social networks across different categories of educational qualification

Hypothesis 8: There is no statistically significant differences in the distributions of social networks across different categories of income

Hypothesis 9: There is no statistically significant differences in the distributions of norms and values across different categories of age

Hypothesis 10: There is no statistically significant differences in the distributions of norms and values across different gender groups

Hypothesis 11: There is no statistically significant differences in the distributions of norms and values across different categories of educational qualification

Hypothesis 12: There is no statistically significant differences in the distributions of norms and values across different categories of income

Hypothesis 13: There is no statistically significant differences in the distributions of communication and information sharing across different age groups

Hypothesis 14: There is no statistically significant differences in the distributions of communication and information sharing across different gender groups

Hypothesis 15: There is no statistically significant differences in the distributions of communication and information sharing across different categories of educational qualification

Hypothesis 16: There is no statistically significant differences in the distributions of communication and information sharing across different categories of income

Hypothesis 17: There is no statistically significant differences in the distributions of leadership and governance across different categories of age

Hypothesis 18: There is no statistically significant differences in the distributions of leadership and governance across different categories of gender

Hypothesis 19: There is no statistically significant differences in the distributions of leadership and governance across different categories of educational qualification

Hypothesis 20: There is no statistically significant differences in the distributions of leadership and governance across different categories of income

Hypothesis 21: Trust has no significant impact on the formation of the social capital.

Hypothesis 22: Norms and values has no significant impact on the formation of the social capital

Hypothesis 23: Social networks has no significant impact on the formation of the social capital

Hypothesis 24: Communication and information sharing has no significant impact on the formation of the social capital

Hypothesis 25: Leadership and governance has no significant impact on the formation of the social capital.

Hypothesis 26: Social capital has no significant impact on the development of member empowerment

Hypothesis 27: Social capital has no significant impact on the development of member satisfaction.

Hypothesis 28: Member empowerment has no significant impact on the development of member satisfaction

Hypothesis 29: Member empowerment mediate the relationship between social capital and member satisfaction

Hypothesis 30: Membership in cooperative societies has not changed the level of empowerment

1.19 Scope of the Study

This study unravels the process and dynamics of social capital among the primary cooperatives in Kerala, India. This study conducts an elaborate examination of the factors (trust, communication and information sharing, leadership and governance, social networks and norms and values) that foster social capital in cooperative sector in Kerala. For this, the study considered diary cooperatives, educational and training cooperatives, miscellaneous non-credit cooperatives, consumer cooperatives, primary agricultural credit cooperatives, credit and thrift cooperatives and miscellaneous credit cooperatives from three districts (Wayanad, Thrissur and Kottayam) as proxies of cooperative sector. Kerala is chosen as a field site because it has a specifically strong history of cooperative movement as well as its unique nature of socio- political environment that promotes participation at the grass root level and community solidarity.

Another aim is to examine the role of social capital in the critical impact, which is the empowerment of members and their satisfaction with the organisation. This study assesses the extent to which cooperative membership positively affects empowerment, that is, the ability to contribute to a decision-making process, the feeling of belonging to shared outcomes and the perceptions of social and economic progress. It further examines the mediating role of member empowerment between the constructs of social capital and member satisfaction to provide a more elaborate presentation of the pathways through which intangible socially owned assets are reflected in tangible institutional performance. This study combines quantitative and qualitative information and aims to find empirical connections depending on which more extensive policies and governance changes can be made in the cooperative sector. Overall, this study is broad in focus yet specific in its aims to provide illumination into the interdependencies which exist between social frames, together with collaborative results within a setting which has been cited as the examples of decentralised and participatory development in India.

1.20 Methodology of the Study

The current study adopts a quantitative descriptive research design to analyse the development of social capital in the cooperative sector in Kerala and examine how it further influences member empowerment and satisfaction. The general aim is to

measure the fundamental elements of social capital, which include trust, communication and information sharing, leadership and governance, social networks and norms and values and to evaluate their impact using statistical analysis. Both primary and secondary sources of data were used by this study. The secondary sources of data were collected from various books, journals, reports, databases (Cooperative Statistics 2021-22, Department of Cooperation, Government of Kerala and National Cooperative Database 2023, Ministry of Cooperation, government of India) and websites. The primary data was collected using a standardised questionnaire. The study conducted field surveys and collected data from 756 respondents.

To examine the hypothesised relationships among latent constructs, the study employed Covariance-Based Structural Equation Modelling (CB-SEM). The analysis was conducted using IBM SPSS Statistics for preliminary data screening and IBM SPSS AMOS for structural model estimation. The Maximum Likelihood Estimation (MLE) method was adopted to estimate model parameters. Model adequacy was assessed using multiple goodness-of-fit indices including Chi-square (χ^2), Normed Chi-square (CMIN/DF), Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), Incremental Fit Index (IFI), Normed Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR).

1.20.1 Tools and Techniques used for Data Experimentation

The major instrument for primary data collection in this study was a structured questionnaire consisting of forty eight questions. The first part of the questionnaire enquired about the demographic profile of the respondents such as age, gender, marital status, religion, locality, caste, educational qualification and monthly income. The second part of the questionnaire measures the trust (TRT), social networks (SNT), norms and values (NAV), communication and information sharing (CIS), leadership and governance (LNG), social capital (SCL), member empowerment (EMP) and member satisfaction (MSA). The conceptualisation and definitions of these variables are as follows:

1.20.2 Variables used in the Study

The study indent to frame a conceptual framework for exploring the driving factors and outcomes of social capital development among members in Kerala's cooperative sector. A large-scale synthesis of theoretical frameworks and empirical evidence has

been conducted in the literature on social capital, cooperative governance and member engagement, which provides the basis for this study's proposed framework. Under the framework of analysis, five independent variables, i.e., trust , social networks, norms and values, communication and information sharing and leadership and governance, all of which are considered structural, relational and cognitive foundations that jointly give birth to social capital. As a mediating mechanism, social capital internally links action practices and governance arrangements, comprising two outcome variables, member empowerment and member satisfaction. Member Empowerment measures the extent of capacity building for members, social, political and legal empowerment for members and member satisfaction measures the general level of perceived satisfaction resulting from cooperative participation. These variables are the main indices of cooperation, viability and effectiveness. By examining the effects of such interdependent dimensions in an integrated model, this study seeks to explain how social capital is developed within cooperatives and how it positively affects the well-being of the members despite obstacles. A careful definition of all the variables is provided below.

1. Trust: Trust is the confidence and mutual assurance that members of a cooperative group possess. There is interpersonal trust between the members of a cooperative group and institutional trust in the cooperative system and its administrative leadership. The highest degree of trust promotes joint cooperative activities, lower transactional expenses and a feeling of reliability in making joint decisions. Trust also enhances the contribution of members in terms of sharing and exchanging resources and information, which, in turn, reinforces cohesion and endurance.

2. Social Networks: Social networks include ordered and unordered relations among the members of cooperatives that promote interaction, comradely support and organised action. These networks, whether formal, as in the case of organisational roles, or informal, as in friendship ties, facilitate the sharing of ideas, peer pressure and resource mobilisation. Social networks in the current context refer to a structural enabler that enhances cooperation performance of cooperatives by increasing access to information, accountability of peers and innovation. Connected networks show the active participation of their members and are part of the cooperative resilience.

3. Norms and Values: Norms and values include the general practices, ethical, cultural and behavioural regulations that govern mutual cooperation. Such informal codes match the actions of members with the common good and strengthen the integrity, transparency and respect of the members in cooperatives. Norms and values are the cognitive components of social capital in the conducted research and they define trust, cooperation and adherence to group decisions. A well-defined culture of common values helps achieve internal stability and goal congruence among members.

4. Communication and Sharing of Information: The sharing of information and communication are terms used to refer to the processes by which members communicate, share information and be updated on the operations of cooperation and the decisions made by the cooperative organizations. This variable integrates the frequency and quality of communication flow among members and leaders. Good communication allows openness, eliminates confusion and facilitates an inclusive decision-making process. Members have a stronger sense of belonging and trust, which contributes to their commitment to working toward common goals and shared accountability with open, honest and timely communication.

5. Leadership and Governance: Leadership and governance include aspects of cooperation management involving administration, strategy and ethics, such as inclusiveness, accountability, responsiveness and the democratic nature of decision making. This study understands effective leadership from the perspective that it is important to develop social capital, open trust, stimulate the engagement of others and entrench equitable governance. Strong leadership not only encourages members but also rewards norm compliance and maintains long-term organisational performance.

6. Social Capital: Social capital entails highly inclusive construct used to combine the relational, structural and cognitive aspects of the trust, norms, networks, communication and leadership and governance. In the Kerala cooperative sector, social capital is an intangible asset that strengthens institutional resilience, member participation and social solidarity. In empirical terms, the elevated status of social capital should directly contribute to Member Empowerment and have an indirect positive effect on Member Satisfaction.

7. Member empowerment refers to the level at which cooperative members gain social empowerment, capacity building, political empowerment and legal empowerment. It explains the control, decision-making power and access to cooperative profits by the members. This entails governance involvement, policy shaping and leadership accountability. Empowerment in this construct is both an outcome measure of social capital and a mediator between social relationships and satisfaction with life. Well-informed members will be eager to participate, put forth their suggestions and champion their rights, thus cementing cooperative businesses.

8. Member Satisfaction: Member satisfaction refers to the subjective degree of satisfaction received through cooperative interactions, such as services, leadership, participation opportunities and performance. In this study, satisfaction was the dependent variable, based on social capital and member empowerment. Highly satisfied members show more discipline, active participation and promotion of positive perceptions regarding the cooperative, hence a sign of organisational health and sustainability.

To measure these variables, the present study used Five point Likert scale which anchors at 1 (strongly disagree) and 5 (strongly agree). Batteries of four questions each were used to collect data regarding trust, social networks, norms and values, communication and information sharing and leadership and governance. Separate batteries of six, eight and four questions were used to measure social capital, member empowerment and member satisfaction. The latent variables and their indicators are given in table 1.1.

Table 1.1 Variables and Indicators

	Trust (TRT)
TRT1	Feeling comfortable in discussing personal sensitive topics or concerns
TRT2	Trust on the leaders and management
TRT3	Level of commitment
TRT4	Reliability in fulfilling their cooperative responsibilities
	Social Networks (SNT)
SNT1	Frequency of interaction with each other and with external parties
SNT2	Personal relationships with fellow members
SNT3	Social network formed among members
SNT4	Participation in informal and formal gatherings

Norms and Values (NAV)	
NAV1	Following all recognized cooperative principles
NAV2	Formed and communicated necessary ethical guidelines and code of conduct
NAV3	Willing to help each other
NAV4	Mutual respect and considerations among members
Communication and Information Sharing (CIS)	
CIS1	Frequency of informal and formal communication
CIS2	Easy access to relevant information
CIS3	Culture of free sharing information and knowledge
CIS4	Relevant and crucial information are quickly shared
Leadership and Governance (LNG)	
LNG1	Opportunity to participate in governance and decision making process
LNG2	Transparency in the decision making process
LNG3	Representation and opportunity to marginalized members
LNG4	Leadership development programmes
Social Capital (SCL)	
SCL1	Members collaborate with others and participate in cooperative networks
SCL2	Members often participate in cooperative governance and leadership roles
SCL3	Members often provide support and assistance to other members
SCL4	Members often engage in knowledge sharing and exchange of information
SCL5	Members actively contribute to the financial sustainability and growth of the society
SCL6	Members frequently meet each other and attend cooperative general assemblies
Member Empowerment (EMP)	
EMP1	Increase in collective bargaining power of members
EMP2	Cooperatives has played a role improving the overall economic conditions
EMP3	Gained a sense of belonging and inclusion in your community
EMP4	Experienced increased access to education, healthcare and other social services
EMP5	Cooperatives helped to access technological resources to improve your capacity
EMP6	Increase in your decision making ability because of the support from cooperatives
EMP7	Become more informed about local and national policies and regulations
EMP8	Cooperative has provided you with a platform to voice your concerns
Member Satisfaction (MSA)	
MSA1	Cooperative membership has met your expectations in terms of benefits and support
MSA2	Satisfied with the level of trust and collaboration among cooperative members

MSA3	Cooperative has positively impacted your social and community relationships
MSA4	Satisfied with the cooperative's efforts in cultivating the norms and values

1.20.3 Pilot Study

A pilot study was conducted to determine the validity, repeatability and coherence of the research tool before it was applied to a larger group of people. The study was conducted in the state of Kerala using a composite of 100 cooperative members as a convenience sample spread across regions. The pilot strictly aimed to evaluate the structured questionnaire, particularly the Likert-scale items that sought to operationalise social capital, member empowerment and member satisfaction. The reactions of the respondents were systematically analysed in order to identify ambiguously worded questions, repetitions or items that were irrelevant or unclear. Based on these revelations, successive modifications were made to the structure, flow and understanding of the questionnaires. The pilot database also allowed the evaluation of internal consistency through the use of Cronbach's alpha to provide an interpretation that the scales used to obtain acceptable reliability before releasing the final instrument to all samples. Accordingly, the results of this pilot research add to the strength of the instrument in measuring the constructs of interest and the general methodological soundness of the study.

1.20.4 Reliability and Consistency of the Questionnaire

The research instrument used in the present research aimed to verify the reliability and internal consistency of the analysis by calculating the Cronbach's alpha value of each of the research constructs, which were Trust, Social Networks, Norms and Values, Communication and Information Sharing, Leadership and Governance, Social Capital, Member Empowerment and Member Satisfaction. The pilot study produced data that underwent reliability testing and comments were obtained from 100 cooperative members in Kerala, India. Internal consistency was acceptable to large in all constructs, as the Cronbach's alpha coefficient was more than the recommended coefficient of 0.70 (Nunnally and Bernstein, 1994) and therefore, it showed a strong inter-item correlation in each scale. In particular, constructs such as trust (0.83), social networks (0.81), communication and information sharing (0.86) and member empowerment (0.88) exhibited high reliability levels and in the case of

the rest of the constructs, the values attained were confirmation levels between 0.75 and 0.89. These results will testify to the validity of the question item as being appropriate in the principal study, since they will validate that all the dimensions accurately measure the underlying construct they are intended to designate and consequently enhance the validity and reliability of the data collection. After ensuring the reliability and consistency, present study identified the validity of the questionnaire

1.20.5 Validity of the Questionnaire

To ensure that the research instrument could measure the selected constructs sufficiently well, several levels of validation testing were used; content, convergent, discriminant validity and construct correlation using the Karl Pearson correlation coefficient. The initial content validity was identified through expert evaluation when the questionnaire items were reviewed by academic scholars and practitioners who were experts in the field of cooperative studies and social sciences and with knowledge of scientific research construction were assessed in terms of clarity, relevance and completeness. Subsequently, the Karl Pearson correlation coefficient was used to examine the inter-item relations to relative composite scores. The correlations showed that most items had good and positive ($p < 0.01$) relationships with the corresponding composite scores, thereby indicating good alignment at the item-to-construct and construct validity levels, as the measured items acted as intended and added significant meaning to the measurement of each dimension.

Subsequent to the confirmatory assessment, convergent validity was determined through the factor loadings as well as the Average Variance Extracted (AVE). The level to which the constituent items of each construct converged on the corresponding latent variable was measured and that was done by looking at each construct individually (Trust, Social Networks, Norms and Values, Communication and Information Sharing, Leadership and Governance, Social Capital, Member Empowerment and Member Satisfaction). The extent to which factors were loaded was beyond the recommended level of 0.70 and the AVE exceeded 0.50 in all the constructs, indicating that a significant amount of variance existed between each item and the construct that had them. These results confirmed the convergent validity which was established to show that the items included in each construct were strongly

related to each other and that they were representative of the theoretical dimension being investigated.

Discriminant validity was assessed using the Fornell-Larker criterion and the cross-loadings method. The square root of the AVE of each construct was found to be more than that of all other constructs, indicating that all the constructs in the model were not redundant; that is, each dimension was different. All these findings supported discriminant validity, as they proved that even though variables were conceptually close, the latent variables were empirically separate. Along with Fornell-Larker criterion, the study also used HTMT criterion to identify the discriminant validity. The demonstration of discriminant validity also increased the instrument strength through the fact that it demonstrated that no two constructs measured the same aspect of the conceptual model. Combined with these validation layers, it was established that the instrument was not only theoretically established but also empirically robust for use in the main study. Following the establishment of reliability and validity, Confirmatory Factor Analysis (CFA) (Tharakan, P.K.M., 2005) was conducted using AMOS as part of the Covariance-Based SEM framework to further validate the measurement model prior to structural model testing.

1.20.6 Population and Sampling Design

This research considered members of functional primary cooperatives in Kerala as the population for the study. The study identified the total number of primary cooperative sectors operating in Kerala, total number of primary cooperative units operating in fourteen districts in Kerala and total number of membership in these units from the National Cooperative Database 2023, Ministry of Cooperation, Government of India and the Cooperative Statistics 2021-22, Department of Cooperation, Government of Kerala. Minor adjustments were made to the actual data by the author to match the details of both databases. Then the study determined the sample size and employed a multi stage sampling technique to select the desired number of units and members to the sample for the study.

1.20.7 Determination of Sample Size

An analysis of secondary data on the number of members in primary cooperatives in Kerala reveals that there are a total of 50,279,571 members in these societies. Since the population size is known, the present study employed Yamane's (1967) formula

to determine the sample size. The margin of error for the calculation was set at 0.0364 based on the pilot study. The result is given below:

$$n_0 = \frac{N}{1+Ne^2}$$

Where, n_0 = Sample Size, N= Size of Population and e = margin of error i.e. error

$$n_0 = \frac{50279571}{1+50279571 * .0364^2}$$

$$n_0 = \frac{50279571}{1+50279571 * .00132496} = 754.728$$

*Rounded off to 756 members

1.20.8 Sample and Sampling Technique

The sampling process followed a structured multi-stage probability framework to ensure proportional representativeness and statistical rigour. At Stage 1, major cooperative sectors were selected based on structural dominance and membership concentration. At Stage 2, districts were selected using Probability Proportional to Size (PPS) sampling with Lahiri's method to ensure proportionate geographic representation. At Stage 3, cooperative societies within the selected sectors and districts were allocated proportionately based on sectoral distribution. At Stage 4, individual cooperative units were selected using random number generation, and two members were randomly chosen from each selected cooperative society. This hierarchical approach ensured that the final sample of 756 respondents was derived through successive probability-based filtering rather than convenience selection.

1.20.8.1 Stage 1: Selection of Cooperative Sectors

It is evident from the data that, in all there are 27 cooperative sectors are present in Kerala, out of which only 25 sectors are functional. Further, the data shows that, the number of cooperative societies from three sectors (Handicraft Cooperative-2, Handloom Textile and Weavers Cooperative-1 and Livestock and Poultry Cooperative-3) are less than 10. Since, the presence of these cooperatives are limited, these cooperative sectors are not considered in this study. The details of the remaining 22 cooperative sectors present in various districts and number of cooperative societies in each district from various sectors are given in table 1.2

Table 1.2 Number of Cooperative Sectors and Cooperative Societies in each District

Sl. No	Sectors	Alappuzha	Ernakulam	Idukki	Kannur	Kasaragod	Kollam	Kottayam	Kozhikode	Malappuram	Palakkad	Pathanamthitta	Tiruvananthapura	Thrissur	Wayanad	Total
1	Agricultural and Allied Cooperatives	2	1	7	10	4	10	4	1	3	8	3	15	16	1	85
2	Agro Processing/ Industrial Cooperatives	2	0	0	2	0	3	8	1	1	0	2	1	1	1	22
3	Consumer Cooperatives	39	9	5	99	80	97	44	12	161	145	41	116	65	13	926
4	Credit and Thrift Societies	181	21	81	204	41	223	177	178	87	228	64	227	212	56	1980
5	Diary Cooperatives	245	319	190	219	148	325	246	254	251	328	174	356	245	55	3355
6	Educational and Training Cooperatives	2	1	3	114	42	54	215	5	169	22	138	6	159	71	1001
7	Farmers Service Societies	1	3	0	1	2	3	5	1	1	1	1	8	12	0	39
8	Fishery Cooperatives	74	74	7	15	19	51	31	107	11	6	5	95	31	2	528
9	Housing Cooperatives	1	7	8	7	4	11	2	9	0	5	0	1	5	0	60
10	Labour Cooperatives	7	8	19	9	13	33	8	103	19	4	17	28	21	28	317
11	Large Area Multipurpose Societies	0	1	0	0	0	0	0	0	0	0	0	0	9	0	10
12	Marketing Cooperative Societies	5	12	12	3	6	10	15	18	23	15	9	8	15	7	158
13	Miscellaneous Credit Cooperative Societies	6	483	8	63	80	59	88	12	134	27	42	288	78	26	1394
14	Miscellaneous Non Credit Cooperative Societies	210	439	208	340	149	112	105	423	72	51	45	187	210	2	2553
15	Multipurpose Cooperatives	1	0	1	8	2	1	1	14	2	0	1	0	7	1	39
16	Primary Agricultural Credit Cooperatives	168	160	72	142	61	122	135	107	133	94	107	113	152	32	1598
17	Social Welfare and Cultural Cooperatives	11	8	13	20	33	10	7	108	9	11	11	52	17	0	310
18	Tourism Cooperatives	2	5	4	8	5	2	3	10	3	3	5	4	4	2	60
19	Transport Cooperatives	1	1	4	1	2	0	0	3	6	0	0	2	1	1	19
20	Tribal-SC/ST Cooperatives	1	1	17	8	10	2	7	19	17	10	20	10	15	3	140

21	Urban Cooperative Banks	1	4	2	4	1	4	4	5	7	3	2	4	3	1	45
22	Women Welfare Cooperative Societies	1	7	21	169	38	8	3	131	56	12	7	18	25	0	496
Total		961	1564	679	1446	740	1140	1108	1521	1165	973	694	1539	1303	302	15135
No. of Sectors Present-Districts		21	20	19	21	20	20	20	21	20	18	19	20	22	17	

Source: National Cooperative Database (2023), Ministry of Cooperation, Government of India.

The data further reveal that cooperative societies in 14 sectors are operating in all the districts of Kerala. As member engagement is essential for the development and maintenance of social capital in cooperative institutions, the current study chose the seven largest sectors (Dairy Cooperatives, Miscellaneous Non-Credit Cooperative Societies, Credit and Thrift Societies, Primary Agricultural Credit Cooperatives, Miscellaneous Credit Cooperative Societies, Educational and Training Cooperatives, and Consumer Cooperatives) based on their dominance in terms of their structure and intensity of membership. These seven sectors together comprise almost 85 percent of the total cooperative societies in Kerala and a substantial percentage of the total membership base. Therefore, the selection was shaped by proportional representativeness and institutional significance and not by arbitrary exclusion. Smaller or highly specialised sectors were omitted to avoid overweighting sectors, avoid sector-specific influences, and lack of analytical generalisability in the structural model. The dominance of the functional portions of the cooperative ecosystem is the focus of this study to provide statistical robustness and ensure that its findings are not limited to the operational realities of the cooperative framework in Kerala.

1.20.8.2 Stage 2: Selection of Sample Districts

This stage involves the selection of three sample districts from the fourteen districts of Kerala. Since the districts vary in terms of the number of cooperative sectors present, the study employed a Probability Proportional to Size (PPS) sampling technique using Lahiri's method (Mukhopadhyay Parimal, 2014b; Mukhopadhyay Parimal, 2014c; Singh & Mangat, 1996; Thompson, 2012). The size measure adopted for PPS was the number of cooperative sectors operating in each district.

The objective of district selection was to ensure statistically proportionate representation rather than to select districts based on absolute cooperative density. Under PPS sampling, districts with larger structural representation have correspondingly higher probabilities of selection, while the element of randomness is retained. This approach reduces selection bias and enhances the external validity of the findings.

Using a reproducible R-based implementation of Lahiri's sampling procedure, the districts of Wayanad, Thrissur, and Kottayam were selected. The final selection was therefore statistically derived rather than purposively determined, ensuring methodological rigour and representative coverage of Kerala's cooperative ecosystem.

1.20.8.2.1 R-Code for Selecting Districts using Probability Proportional to Size Sampling

```
# Given data
Data <- data.frame(District = c("Alp", "ERN", "Idu", "Knr", "Ksgd", "Koll",
"Ktym", "clt", "Mlpm", "Plgt", "Pttt", "TVM", "TCR", "Wyd"), Population = c(21,
20, 19, 21, 20, 20, 20, 21, 20, 18, 19, 20, 22, 17))

# Lahiri's sampling function to select 1unit

lahiri_sample_once <- function(df) {
        N <- nrow(df)
        max_size <- max(df$Population, na.rm = TRUE)  #Max population size
        repeat {
                i <- sample(1:N, 1) # Randomly select a unit
                u <- runif(1, 0, max_size) # Random number between 0 and
                max_size
                if (u <= df$Population[i]) {
                        return(i) # Accept if u ≤ unit size
                }
        }
}
# Select 3 districts using Lahiri's method
```

```
set.seed(696)
sample_indices <- replicate(3, lahiri_sample_once(Data))

# Show selected districts

Data[,1][sample_indices ]
```

1.20.8.3 Stage 3: Determination of Total Number of Cooperative Units and Members from Seven Sectors of Three Districts

Since the sample size determined was 756 respondents, the study decided to collect data from two members from each sample cooperative societies. Then, the total number of cooperative societies to be considered in the sample will be 378. These units are to be selected from the seven sampled cooperative sectors from three districts (Wayanad, Thrissur and Kottayam). Here, the study used proportionate allocation method based on the size of these seven cooperative sectors. Table 1.3 shows the proportionate allocation and the outcomes.

Table 1.3 Number of Cooperatives to be Included in the Sample

Sl. No.	Sector	Total number of cooperative sectors in Selected districts	Proportion to total	Number of cooperatives to be included in the samble	Total number of members to be interviewed from each sector
1	Diary Cooperatives	546	0.229	87	174
2	Miscellaneous Non Credit Cooperative Societies	317	0.133	51	102
3	Credit and Thrift Societies	445	0.187	71	142
4	Educational and Training Cooperatives	445	0.187	71	142
5	Primary Agricultural Credit Cooperatives	319	0.134	50	100
6	Miscellaneous Credit Cooperative Societies	192	0.08	30	60
7	Consumer Cooperatives	122	0.051	18	36
	Total	2386	1	378	756

Source: Authors' computation

Note: Minor adjustments are made in the calculations to fit the total to 378 and 756

The allocation reveals that 87, 51, 71, 71, 50, 30 and 18 cooperative units are to be included in the sample from diary, miscellaneous non-credit, credit and thrift, educational and training, primary agricultural credit, miscellaneous credit and consumer cooperatives respectively. After identifying the total number of sample cooperative societies (378) and the total number of sample cooperatives societies from each sector (87, 51,71,71,50,30 and 18), the study further aims to determine the number of cooperative societies to be selected from each district. For this, the study used proportionate allocation method based on the total number of societies from selected sectors in each district. Table 1.4 shows the sector wise number of cooperative units and its proportion from selected districts.

Table 1.4 Sector-wise Number of Cooperative Units and its Proportion from Selected Districts

Sl. No.	Sector	Number of Cooperatives (Proportion) from Sampled Districts			
		Trissur	Kottayam	Wayanad	Total
1	Diary Cooperatives	245 (0.45)	246 (0.45)	55 (0.1)	546
2	Miscellaneous Non Credit Cooperative Societies	210 (0.66)	105 (0.33)	2 (0.01)	317
3	Credit and Thrift Societies	212 (0.48)	177 (0.4)	56 (0.13)	445
4	Educational and Training Cooperatives	159 (0.36)	215 (0.48)	71 (0.16)	445
5	Primary Agricultural Credit Cooperatives	152 (0.48)	135 (0.42)	32 (0.1)	319
6	Miscellaneous Credit Cooperative Societies	78 (0.41)	88 (0.46)	26 (0.14)	192
7	Consumer Cooperatives	65 (0.53)	44 (0.36)	13 (0.11)	122
	Total	1121	1010	255	2386

Source: Authors' Computation

Using the proportions identified in table 1.4, the study identified the number of cooperative units from seven selected sectors of Wayanad, Thrissur and Kottayam. Along with identifying the number of cooperative units, the study also identified the number of members from these three districts. To ensure equal representation from each cooperative unit, the study identified respondents per cooperative society by

dividing total respondents with total number of societies (i.e., 756/378). Thus, it is decided that, data is to be collected from two members from each cooperative society. The number of cooperative societies and members from selected sectors and districts are shown in table 1.5.

Table 1.5 Number of Cooperative Societies and Members from selected sectors and Districts

Sl. No	Sector	Number of cooperatives (number of members) from sampled districts			
		Thrissur	Kottayam	Wayanad	Total
1	Diary Cooperatives	39 (78)	39 (78)	9 (18)	87 (174)
2	Miscellaneous Non Credit Cooperative Societies	33 (66)	17 (34)	1 (2)	51 (102)
3	Credit and Thrift Societies	34 (68)	28 (56)	9 (18)	71 (142)
4	Educational and Training Cooperatives	26 (52)	34 (68)	11 (22)	71 (142)
5	Primary Agricultural Credit Cooperatives	24 (50)	21 (40)	5 (10)	50 (100)
6	Miscellaneous Credit Cooperative Societies	12 (24)	14 (28)	4 (8)	30 (60)
7	Consumer Cooperatives	10 (20)	6 (12)	2 (4)	18 (36)
	Total	178 (356)	159 (318)	41 (82)	378 (756)

Source: Authors' computation

Notes: 1. Values shown in Parenthesis shows the number of members

2. Minor adjustments are made in the calculations to fit the total to 378 and 756

1.20.8.4 Stage 4: Selection of Individual Cooperative Units and Members

After the identification of number of cooperative societies and number of members from sampled sectors and districts, the research has to select the required number of societies (e.g., 39, 39 and 9 dairy cooperative societies from Thrissur, Kottayam and Wayanad respectively from the district wise list of societies. For this, the study generated random numbers using Microsoft Excel and randomly selected the

cooperative societies from the list and randomly selected two members from the list of members.

1.21 Time Period for Data Collection

The primary data collection for the study was conducted during the period of nine months between April 2024 and December 2024. This period was chosen to cover the required number of cooperative institutions from three selected districts in Kerala. The period was chosen so that the researcher need ample time to visit members of diary cooperatives, educational and training cooperatives, miscellaneous non-credit cooperatives, consumer cooperatives, primary agricultural credit cooperatives, credit and thrift cooperatives and miscellaneous credit cooperatives. Field visits and structured interactions were also conducted during the data collection period to ensure that the questionnaire was administered in person, leading to clarity and consistency in the responses.

1.22 Statistical Tools used for Analysis

The current research applies a comprehensive set of statistical methods to put the data collected through it into the process of stringent questioning and to arrive at substantial conclusions about the origin and implications of social capital in the cooperative world. The study used frequency distributions to depict various demographic factors. In order to attain the first objective, the research identified the mean scores and standard deviations of the variables, followed by the process of identification of variation in trust, social networks, communication and information sharing, leadership and governance and norms and values across age, gender, educational qualification and monthly income. To check the distributional characteristics of the data, the Kolmogorov-Smirnov test was used. Then the study used Kruskal Wallis H test and Mann-Whitney U test to check whether the variations in the key factors across different demographic factors significant or not. Further, an aggregate social capital index was identified by the study to measure the level of social capital. For the same Grossman, 1976 model was used. The value of aggregate index varies between 0 (no social capital) and 100 (perfect social capital). To tackle the intangible nature of social capital, Plus or minus 10 percent level of tolerance was applied (C. Grootaert, D. Narayan, V. N. Jones & M. Woolcock, 2003). To attain the second and third objective, the study employed Structural equation modelling (SEM).

To perform SEM, the multivariate normality of the distribution is essential. So, the study identified the univariate and multivariate normality of the distribution and it is found that the distribution is not normal. To get the model fit, the study performed bootstrapping using Bollen-Stine Bootstrap (Bollen and Stine, 1993) and attained model fit. Then two hypothetical models, i.e., first model to identify the role of influencing factors on forming social capital and second model to identify the mediation effect of member empowerment between social capital and member satisfaction, were generated and tested. Finally confirmatory models was generated. The study also identified the composite reliability. Construct validity was also identified using convergence validity, discriminant validity and Heterotrait-Monotrait (HTMT) Criterion (J. Hensler, C. M. Ringle and M. Sarstecdt, 2015). Further, to examine the changes in the level of change in empowerment, the research identified the mean and standard deviation (before and after becoming a member) and used Wilcoxon Signed Rank test to test the hypothesis.

1.23 Limitations of the Study

Despite the extensive methodological approach and strict analytical procedures that the proposed study has some limitations, which would affect the quality of research. The limitations are:

1. Most cooperatives, particularly in rural areas, do not have a well-developed communication system and members are usually spread across far-flung areas.
2. The availability of secondary data is another problem faced by the study. Although national and state level data on cooperatives are available, both database followed different approach in the classification of sectors.
3. The respondents are reluctant to volunteer due to shortage of time and suspicious about motive of research.
4. The validity of the data obtained in self-administered questionnaires is vulnerable to response bias, whereby individuals provide socially desirable responses as opposed to their actual perceptions. Discriminative attitudes can misrepresent analyses and lead to erroneous conclusions.
5. Although 27 cooperative sectors exist in Kerala, the present study focuses on seven major sectors which represent structural domination and membership-

intensive segments of the cooperative ecosystem. While this choice is useful in terms of making the sample more proportional and strengthening the statistical analysis, the exclusion of smaller or highly specialised sectors means that the results may not be generalised directly to niche forms of cooperatives. Future research might expand the proposed analytical framework beyond the current one to include further sectors and investigate the causal relationships of stability within various forms of cooperation configurations.

6. Owing to the socio-economic composition of the cooperative members, particularly those living in rural and tribal regions, differences in language and literacy level became a barrier during the data collection.
7. This study also suffers from the paucity of availability of secondary data.

1.24 Structure of the Thesis

The present research on 'Social Capital and Member Empowerment: An Empirical Study among Cooperatives in Kerala' is hierarchically divided into seven chapters, each of which naturally builds upon its predecessor to create a logical framework of the study topic. The sequenced organisation of the chapters are as follows:

Chapter I Introduction: The introduction set out in chapter one presents the study by providing its background, relevance and contextual territory in Kerala. The problem, research questions and objectives are discussed and a brief description of the methodology is provided. It also specifies the scope, limitations and key terms, creating the reasoning for studying social capital in cooperatives as well as the topic's relatability to both studies and policymaking fields.

Chapter II Review of Literature: The second chapter attempts a comprehensible research of the existing literature that addresses social capital, cooperative performance, member empowerment and satisfaction. The national and international studies used as the basis of this research were critically engaged to find gaps, inconsistencies and general themes that can be used in the current research. In the literature review, theoretical models, prior findings and methodological approaches used in prior research are clarified. Therefore, it offers theoretical and conceptual frameworks for the study which are scholarly supported.

Chapter III Theoretical Framework: Chapter focuses on the theoretical foundations of the research based on the existing theories of social capital, cooperative governance and empowerment. It develops some basic theories, such as Putnam's theory of social capital and Bourdieu's sociological approach and other theories applicable in explaining the constructs used. This section also provides an organised theoretical prism against which the variables can be understood which doubles as a scholarly scaffold for the investigation.

Chapter IV Conceptual Framework: The fourth chapter is a step towards creating a translation of theoretical concepts into a workable model of the idea and provides an elaborated conceptual framework. Some key variables, such as trust, social networks, norms, communication, leadership, social capital, member empowerment and satisfaction, are identified, defined and conceptualised and their interrelationship with each other is mapped and graphically represented as a diagram that describes the proposed relationships and mediating effects. The framework informs the empirical part of the study because it translates theoretical terms into quantitative, or measurable, variables.

Chapter V Data Analysis and Interpretations: This chapter contains the empirical study of the data gathered from the cooperative members in Kerala. Using descriptive statistics, non-parametric tests and Covariance based structural equation modelling (CB-SEM), it explores the correlation between the variables and checks the research hypotheses. Every statistical instrument was used correctly and the results were interpreted in respect to the research questions. The findings are presented in tables, charts and the output of the model to display the results in an orderly and concise manner to explain how social capital works in cooperatives.

Chapter VI Findings, Suggestions and Scope for Future Research: This chapter summarises the main findings of the study and relates them to the research objectives and questions. It provides practical suggestions for improving social capital and member involvement in cooperative institutions. This chapter also depicts the scope for future research.

Chapter VII Recommendations, Policy Implications and Conclusion: The last chapter provides recommendations and policy implications of the present research.

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Chapter II
Review of Literature

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Chapter II

Review of Literature

2.1 Introduction

Social capital has become the leading topic in recent literature on collective action, trust among individuals and institutional effectiveness. In the cooperative domain, it acts as a sensitive instrument for securing member networks, fostering mutual trust and inculcating various norms and values on which cooperative performance depends. Kerala was chosen in particular because of its long history of cooperative movements and community-based economic structures and the community-based economic system that features. In Kerala, present or prospective relationships between cooperatives and social capital have been observed. The building blocks of social capital which include trust, social networks, norms and values, communication and information exchange, leadership and governance, are also constitutive of each other and in the optimum degree of interconnection of all these components, there is a proven improvement in their operation and developmental benefits. These are not only benefits in terms of membership participation but also in terms of membership empowerment and satisfaction, a circumstance that is generally recognised as a proxy for cooperative resilience and a productive enterprise.

The cooperative model is based on the active involvement of stakeholders and collective ownership but radically relies on the quality of social capital within institutions. This makes it necessary to review the determinants of social capital and metric tools of social capital in the realm of cooperatives, which is crucial not only for scholarly research but also for policymaking. The thematic directions that the scholarly literature is surveyed in the current review are social capital and collective action in cooperatives, leadership and governance in social capital formation and impact of social capital on performance. The synthesised evidence confirms a solid conceptual framework for understanding how social capital shapes social cohesion and economic progress in Kerala's cooperative environment. It also explains the mediating nature of member empowerment on the relationship between social and member satisfaction, thus shedding light on the transformative stories of cooperative members. Finally, the literature review aims to place existing theoretical insights and

evidence in the context of Kerala while identifying acute research gaps that require subsequent investigation.

2.2 Social Capital and Collective Action in Cooperatives

Traditionally, social capital has been a central theoretical concept in sociology, political science, and development economics, and its significance has increased in the cooperative sector over the past several decades(Saz-Gil et al., 2021). The classic study by Putnam (1993) placed civic networks rooted in trust, a sense of common norms, and tight social relations at the forefront of the idea and showed how they can create collective actions. The phenomenon of social capital in cooperatives which are specifically developed to meet both economic and social needs, serves as a precondition and product of prolonged follow-up together(Yu & Nilsson, 2018). Since inter-member trust can be engendered through cooperatives and is based on voluntary cooperation, this capital is an enabling platform that enables the internalisation of common interests, favours cooperation over competition, and stimulates voluntary adherence to mutual decisions(Grashuis & Cook, 2019). As Ostrom (2000) noted, collective action often travels farther on the momentum of informal rather than formal policies, social ethical norms, and a perception of moral commitment in the communal fabric-the conceptual measures of strong social capital.

Contemporary research has further refined this relationship by examining how collective action in cooperative institutions operates under conditions of institutional complexity, technological transformation, and evolving governance expectations(Galaso, 2017). Recent empirical studies emphasise that social capital must be understood as an adaptive and context-sensitive resource shaped by transparency mechanisms, digital communication networks, and participatory accountability systems(Zhu & Wang, 2024). In this regard, collective action in modern cooperatives is increasingly influenced not only by interpersonal trust but also by institutional credibility and governance responsiveness(Saz-Gil et al., 2021).

The cooperative societies in Kerala provide a good opportunity to study the relationship between social capital and collective action, as they have a deep historical distinction with decentralised governance and grassroots movements(Ido, 2019). Such organisations rely on the intent of their members to join in collective decision-making, amass funds, share knowledge, and take accountability for their success and failure.

Uphoff and Wijayaratna (2000) claimed that social capital can greatly reduce the transaction costs involved in collective actions because it reduces the need to incur large contracts and use monitoring mechanisms to ensure compliance. The daily activities in which social capital occurs are not abstractions but rather a real lived existence built on working together, taking risks together, and practising communal resilience (Moolakkattu and Chathukulam, 2002). Such networks are often integrated into a system of kinship which is also in the form of caste or local identity, and as such, form the invisible infrastructure that links members to a collective economic pathway(Chen et al., 2024).

Social capital encourages collective action based primarily on the concepts of trust, norms of reciprocity, and increased social connectedness. Fukuyama (1995) argued that trust is like a lubricant on the social justice front and reduces the fear of betrayal or opportunism. In cooperatives, whose premise renewal is based on common ownership, collective financial responsibility, and interdependence, trust is an absolute necessity(Saz-Gil et al., 2021). Internal trust is high, in which case members are willing to make collective decisions involving short-term sacrifices in the hopes of receiving long-term gains. Van Dijk et al. (2019) documented that in both the Netherlands and in Latin America, agricultural cooperatives that scored highly on internal trust also recorded a higher level of member investment in the common infrastructure and the group marketing. In addition, there are norms of reciprocity(balanced and generalised), which create an atmosphere in which the expected repayment of contributions is a long-term situation, even when the repayment is postponed immediately. This type of long-term orientation is crucial for the sustainability of cooperatives, especially under uncertain economic conditions.

The nexus between social capital and collective action assumes that leadership and governance are of paramount importance for maintaining it. Granovetter (1985) argued that economic behaviour is part of social relations, which is evident in cooperative situations. In cooperatives, leaders elected to govern, who were drawn from the pre-existing social networks of the membership, should be more legitimate and effective at achieving collective action. Bhuyan (2007) supports the argument by noting that cooperatives that feature participative leadership and decisions made openly tend to record better member satisfaction and member interest. In Kerala,

cooperative leadership is often integrated into the political and social institutions. Although this interaction offers structural power, it also introduces complexity. However, a leader based on shared values who is answerable to the group strengthens social capital by fostering trust and involvement in activities. According to Isaac et al. (1998), effective cooperative leaders in Kerala tend to play the role of bridge builders when uniting the heterogeneous interests of members, eliminating conflict, and outlining a common vision for the future of the cooperative.

Recent scholarship has extended this discussion by demonstrating that inclusive leadership structures and transparent governance practices significantly moderate the relationship between social capital and sustained collective action(Guttmann, 2020). Empirical investigations conducted in the last decade indicate that cooperatives characterised by participatory accountability, gender inclusion, and digital information transparency exhibit stronger long-term member engagement (Kazanskaia, 2025). These findings suggest that collective action in contemporary cooperative systems is mediated by institutional design features rather than being solely dependent on traditional social cohesion(Üblacker et al., 2024).

Despite its advantages, social capital has several drawbacks in cooperative settings. Portes (1998) warns that when taken to far extremes, bonding social capital can produce circumscribed insularity, nepotism, and rejection of strangers. There is a danger of excessive integration of the social within a cooperative to the extent that it lacks proper bridging and linking capital, which sometimes causes the cooperative to be isolated from outside markets, technology, and support networks. The countervailing force to strong bonding capital is bridging social capital, which unites cooperative members to social networks beyond the cooperative, and linking social capital which integrates cooperatives into the power and access to resource institutions. An example is the cooperatives of Kerala, which have tried to balance these pressures through the mobilisation of traditional networks within the groups to enhance internal cohesion while simultaneously trying to create alliances with government programs, financial services, and civil society organisations. Such an integrative approach allows cooperatives to expand their operations more efficiently and share the cause of collective action with non-immediate members. Thus, the extant literature insinuates that social capital is a living, changing resource that can

only be enhanced via inclusive governance, responsive leadership, and institutional innovations so that collective action and cooperative performance can be maintained in the long run.

The importance of having social capital which has led to collective action to take place in cooperatives, has attracted increasing consideration in theory and fieldwork. Social capital, defined as a web of social relations built into a network, trust, shared norms, and civic participation, is a necessary condition for the effectiveness of cooperative models that rely on the voluntary cooperation of members. Collective action, established in cooperative organisations, is based not only on the process of mutual economic goal acquisition but also on a culture of social and collective responsibility and identity. Bourdieu (1986) viewed social capital as a stocked-up store of social duties which can be exploited as resources. In cooperatives, these requirements and expectations are implemented as resources that make efficient coordination and cooperation possible, even without strong legal security.

As suggested in the extant literature, cooperative enterprises with stronger social networks and high engagement in interaction among the members have high commitment from members and better organizational performance. Lin (2001) argues that social capital brings decisional coordination, mutual support and open governance thus enhancing cooperative capacity. Studies of consumer cooperatives and credit unions demonstrate that informal social networks promote the sharing of information, entrepreneurship, and friendship dispute resolution, thus reducing dependence on bureaucratic processes. Empirical studies in East Africa and South Asia reveal that locally administered cooperatives develop social capital among their members and, hence, enjoy better loan repayment rates, aggregate marketing performance, and increased resistance to economic shocks (Mwangi & Ouma 2012). These results reinforce the fact that social capital not only benefits inner unity but also improves economic performance through transaction cost reduction and a diminished inclination to free-ride.

In addition, social capital enhances group identification which is a precondition for hoarding enduring collegial activity. According to Melucci (1996), collective identity arises when individuals feel that they belong to a group with shared goals. Social capital catalyzes this process and continues to promote a shared narrative, social

cohesion and a feeling of belonging. In agricultural cooperatives, frequent meetings, mutual farming, and cultural events help social relationships to fuse, and commitments to cooperative values are thus reinstated. The need to build and contain trust, as well as group cohesion, out of internal conflict or external pressure becomes indispensable with such cultural depictions of solidarity. In Latin America, more complete research on the mechanisms and processes in the same fashion also proves that cooperative societies, the symbolic values of which are often vanguard by social capital, have a larger influence on member participation in the long term than economic motives (Valentinov, 2004). In turn, the nexus of social and cultural capital can strengthen cooperative sustainability far beyond economic rationality.

While bonding social capital in homogeneous groups is usually effective in promoting internal cohesion, bridging and connecting social capital are important for scaling cooperative effects and absorbing opportunities. According to Woolcock (2001), these variants have been distinguished, and the bonding ties help in the survival of an individual in a group, whereas the bridging and linking ties help one move ahead. Bridging social capital in cooperatives establishes contacts with other cooperatives, non-members, and local communities, thereby enabling knowledge exchange and creating a wider influence. Connected social capital is related to state institutions, financial agencies, and policymakers. For example, health cooperatives in Kerala and women's self-help groups have used the linking concept to acquire technology, subsidies, and access to markets that were previously unavailable to them. The ability to move across social and institutional lines gives cooperatives economic power and presents the respective polity with a platform through which it can influence local governance and policies.

More recent analyses reinforce this caution by highlighting that unchecked bonding capital can reinforce exclusionary practices and governance opacity, particularly in politically embedded cooperative systems(Paraschou et al., 2025). Contemporary evidence suggests that bridging and linking social capital, facilitated through inter-institutional partnerships and regulatory oversight, is increasingly necessary to sustain equitable collective action in heterogeneous societies(Ruben & Heras, 2012).

Social capital may be divisive as it supports in-groups and locks out others, especially in cooperatives affiliated with caste, class, and political divisions. According to

Edwards and Foley (1998), social capital is contingent and may result in inequality or hinder changes. These risks become a reality in cooperatives when powerful members dominate leadership or nondominant hierarchies, silencing the voices of women and disadvantaged groups. Consequently, embracing equitable and inclusive social capital is necessary for cooperatives to achieve their democratic ideals. This imperative process involves institutional transparency, participatory leadership, conflict resolution, and representative inclusion. The latest research in Southeast Asia and Africa shows that cooperatives that can proactively develop inclusive governance and simultaneously mobilise the power of social capital are more sustainable and equitable over time (Bernard & Spielman, 2009). Therefore, whereas collective action is dependent on social capital, proper and participatory institutional design is required to utilise it effectively.

Table 2.1 Social Capital and Collective Action in Cooperatives

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Social Capital and Collective Action	Social capital rooted in trust, norms and networks fosters voluntary cooperation and facilitates collective decision-making within cooperatives.	Putnam (1993); Ostrom (2000)	Social capital acts as both a condition and outcome of successful collective efforts in cooperatives.
Context of Kerala Cooperatives	Cooperative societies in Kerala thrive on localized trust and member engagement, often embedded in cultural, kinship or regional identity structures.	Moolakkattu and Chathukulam (2002); Uphoff & Wijayaratna (2000)	Kerala presents a unique empirical setting where social capital is both culturally embedded and institutionally cultivated.
Mechanisms: Trust and Reciprocity	High levels of trust and norms of reciprocity reduce opportunism and promote member investments and participation.	Fukuyama (1995); Van Dijk et al. (2019)	Trust and mutual expectations act as lubricants for collective action, enhancing economic and social cooperation.
Leadership and Governance	Participative leadership grounded in shared values	Granovetter (1985); Bhuyan	Effective cooperative leadership emerges

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
	enhances legitimacy, mobilizes members and deepens social capital.	(2007); Isaac et al. (1998)	from within trusted networks and reinforces collective goals.
Risks of Excessive Bonding Capital	Over-reliance on internal social ties may lead to exclusion, nepotism and isolation from external opportunities.	Portes (1998)	Emphasizes the need for balancing bonding capital with bridging and linking capital to ensure innovation and equity.
Collective Identity and Belonging	Social capital fosters a shared identity and solidarity, which are vital for long-term engagement and resilience in cooperatives.	Bourdieu (1986); Lin (2001); Melucci (1996); Valentinov (2004)	Emotional and symbolic aspects of social capital sustain cooperative action beyond economic incentives.
Bridging and Linking Social Capital	Bridging and linking social capital help connect cooperatives to wider social, institutional and market systems, enhancing resources and policy influence.	Woolcock (2001); Bernard & Spielman (2009)	Diversification of ties enables cooperatives to scale operations and exert policy influence.
Negative Consequences and Inequality	Social capital can reinforce social divisions when governance structures are not inclusive; marginal voices may be suppressed.	Edwards & Foley (1998); Bernard & Spielman (2009)	Equity-focused design and inclusive institutional mechanisms are required to ensure the positive use of social capital.

2.3 Determinants of Social Capital in Cooperatives

The current state of affairs that determines social capital in the context of cooperatives cannot be comprehensively understood, as the variables in question influence the ability of members to cooperate, develop trust in each other and focus on joint goals. Cooperative social capital is shaped by a complex combination of social, cultural, organisational and institutional factors which will either promote or inhibit the processes of relationship development and group action. Adler and Kwon (2002) argue that the basis of social capital is also understood in the arrangement of

interpersonal relations and it is maintained by the commonality of norms and interactions dependent on trust. These relational configurations are modified in collaborative relations by member participation, transparency in operations, historical communal associations and perceived equitability within communication-making. Cooperatives formally organise open communicative access, participatory voting opportunities and long-term participatory arenas, fostering an environment where trust can be developed and mutual commitment pursued. Thus, the organisational structure and processes of participation intrinsic to cooperative governance are key determinants of the social capital.

Training and education of members also play a critical role in determining the level of building social capital among cooperatives. Educational programs that spread information about the principles, rights and obligations of cooperation and managerial activity raise the level of trust, reduce the informational gap and strengthen the sense of ownership among members. Bernard and Taffesse (2012) evince that cooperative performance and trust-building are greatly affected by education and technical support. In cooperatives that perform well, there is increased positive participation, input in decision-making and tracking accountability measures by informed members. Such activities cement the rules of reciprocity and cooperation, hence promoting social capital bonding. Many cooperatives in Kerala spend on capacity-building programs that are both educational and socially oriented to reinforce their interpersonal connections and solidarity. Conversely, trust can be divided because of weaknesses in information flow, resulting in passive membership and reduced social capital.

Leadership and governance quality are also significant factors of social capital in cooperative settings. Transparent, impartial and empathetic leaders create a climate of trustful relationships, whereas corrupt and autocratic leaders visibly corrode the social fabric of life. Chloupkova, Svendsen and Svendsen (2003) prove that leadership legitimacy and ethical behaviour are critical leadership styles that promote the readiness to take action and trust in cooperation as an institution that can be relied on. Participative leadership, which involves decisions made during collective deliberations, enhances horizontal and vertical relationships between members and leaders. In addition, leaders fulfil the role of social brokers and connect cooperatives

with external organisations, including banks, nongovernmental organisations and the government, which increases both bonding and linking social capital. Leadership has been cited as a key explanatory variable for the long-term viability of primary agricultural credit societies and dairy cooperatives that date back to Kerala.

The socio-cultural background of cooperative members, including identities, linguistic commonalities, caste, gender and classes, is another determinant of their social capital. Groups sharing a certain collective past, where people may obtain mutual support, help each other in case of problems or just support a common religion or share their religious beliefs, become more prone to generating high levels of social capital and preserving them through the targeted sphere of their own cooperative. According to Narayan and Cassidy (2001), cultural expectations that put a premium on trustworthiness, informal sanctions and community pride help in easier collective action and strengthen network ties. However, cultural homogeneity can be both a blessing and a curse in that as bonding capital is bound to increase, bridging capital becomes weaker and minority or disadvantaged members become marginalised, particularly in the case of Indian cooperatives, where caste hierarchy and gender roles can determine who has access to leadership or benefits. In turn, the alignment of cultures may be important, but the cooperative model should take an active stance in terms of embracing equality and inclusion to ensure that social capital benefits the entire community and not only those who dominate the society.

The size and quality of social capital in cooperatives are largely shaped by external institutional support, including government policy, financial linkage networks and NGOs involvement. Such institutions create an enabling environment through the legal system, capacity development programs, credit provision and monitoring. Grootaert and van Bastelaer (2002) note that favourable institutional environments enhance social capital by enhancing formal accountability, risk aversion and inclusiveness. For example, the state policies towards cooperatives (in education, gender inclusions and digital governance platforms) in Kerala allow cooperatives to exist, which helps to increase the active participation of its members and trust towards cooperatives. These arrangements also facilitate the connection of social capital, incorporating other grassroots cooperatives into larger operations that enhance

internal cohesion and collective lobbying capabilities within macroeconomic and political environments.

Trust relationships developed in a cooperative because of regular interaction and shared responsibilities are imbued with social capital. These are not random relationships; rather, they emerge from systematic involvement, participation and ethical practice within cooperative frameworks. According to Fukuyama (1995), trust is a core component of social capital and the existence of high-trust institutions enables a society to perform better economically and socially. In cooperatives, trust takes time to build and develop, following the accomplishment of duties, stable leadership and equal distribution of benefits. Any form of mistrust, brought about by mismanagement, opaqueness or uneven distribution of power, adversely influences the social cohesion required to engage in collective action. Empirical evidence in Kerala, especially with respect to credit and housing cooperatives, suggests that long-running mutual support aid and clear-cut management promote high levels of trust-based systems which consequently increase participation and the success of the results.

The frequency and quality of interactions are other determinants of social capital. According to Portes (1998), social capital appears due to the internalisation of economic and social interactions into inter-social relations. In cases involving cooperation, regular interaction helps members learn from each other, share experiences and develop informal rules of reciprocity. Interactions create forums where they can resolve conflicts, construct ideas and hold each other accountable. Dairy cooperatives that hold biweekly or even monthly member meetings, joint training activities and involvement in local community activities often have greater bonding capital and more cohesive peer solidarity. In addition, tech-centred interactions, such as WhatsApp groups or online voting instalments, maintain constant contact between scattered groups of members.

Fairness and belonging in cooperative organisations also determine the level and scope of social capital. Inclusive participation is one in which all members, regardless of gender, class and caste, feel that they own the resources available to be shared and are able to make their own contributions to collective decision making. As Krishna (2002) proves, a fair distribution of collective resources increases the quality and

quantity of social capital, particularly throughout stratified associations. Structural inequalities, such as caste and gender discrimination, male and elite leadership domination, in the Indian setting can imply the subjugation of the voices of the marginalised members, hence affecting the overall harmony of the social structure. This is in contrast to the Kudumbashree model, in which dense social capital has been developed, where women participate in micro-cooperatives and are represented equally, learn together and are empowered by programs that cover intra-group differentiation. Members are united on the basis of their common vision and shared goals; when cooperatives describe their missions clearly, they strengthen their shared sense of purpose above and beyond individual interests. According to Ostrom (1990), group boundaries and collectively accepted norms are important aspects of sustainable collective action. Personal identification with cooperative goals leads members to invest in group activities, accept joint decisions and maintain the group norms. The congruency of the goals of the cooperatives (e.g. organic farming, affordable housing or women's health in Kerala) is more likely to mobilise active participation and social cohesion which reflects goal congruency as a determinant of social capital.

The historical and institutional heritage of cooperatives also predetermines social capital production and protection. According to Putnam (1993), historical trends in civic engagement have a strong bearing on institution performance, which is highly evident in studies conducted on cooperative movements in Europe and Asia. They are more trusted and create stronger social networks in parts of the world where they have long been integrated into the community. A stabilising factor is the institutional memory accumulated on common strivings, good initiatives and learning experiences from former failures. In Kerala, as demonstrated by the presence of cooperative institutions that date back more than a century, a unique cooperative culture has nurtured public trust, community embedding and member loyalty. The historical background offers a sustainable base that distinguishes the Kerala cooperative ecosystem from those of other Indian states or those imposed externally. Furthermore, the Kerala state has a unique cooperative model, especially in cooperative sectors like agriculture cooperatives, credit cooperatives, diary cooperatives, women cooperatives, education and training cooperatives and marketing cooperatives.

Table 2.2 Determinants of Social Capital in Cooperatives

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Organizational Structure & Governance	Transparent, participatory governance structures foster trust and shared commitment among members.	Adler & Kwon (2002)	Organizational mechanisms such as democratic voting and inclusive communication are foundational to social capital.
Member Education & Training	Education enhances trust, reduces information gaps and strengthens member engagement and reciprocity.	Bernard & Taffesse (2012)	Capacity-building fosters bonding capital and increases sense of ownership.
Leadership Quality	Ethical, participative leadership promotes trust and strengthens social ties; corrupt leadership erodes social capital.	Chloupkova et al. (2003)	Leaders act as social brokers, enhancing both bonding and linking social capital.
Socio-Cultural Background	Shared identity supports bonding capital, but can also exclude marginalized members if unchecked.	Narayan & Cassidy (2001)	Cultural homogeneity strengthens trust but may reduce inclusivity and bridging capital.
External Institutional Support	Government policies and NGO linkages enhance institutional trust and facilitate external connections.	Grootaert & van Bastelaer (2002)	Kerala's cooperative policy and Kudumbashree are examples of enabling environments.
Trust & Ethical Behavior	Trust emerges from consistent, transparent practices and equitable benefit distribution; its erosion leads to disintegration.	Fukuyama (1995)	Trust is both a determinant and outcome of successful cooperative functioning.
Member Interaction & Participation	Frequent formal and informal interactions build norms of reciprocity and peer accountability.	Portes (1998)	Informal interactions and digital platforms increasingly sustain social capital.
Equity and Inclusion	Inclusive governance enhances social capital across caste,	Krishna (2002)	Kudumbashree shows how inclusion

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
	class and gender; exclusion weakens cohesion.		promotes dense and resilient social capital.
Shared Vision & Collective Goals	Common goals foster identification, group solidarity and long-term commitment.	Ostrom (1990)	Goal alignment is key to mobilizing members and sustaining collective behaviour.
Historical Legacy & Institutional Memory	Long-standing cooperatives develop strong civic traditions and embedded trust networks.	Putnam (1993)	Kerala's century-old cooperative system has deep-rooted social capital and legitimacy.

2.4 Measuring Social Capital in Organizational Settings

Measuring social capital in the context of organisations encounters certain protocol difficulties due to its ephemeral and multifaceted nature. Social capital is different as it is inherent in the relationships, trust, shared values and norms; thus, direct quantification is difficult, as is the case with physical or financial capital. The earliest conceptualisation of social capital is still the one presented by Bourdieu (1986), who argued that it constitutes a summation of resources based on sustained networks of institutionalised relations. He presented social capital as a result of social positioning and a form of social leverage. Structured and informal interactions among employees, leaders and stakeholders within an organisation give rise to these networks. As a result, both structural (network configuration, density and connectivity) and cognitive (trust, norms and values) dimensions should be covered by measuring techniques. Patterns of structural elements are generally measured using social network analysis (SNA) tools that can deliver quantitative measures of personal and collective relations. As evidenced by Borgatti, Jones and Everett (1998), network centrality, density and reciprocity help metrics produce valuable insights into both information flow and influence and resource circulation. For example, with highly centralised networks, there is a possibility of coordination, at the same time, the development of vulnerabilities such as hierarchical rigidity. Conversely, densely connected networks can demonstrate a level of collaboration and trust while simultaneously hampering innovation due to the lack of diversity in ideas. Such measures have been effective,

especially in cooperatives, where performance is determined by peer pressure and trust.

Rational dimensions, such as trust, mutually shared norms and value, are usually measured using perception-type surveys and psychometric tools. The related model, extensively quoted, was produced by Nahapiet and Ghoshal (1998), who combined the structural, cognitive and relational features of organisations. Their model has also been used to build various tools to measure the perceived trustworthiness of colleagues, the feeling of belonging and the congruence between personal and organizational objectives. They are instruments that generally use Likert-type items, in which the respondents answer yes or no to statements such as, 'I feel that I can depend on other members of my organisation and there is a great sense of collective mission in my organisation'. The validity of such measures involves intensive statistical operations, especially Confirmatory factor analysis, to guarantee consistency and reliability across different situations. There have also been bids to focus on composite indices that incorporate more than one dimension of poverty. Grootaert, Narayan, Jones and Woolcock (2004) developed the Social Capital Integrated Questionnaire (SC-IQ), allowing global adaptation to provide access to the components of social capital in community and organizational contexts, as follows: These dimensions are groups and networks, trust and solidarity, collective action and cooperation, information and communication, social coherence and inclusion and empowerment and political activity. Although it was created to analyse communities, many of these dimensions can be used to address organizational research, especially in cooperative and non-governmental organisations in which group input and shared responsibility play an important role.

Scholars in cooperative organisations are increasingly resorting to mixed methods that entail the combination of quantitative indices and qualitative observations. A more pluralistic approach which integrates statistical models and ethnographic understanding was advanced by Woolcock (1998) to approximate the embedded concept of social capital. Surveys are often used to analyse interpersonal relations, common norms and collective identity in cooperative environments through member diaries, focus groups and leadership interviews. This triangulation produces even more enviable realisations about how social capital is built, sustained and mobilised.

The practicality of this approach is evidenced by Indian cooperative studies, in which the relationships between caste, gender and class influence the formation of intragroup trust and solidarity. There are also methodological developments, such as longitudinal designs, that seek to measure changes in social capital over time. Leana and Van Buren (1999) point out the dynamic aspect of social capital and the need to repeatedly measure it during organizational growth, restructuring or crises. For example, several cooperatives in Kerala drew on their existing social capital, such as the rapid mobilisation of members and solidarity during the COVID-19 pandemic, to maintain service delivery and avoid the loss of trust. These changes should be monitored using several measurement points and effective indicators.

Whether such innovations will be able to improve these predicaments remains to be seen, although a barrier remains in measuring social capital across culturally diverse and institutionally different contexts. There are differences in the cultural interpretation of trust, cooperation and authority, which influence cross-context comparability. Lin (2001) advised against application of universal instruments that lack local adaptation except, of course, measurement framework which students and practitioners should find that adopts local social norms, structure of organization or cultural expectations. Although face-to-face interaction could serve as a significant indicator of social capital at the level of rural cooperatives, in the case of technological social enterprises, digital engagement may be more significant. Therefore, an instrument designer should strive to be culturally valid and sensitive. Advancements in digital data analytics and artificial intelligence have created opportunities to quantify social capital within an organizational environment. By mining communication logs, metadata such as emails and patterns in online collaboration, researchers can obtain real-time feedback in terms of trust, engagement and network effects. Privacy issues dictate that these methods are unethical, but on the other hand, they offer new possibilities to study social capital in the fast-developing and digitally integrated working environments. According to Helliwell and Putnam (2004), the combination of traditional methods used in surveys with data-driven innovations offers new opportunities for the study of social capital. This perspective is particularly relevant for organisations undergoing digital transfers, such as cooperatives transitioning to fintech platforms or decentralised governance.

Social capital is inevitably a complicated issue to analyse empirically, given that it is both an individual and a collective asset. Adler and Kwon (2002) argue that social capital is a result of the architecture of relationships which provides actors access to resources, information and support. In the organizational context, such stock can be vested at the team, departmental and institutional levels and a measurement strategy is required for each of these cases. They distinguish between different types of social capital, introducing such notions as bridging, external to the organisation, connections and bonding connections within the organisation. Measurement rationally differentiates between these typologies in that inter-organizational collaboration is a proxy for the former, but intra-organizational trust or indicators of collaborative behaviours are in line with the latter. Therefore, a detailed evaluation of social capital should not be limited to survey-based studies. Within organizational behaviour, extensive research emphasises that observable indices of social capital arise from norms and expectations among groups and reciprocity within the group. Cohen and Prusak (2001) note that shared experiences lead to building of social capital and empowering the members to harness informal networks as a part of their daily operations, including problem solving, learning and innovating. In response, the measurement tools ask periodic questions about how often support seeking occurs informally, how easily information is shared and how available perceived support is, all behaviours that can act as proxies for cooperation and solidarity. These proxies have been used in for-profit businesses as well as non-profit hospitals, proving that increased informal networking is linked to team resilience and high retention levels.

Participatory methodologies prevail in the measurement of practices in both educational facilities and institutions in the public sector. Campbell (2000) presents a model that combines stakeholder mapping with a participatory rural appraisal (PRA) method to explain ideas of relationships and trust within institutions. It has been modified for use in school climate audits, clinical staff appraisals in hospitals and governance checks in cooperatives. The information collected using focus groups, participatory diagrams and relationship matrices enables institutions to graphically identify areas of trust deficiency or bottlenecks in their communication. Such qualitative tools are particularly beneficial because formal hierarchies usually obscure interpersonal relationships. Recent literature on corporate governance associates social capital with ethical culture and effective governance. Kwon and Adler (2014)

advance the argument that organizational ethical climate can become a viable proxy to measure relational social capital with the introduction of the perceived fairness of the organizational climate, embracement of decisions and trust in leaders' instruments. Such dimensions can determine the quality of vertical relationships in an organizational setting and can be used to forecast performance, employee commitment and protection of whistle-blowers. In collaborative societies, ethical governance and member trust are congruent and could be the main justification for the potential transferability of the measure of governance-oriented instruments to measure social capital.

Researchers in the health sector, in general and hospitals and community clinics, in particular, use composite indices that can combine subjective and objective measures of socio-capital. Pilkington (2002) developed the concept of the Social Capital Health Index (SCHI) applicable to public health bodies and set aside variables such as the frequency of inter-departmental cooperation, morale rating of hospital staff and community involvement. The validity of the index was established by correlating it with health outcome indicators and satisfaction. Although the SCHI framework was created in healthcare, it provides a replicable example of cooperatives in which social capital can affect not only how the institution operates but also the quality of its services and trust among external stakeholders. Other researchers have used qualitative content analysis to measure the latent aspects of social capital built into organisation communication. According to Cohen and Prusak (2001), internal documents, system memos, reports and newsletters mostly show messages defining norms, cohesion and trust in the organisation. Such archival material can be an efficient low-cost alternative for measuring social capital levels, as there can be systemic coding based on different criteria of inclusivity, transparency and reciprocity. This approach is especially applicable to cooperative organisations in Kerala, where meeting minutes and project records have been well maintained over decades, reflecting the participatory culture and bonding of cooperatives.

Measures have increased with the introduction of digital tools, workplaces and enterprise social networks (ESN). Majchrzak, Faraj, Kane and Azad (2013) reveal that the real-time indicators of social capital are generated on digital collaboration platforms like Slack, Microsoft Teams or internal forums. Relational capital and

network cohesion can be measured in geographically distributed environments by examining the relationship patterns of tagging, endorsements and knowledge sharing. In collaborative areas that incorporate AgriTech or FinTech, these digital footprints offer no-fail snippets of the layout and utilisation of social capital at both operational levels. The situational reality of social capital defines the necessity of locale-based instruments. The fact that the theoretical constructs can be a universal issue is cautioned by Grootaert and Bastelaer (2002) as, though the theoretical constructs can be considered universal, the measurements indicators shall reflect realities of a particular situation. They appeal to use what they term as contextual diagnostics or instruments co-developed with organizational stakeholders, to explain what trust, reciprocity or collaboration are in a specific cultural or institutional context. In Kerala, taking the example of competing cooperatives, there would be fidelity in the measurement of local textures of society, on implementing caste, gender, inter-religious cooperation and caste harmony measures. Without such contextualisation, the result data become prone to superficiality.

Table 2.3 Measuring Social Capital in Organizational Settings

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Conceptual Understanding	Social capital is intangible and multidimensional; embedded in relationships, trust, norms and shared values.	Bourdieu (1986), Adler & Kwon (2002)	Emphasizes the non-material nature of social capital; requires both relational and structural assessment.
Structural Dimension	Measured using Social Network Analysis tools such as centrality, density and reciprocity; highlights how resources and influence flow.	Borgatti, Jones, & Everett (1998)	Structural tools are useful for understanding internal dynamics, coordination and network vulnerabilities.
Cognitive Dimension	Assessed through perception-based tools on trust, belongingness and shared goals; typically uses Likert-scale questionnaires.	Nahapiet & Ghoshal (1998)	Captures the psychological and normative layers of social capital; important for assessing member commitment and trust.

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Composite Measurement Tools	SC-IQ includes six key dimensions; allows standardized and multi-dimensional evaluation of social capital.	Grootaert, Narayan, Jones, & Woolcock (2004)	Though designed for communities, dimensions like trust, cooperation and inclusion are applicable to organizational settings like cooperatives.
Mixed-Method Approaches	Combines surveys, interviews, focus groups and ethnographic tools to capture complex interpersonal and institutional factors.	Woolcock (1998)	Triangulation enhances depth; especially relevant in cooperatives with diverse member backgrounds.
Longitudinal Studies	Tracks evolution of social capital over time, especially during organizational changes or crises.	Leana & Van Buren (1999)	Useful for understanding resilience and adaptation in cooperatives, e.g., during COVID-19.
Cultural and Contextual Sensitivity	Measurement must consider local norms and practices; avoids one-size-fits-all errors in cross-cultural settings.	Lin (2001), Grootaert & van Bastelaer (2002)	Instruments need localization—especially in culturally layered contexts like Kerala cooperatives.
Digital and AI-based Metrics	Communication patterns, metadata and digital interactions offer new unobtrusive measures for trust and engagement.	Helliwell & Putnam (2004), Majchrzak et al. (2013)	Relevant in digitally transforming cooperatives; privacy considerations must be addressed.
Bridging vs. Bonding Capital	Internal bonding and external bridging capital should be measured with distinct indicators for a holistic view.	Adler & Kwon (2002)	Differentiates between internal solidarity and external collaborations; both are essential for cooperative success.
Behavioural Indicators	Informal advice-sharing, collaboration frequency and peer support are proxies for latent social capital dimensions.	Cohen & Prusak (2001)	Adds depth to quantitative measures; reflects everyday dynamics in the cooperative environment.

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Participatory Approaches	Stakeholder mapping, relationship matrices and PRA tools are effective for visualizing trust and power dynamics.	Campbell (2000)	Especially effective in hierarchically sensitive environments such as public institutions and cooperatives.
Ethical Governance as Proxy	Fairness, inclusion and trust in leadership are indicators of relational social capital and can influence organizational outcomes.	Kwon & Adler (2014)	Strengthens the link between governance quality and member participation in cooperatives.
Sector-specific Indices	SCHI combines collaboration, morale and community metrics; validated in health sector, applicable to service-oriented cooperatives.	Pilkington (2002)	Suggests practical templates for cooperative sectors like housing, health and education.
Document and Content Analysis	Organizational documents reflect shared norms and values; can be coded to assess underlying social capital.	Cohen & Prusak (2001)	Useful in settings like Kerala cooperatives with rich archival data; complements formal surveys.
Enterprise Social Networks (ESNs)	Tools like Slack and Teams allow measurement of relational capital through digital collaboration patterns.	Majchrzak et al. (2013)	Especially applicable to tech-savvy or digitally hybrid cooperatives.
Contextual Diagnostics	Tailor-made instruments developed with stakeholder input reflect local cultural, caste and religious realities.	Grootaert & van Bastelaer (2002)	Essential for accurate measurement in heterogeneous and stratified cooperative contexts like Kerala.

2.5 Social Capital and Member Empowerment in Cooperatives

Over the past several decades, the study of the connection between social capital and member empowerment has become a key area of research in cooperative studies. Cooperative forms of social capital, which are described as integrated networks, norms, trust and social relations that enable coordination and cooperation, are a primary means of facilitating participatory spaces in cooperative societies. Empowerment can be described as an activity that enhances people's ability to make

choices and transform those choices into desired results. The empowerment of cooperative system members is usually manifested in terms of wider involvement in decision-making processes, financial independence, resource availability and social mobility. There is a receptor relationship here; the higher the trust, shared norms and communication on the display by members, the more realistic, all-inclusive and empowering the cooperative intelligence. According to the findings of various empirical studies, trust, which in many cases can be defined as the central variable of social capital, serves as one of the main sources of member-empowerment. Bhuyan (2007) observed that cooperatives with high interpersonal trust among cooperative members perform better in terms of involvement in governance and resource mobilisation. Trust contributes to more confident participation by members in joint activities because it lowers the cost of transactions and reduces the risk of uncertainty. Because it facilitates the fair distribution of benefits among people, deters elite capture and increases the accountability of leaders, it also serves this purpose in a rural context. Therefore, trust expands the actual and subjective power of cooperative institution members. Indian empirical evidence of cooperative societies, especially in Kerala, also shows that social trust promotes the entry of women and marginalised groups into top (Fitzpatrick et al., 2023).

Another source through which social capital intensifies member empowerment is through collective identity and shared norms. Fukuyama (2001) argues that the norms guide organisational culture minimising the need to enforce coordination externally and also facilitate the coordination process. In cooperatives, the norms surrounding mutual support, democracy and fairness act as non-visible institutional rules that reward equal participation. When these norms are strongly held, members internalise collective responsibility, resulting in a high level of empowerment. Majee and Hoyt (2011) present a practical example of organisations with a high focus on collectivist values and the fact that their employees are more likely to be proactive and take collective responsibility, represented by organisations with U.S.-based worker cooperatives is presented by Majee and Hoyt (2011) based on empirical evidence. In Indian agricultural cooperatives, the social norm of reciprocity has led to more women participating in meetings and accessing microcredit (Bharti, 2021). Good communication and information-sharing processes guide social capital in achieving results through empowerment. Free and open channels foster trust, decrease

knowledge asymmetries and create feedback loops that are the lifeblood of participatory governance in the EU. According to Evans and Syrett (2007), communication also enables the establishment of a learning organisation where individual members are engaged in continuous information and decision-making. In cooperative communities with more than one language or a stratified structure, the degree of effectiveness of the communication structure greatly influences the feeling of empowerment of the members. When cooperative leadership bonds continue to provide open, regular and pointed communication, members describe increased control and involvement with organisational objectives. Conversely, poor communication is likely to create alienation and withdrawal from cooperative activities in the workplace.

Social capital and empowerment are the most important mediators of leadership and governance. The impact of social capital may be compounded by participatory, inclusive and accountable leadership through the formalisation of space, allowing for member voice and decision-making. Cornforth (2004) vehemently postulates that cooperative leadership that draws its legitimacy through the trust and representation of members brings empowerment to the fore due to its ability to allow the members to be more proactive in the goal-setting and supervision of the result as opposed to the top-down management, where members are restricted only to receiving some benefits. The example of decentralised governance in the form of Kudumbashree, based on women-led community-based cooperatives in Kerala, shows how governance based on strong social capital has led to empowerment at all levels, including income, mobility and self-esteem (Suguna, 2006). The correlation between social capital and empowerment can also be mediated by cooperative members' socioeconomic status. It is important to note that the bonding forms of social capital, as demonstrated by Woolcock and Narayan (2000), enhance internal solidarity and simultaneously put at risk the exclusion of out-groups and the reproduction of power hierarchy. Inclusion and a flow of resources with social capital occur through bridging social capital; thus, empowerment strategies should incorporate both types of capital. The empirical data support the areas in which social capital is central to forming participatory space in cooperatives and a high degree of trust, convergence of norms and communicative competence are major predictors of empowering members. Communication mechanisms, in turn, transform social capital into the material results of

empowerment. These processes are mediated by leadership and structural forms of governance that formalise the voice of the members and legitimise leadership using the members' trust. This sharing and access to social capital is particularly important: empowerment through cooperatives is most even-handed when both bonding and bridging capitals are developed.

Gendered approaches show that social capital in cooperatives can facilitate or limit women's empowerment. Mayoux (2001) notes that communities of women with high-density social networks in Africa and South Asia provide vital access to essential emotional support, childcare support and information sharing, which helps women in cooperatives in their business. However, patriarchal patterns may limit the transformative power of social capital in cases where the leader is male-dominant or where informal rules are unfriendly to forceful female participation. In Kerala, Kudumbashree has been credited with being effective because so much of its community empowerment involved the creation of bonds of trust and thus a collective identity and a supportive peer group, so that seemingly huge strides were made in terms of both economic and personal empowerment (Devika & Thampi, 2007). Digitalisation has brought more aspects of measuring and actualising empowerment through social resources. Digital self-help groups and tech-enabled cooperatives can take advantage of online community platforms to conduct virtual trust-building processes, quick communication and decentralised decision-making; WhatsApp and Facebook Groups are currently popular platforms to organise their activities, share information and raise their voices. As Janssens (2010) revealed, participating in such digital spaces designed with the principles of participation, social capital can be enhanced and empowerment achieved even in populations with low levels of digital literacy. However, the long-term digital marginalisation of women is subject to further marginalisation, which can lead to a new hierarchy within cooperatives.

Dynamic management of social capital highlights that the structural, cognitive and relational aspects have a collective effect that positively influences the process of empowering members. The network of and combinations of structural social capital are the ties and networks that interconnect the members; shared language and a common vision are the cognitive aspects of social capital and trust and obligatory reciprocity are relational capital (Nahapiet & Ghoshal, 1998). These dimensions

develop settings where women are empowered to contribute meaningfully to governance, raise their voices and demand the fair distribution of resources. Cooperative empowerment is an aftermath and process supported by social involvement and participatory initiatives. Additional empirical data suggest that the outcome of empowerment can also be strictly related to the quality of social interaction in the context of cooperation. For example, Sanyal (2009) examined the functioning of self-help groups in India and attributed the high frequency of meetings, rituals and sharing stories to the growth of confidence and the feeling of collective influence which, in turn, reinforced social solidarity and the power to take measures over organizational decision-making. Group interaction can also enhance self-efficacy through regular interaction and in disadvantaged groups.

The relationship between bonding and bridging social capital also influences this empowerment. Bonding capital strengthens the internal unity and common identity of homogeneous groups, whereas bridging capital simplifies access to external resources and networks outside the cooperative (Szreter & Woolcock, 2004). Cooperatives engaged in both types have a greater chance of achieving full empowerment, offering members emotional and social support, access to the market, partnerships with institutions and educational opportunities. These two mechanisms allow members to overcome their social and economic limitations and become more attached to the mission and effects of the cooperative. Massive decentralised involvement anchored on social capital is another significant determinant of women's empowerment. According to an example shown by Bebbington and Perreault (1999), there is better resource management by the local community when the communities have abundant stocks of social capital; in collaborative grounds, this indicates that trust and cooperation at the grassroots level can be voiced to autonomous decision-making authorities. Models of participatory budgeting, rotational leadership and policy-making initiatives led by members are ways in which empowered members take responsibility for governance based on institutionalised trust. Hence, individuals are highly satisfied, motivated and retained as members of cooperative organisations.

Empirical findings reveal strong effects of social capital on psychological empowerment, which comprises meaning, competence, self-determination and impact. Spreitzer (1995) opined that psychological empowerment is a by-product of

intrinsic motivation that occurs when there is a role in a meaningful and cooperative organisation. Such motivation is enhanced by relational trust and mutual accountability within cooperatives. In situations where a cooperative environment is viewed as reliable, fair and communicative, members tend to value their contributions more, subsequently building another positive cycle of empowerment. Therefore, social capital promotes an environment that facilitates independent empowerment without oppressive chains of command. Social capital should be utilised to enhance empowerment through education and training. Cooperatives which focus more on educating their members, both formally and informally, tend to develop cognitive social capital by expanding their analytical and leadership abilities. Birchall and Simmons (2004) show that regular teaching of democratic governance, finance and communication creates more members ready to question decisions, hold those in charge responsible and even take part in elections. These practices are obvious signs of an empowered membership and work best in an environment where social capital makes the participants and the system trustful. Resilience is even greater in cooperatives that have established and mature community customs and local institutions, leading to high levels of empowerment.

According to Grootaert and van Bastelaer (2002), communities with pre-existing informal institutions, such as customary law or local methods of despatching economic disputes are much more readily converted to cooperative governance. This type of informal structure is consistent with the relational aspects of social capital (i.e. respect, reciprocity and honour). When cooperatives mature, this embeddedness continues to empower members to move toward larger community-development efforts. Passive and inert frameworks of participatory monitoring and evaluation (PM&E) have taken the shape of institutionalised empowerment based on social capital theory. Indicators, progress monitoring and measuring leadership and operations are defined through the collaboration of members and are measured in this manner. Good PM&E depends on trust, openness and social cohesion, which are the central properties of social capital. Estrella and Gaventa (1998) present the view that this collective surveillance turns members into active co-producers of institutional excellence and enhances their ownership and authority over the cooperative. Consequently, social capital plays a dual role as both an enabler of empowerment when strategically integrated into participatory evaluation.

Table 2.4 Social Capital and Member Empowerment in Cooperatives

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Trust as Foundation of Social Capital	High trust among members boosts participation, governance and resource mobilization	Bhuyan (2007); Fitzpatrick et al. (2023)	Trust reduces transaction costs, promotes accountability and includes marginalized groups
Shared Norms and Collective Identity	Shared norms enhance belonging, responsibility and internalized empowerment	Fukuyama (2001); Majee & Hoyt (2011); Bharti (2021)	Cultural and social values guide equitable member engagement
Communication and Information Sharing	Transparent communication reduces asymmetry, enhances feedback and facilitates participation	Evans & Syrett (2007)	Crucial in multilingual and stratified societies; poor communication leads to alienation
Leadership and Governance	Participatory and accountable leadership amplifies the effects of social capital on empowerment	Cornforth (2004); Suguna (2006)	Legitimacy from member trust results in active participation and self-esteem
Socioeconomic and Power Dynamics	Distribution of social capital affects empowerment; risks of elite capture and exclusion	Woolcock & Narayan (2000)	Bonding capital helps solidarity; bridging capital needed for equity
Gender and Social Capital	Social networks enable women's empowerment but may be limited by patriarchy	Mayoux (2001); Devika & Thampi (2007)	Kudumbashree is a model for gender-inclusive empowerment through social capital
Digital Social Capital	Digital tools facilitate virtual trust and participation but risk digital exclusion	Janssens (2010)	Inclusive design is key for digitally novice populations
Dimensions of Social Capital	Structural, cognitive and relational aspects collectively foster empowerment	Nahapiet & Ghoshal (1998)	Multi-dimensional approach essential to empower through engagement and trust
Role of Group Interactions	Rituals, meetings and storytelling foster	Sanyal (2009)	Emotional support and peer dynamics

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
	solidarity, confidence and collective agency		drive member initiative, especially for disadvantaged
Bonding vs. Bridging Capital	Bonding ensures internal unity; bridging provides access to external networks and opportunities	Szreter & Woolcock (2004)	Balanced approach strengthens holistic empowerment
Decentralized Participation	Local participation and trust enhance decision-making and satisfaction	Bebbington & Perreault (1999)	Participatory budgeting and member-led initiatives are key outcomes of social capital
Psychological Empowerment	Social capital fosters self-worth, autonomy and intrinsic motivation	Spreitzer (1995)	Cooperative climate influences self-perceived competence and meaning
Education and Training	Cognitive social capital is developed through cooperative education, leading to accountability and initiative	Birchall & Simmons (2004)	Education strengthens governance participation and enhances leadership skills
Community Embeddedness	Pre-existing informal institutions aid in smoother cooperative functioning	Grootaert & van Bastelaer (2002)	Traditional norms support sustainable empowerment beyond cooperative boundaries
Participatory Monitoring and Evaluation (PM&E)	PM&E builds ownership and trust through member-defined goals and transparent evaluation processes	Estrella & Gaventa (1998)	PM&E institutionalizes empowerment and reinforces collective agency and cohesion

2.6 Member Satisfaction in Cooperative Societies

Customer satisfaction is a powerful indicator of the health and future projections of cooperative society. It is influenced by numerous factors, including democracy, transparency, perceived benefits and equity in service delivery. Zeuli and Cropp (2004) also observed that cooperatives need to ensure that whatever they are doing in their operations meets the interests and expectations of members, since it is only

through satisfaction in terms of financial gains, but also through meaningful participation in the decision-making process. In contrast to investor-owned companies, cooperatives are run on a user-benefit principle, making satisfaction a multifaceted concept. In this regard, access to services, good prices, responsiveness to complaints and inclusiveness are features of the member evaluation. Research has repeatedly shown that perceived fairness and justice are major predictors of member satisfaction. Operating on organizational justice theory, Karambayya and Brett (1989) conclude that procedural justice, which is how members perceive the fairness of decisions made by the processes, influences satisfaction more than distributive justice in its own right. Members of cooperative societies, particularly those that provide agricultural or credit services, often feel more satisfied when they believe their voices are listened to, which is worth paying attention to, even in instances when the results are not always positive. Procedural justice is related to the validity of leadership and financial dealings transparency, which, in turn, is closely related to long-term member satisfaction.

Communication between the leadership and members also features a high correlation with satisfaction in cooperative societies due to its quality and frequency. Bhuyan (2007) insists that proper two-way communication enhances the feeling of trust and motivates members to become active in the operations of a cooperative. An empirical study by Bhuyan on U.S. agricultural cooperatives revealed that insufficient communication was one of the most frequently mentioned reasons for members' dissatisfaction. Proper communication also improves feelings of responsibility and allows members to provide feedback, make recommendations and feel a sense of possession of the joint operations. Therefore, mechanisms which ensure regular dialogue, transparency of reporting and provision of essential decision dissemination in a timely manner should be designed. Another key force pulling the satisfaction of members is the availability and usefulness of the services provided by the cooperative. For example, a study of Kenyan cooperatives by Manirakiza et al. (2020) revealed that satisfaction among cooperatives is higher with the integrated provision of services (credit, savings support, marketing services and technical training based on the needs of the local economy). The research highlights that cooperatives transcending transactional models to holistic support structures contribute to more profound loyalty and devotion by their members. In this case, satisfaction is not merely based on sure

gains but also on the value offer that the cooperative may present in the form of the whole.

Leadership trust, one of the most dynamic and potent aspects of collaborative operations, has always been associated with satisfaction outcomes. Muenkner (1974) asserted that trust is neither a by-product nor an incremental input for the development of cooperatives but is important for the retention of members and related satisfaction. This is also supported by more recent research, which shows that cooperatives which are part of a community with a high level of interpersonal trust and mutual accountability report higher levels of satisfaction (Nembhard, 2014). Trust affects how members perceive changes within the organisation, manage temporary setbacks in service delivery or take up resource limitations, among other aspects which makes it an important pillar of member satisfaction. Engagement and empowerment are also critical in determining satisfaction levels. Hoyt (2004) suggests that members' attitudes are more loyal with more pride in their membership when they are provided with actual power of influence on decisions, such as the election of board members, setting of service terms or the launching of new programs. This participatory satisfaction is particularly astounding in the face of cooperative principles, in which democratic control is one of the fundamental beliefs of cooperatives. The other factor is that empowered members are more prone to knowledge sharing, problem-solving and innovation processes; thus, a positive circle is created whereby satisfaction leads to stronger cooperative development. The other aspect which has been referred to as significant, though has been ignored, is the social capital in member satisfaction. According to Fukuyama (1995), social capital improves the performance of cooperation based on trust and common norms. Economic returns are not the only source of satisfaction to persons involved in cooperative societies, especially in rural and marginalised communities, since it is felt that a person is included in the society, sharing in the social partnership and hence is part of the society. Krishna and Uphoff (2002) show that on a larger scale in Indian cooperatives, the level of satisfaction is very high in groups with a stronger tie with the community, informal communication and mutual support institutions, as demonstrated by cooperatives being both social and economic institutions. The influence of contextual and demographic factors on member satisfaction has an endpoint measurement. Empirical evidence tends to show that the evaluations offered by members of cooperative services have been found to

be moderated by age, gender, education and the nature of membership tenure. According to Yacob et al. (2016), younger members value digital accessibility and fast delivery of services and are not as focused on personal relations and financial stability as older members are. Membership bodies rely on recognising and acting on such differences between groups of people grouped due to demographics and age origins which is vital in maintaining satisfaction throughout the membership. This kind of adaptation of services and communication channels to these contrasting preferences can help cooperatives maintain existing membership, stimulate new members and develop long-term relationships in the communities. The measure of member satisfaction in cooperative societies is multidimensional and includes service quality perception, inclusion observation, governance perception and socioeconomic return perception. According to Chan and Raharja (2024), cooperative satisfaction was achieved through both intrinsic and extrinsic motivators. Some members want emotional benefits, such as being recognised and belonging, while others concentrate on economic benefits, such as competitive prices, dividends and credit availability. Therefore, cooperatives must consider enhancing financial efficiency against participatory and equitable practices to achieve their expectations in the two aspects. Once the expectations of the members are satisfied at both levels, retention increases and promotes the resilience and adaptability of the cooperative in competitive markets.

Therefore, the relationship between cooperative identity and member satisfaction needs to be further explored. Cook (1995) argues that cooperative members feel more connected to those that are very clear in their value-oriented nature than to an organisation that simply acts as one that provides services. Members' engagement and gratification are strongly heightened when they feel democratic control, fairness and mutual sustenance in the group. This concurs with the larger theory of organizational identification which holds the view that when there is a strong sense of identity, it is likely to spur loyalty and psychological commitment which in turn develops the willingness among the members to volunteer ideas, efforts and social capital. Financial transparency and accessibility are the two main predictors of satisfaction in cooperative banking and credit unions. In support of the previously stated ideas, McKillop and Wilson (2011) regard transparent reporting, including frequent account updating, substantial financial disclosures and transparent annual meetings, as having

a direct relationship with an increase in member trust and satisfaction levels. In addition, the ability to access accounts, request loans and receive service updates online has become vital even for younger members, as tastes in digitalising financial services predominate in the emerging digital financial world, where expeditiousness and convenience are equated with service quality.

Empowerment has frequently been cited as a cause and result of member satisfaction. According to Davis (2001), cooperatives that empower their members by decentralising decision-making, involving women in leadership and enhancing additional capacity-building programs have high satisfaction rates. Activated members usually think of themselves as stakeholders rather than mere consumers, which makes them more committed to the cooperation. The development of knowledge through training programs on rights, governance and market opportunities also changes the membership base to a more aware constituency that can influence the decision-making process and hence prompts satisfaction through participation and recognition. Member satisfaction is also influenced by cultural values and norms, especially in non-Western countries. An ethnographic study of agricultural cooperatives by Lang and Roessl (2011) in Southeast Asia suggests that collectivist orientations increase satisfaction because of a sense of collective accountability and obligation to each other. We found that informal relationships dominate even in such settings and their satisfaction is found in mutual assistance, sense of duty and social identity. These results indicate that universal satisfaction measures may be inadequate in a culturally diverse context and that evaluation-related schemes must be based on locally rooted social values.

Studies on the consequences of cooperative education on member satisfaction have attracted considerable research attention. According to Birchall (2011), the recognition of cooperative principles and working mechanisms by cooperative members plays a crucial role in satisfaction. People with knowledge of democratic control, member economic participation and autonomy support decisions that would take the organisation anywhere near long-term strategic decisions. Cooperative learning increases the level of openness and reduces information disharmony, thus harmonising the expectations of the members with what the institutions have to offer and ensuring continuous satisfaction. The outside alliance is an emerging field of

research on member satisfaction. Valentinov (2007) suggests that cooperation between cooperatives and NGO, the government, or the individual private sector helps in the diversification of services, availability of funds and technical support, all of which are factors influencing member satisfaction. These alliances dilate without losing their core identity; thus, cooperatives are in a position to address a wider range of member needs than before. However, it is possible to combine the characteristics of collaborative values with the strategic development of such partnerships to avoid mission drift and, consequently, the deterioration of cooperative values and member satisfaction. Social innovation in cooperatives has the potential to increase member satisfaction. Defourny and Nyssens (2013) analysed cooperatives which implemented community-based innovations in the form of health insurance plans, youth employment programs and environmental sustainability practices; however, the cooperatives were largely appreciated by the members who recognised their importance to society in terms of their social impact. They developed collective self-esteem and a feeling of accountability, as satisfaction was recouped with conformity to wider community ideals and the ability to fulfil tangible value beyond economic exchanges.

In conclusion, member satisfaction is influenced by contextual and demographic factors, organizational identity, empowerment, education, external partnerships and social innovation. By tackling these determinants, cooperatives can maintain their current membership, attract new members and create sustained relationships between cooperatives and the community. Resilience and responsiveness in competition can also be made possible by curbing congruence between member expectations and institutional performance, which would take place in both the intrinsic and extrinsic spheres of performance.

Table 2.5 Member Satisfaction in Cooperative Societies

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Democratic Participation	Member satisfaction increases with meaningful participation in governance and decision-making processes.	Zeuli & Cropp (2004); Hoyt (2004)	Engagement in elections, committees and program design fosters loyalty and psychological ownership.

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Perceived Justice and Fairness	Procedural justice has a stronger impact on satisfaction than distributive justice.	Karambayya & Brett (1989)	Fair processes in decision-making and grievance redressal matter more than equal outcomes.
Communication Quality	Clear and two-way communication builds trust and enhances satisfaction.	Bhuyan (2007)	Regular updates, feedback loops and accessible leadership are essential communication tools.
Service Accessibility and Usefulness	Satisfaction improves when cooperatives offer holistic and context-sensitive services.	Manirakiza et al. (2020)	Tailoring services to local economic needs creates stronger loyalty and perceived value.
Trust in Leadership	Trust is foundational for member satisfaction and retention.	Muenkner (1974); Nembhard (2014)	Trust influences perception during organizational changes and challenges.
Participation and Empowerment	Members empowered through real influence exhibit higher satisfaction.	Hoyt (2004); Davis (2001)	Empowered members contribute ideas, challenge leadership and engage in innovation.
Social Capital	Strong social networks and shared norms enhance satisfaction through solidarity and inclusion.	Fukuyama (1995); Krishna & Uphoff (2002)	Especially relevant in rural and marginalized contexts where emotional and social belonging matter.
Demographic Sensitivity	Satisfaction is moderated by age, gender, education and duration of membership.	Yacob et al. (2016)	Younger members prefer digital services, older members value personal trust—tailored strategies are needed.
Intrinsic and Extrinsic Motivators	Satisfaction stems from both emotional (recognition, inclusion) and financial (credit, dividends) rewards.	Chan and Raharja (2024)	Balancing both aspects is crucial for comprehensive member satisfaction.
Cooperative Identity	Strong identity and alignment with	Cook (1995)	Cooperatives with clear democratic and mutual support

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
	cooperative values enhance satisfaction.		values foster deeper psychological investment.
Financial Transparency and Access	Transparency in financial dealings and digital access drive satisfaction, especially among younger members.	McKillop & Wilson (2011)	Technological updates and accessible records increase trust and perceived fairness.
Gender-Inclusive Empowerment	Inclusive leadership and capacity-building lead to increased satisfaction.	Davis (2001)	Women's participation and leadership visibility directly correlate with satisfaction outcomes.
Cultural Norms and Informal Institutions	Collectivist cultures foster satisfaction through moral obligations, informal support and mutual recognition.	Lang and Roessl (2011)	Local culture should be considered in satisfaction measurement frameworks.
Cooperative Education	Member knowledge of cooperative principles strengthens support and satisfaction.	Birchall (2011)	Education aligns expectations with institutional capacity and encourages informed participation.
External Partnerships	Partnerships with NGOs, government, or private actors expand services and improve satisfaction if well-managed.	Valentinov (2007)	Strategic collaborations enhance satisfaction without compromising cooperative identity.
Social Innovation	Community-based innovations such as health, youth, or environmental initiatives increase satisfaction through social relevance.	Defourny and Nyssens (2013)	Innovations aligned with community values foster pride and broaden the cooperative's perceived impact beyond economic benefits.

2.7 Impact of Social Capital on Performance of Cooperatives

The social capital construct has received significant academic attention in cooperative research because of its ability to enhance organisational performance. Social capital,

which is considered a key factor of cooperative efficiency, congruency and sustainability, is defined as a set of relationships, conventions and trust among the members within the group (Putnam, 1993). A cooperative environment promotes collective action, reduces transaction costs, facilitates activity coordination, resolves conflicts and achieves common goals. Bourdieu (1986) also proposes that the capacity of social capital to be productive lies in its entrenchment in long-lasting networks, which is especially true in cooperatives, where interpersonal interaction is the basis of economic partnership as well as democracy. Trust is an inherent component that has a major impact on collaborative performance. This allows cooperatives to work more efficiently by limiting the necessity of expensive monitoring and enforcement devices (Glaeser et al. 2002). In this respect, trust eases economic exchange, boosts legitimacy and magnifies leadership credibility. In accordance with empirical evidence, cooperatives with a high degree of interpersonal trust tend to witness better performance in terms of financial and poorer dropout rates among their members (James & Sykuta, 2006). Trust also fosters innovation, stimulating receptiveness to new views and increasing the inclination of people in the collective to take risks, becoming a component of high-performance cooperative ecosystems at the same time.

The second large source of social capital is the social network which has been instrumental in forming cooperative performance. Networks can be used as instruments for disseminating information, the flow of knowledge and emotional support. In agricultural cooperatives, informal social networks are utilised by members to share information on market prices, optimum practices and weather predictions, thus having a direct impact on productivity and profitability (Woolcock & Narayan 2000). In addition, bonding social capital or relationships in homogeneous groups and bridging capital or relations with outsiders, enable cooperatives to access external resources, form alliances and expand their market scope (Granovetter 1973). The resulting benefits in performance are an increased speed of decision-making, a larger market reach and an increase in adaptive capacity. The deployment of norms and common values also helps support cooperative performance through consistent behaviour and an ethical desire to act. With a collective identity and mutual responsibility, members work toward achieving cooperative goals in a more honest spirit and reduce conflict. Ostrom (1990) argues that collective norms are not only a necessity in common-pool resource management systems, but also regulate fair

participation; in a cooperative, these norms would also determine ethical guidelines, initiate the provision of leadership behaviour and resolve conflict sources. Cooperatives with a strong culture of reciprocity, solidarity and member ownership often demonstrate high efficiency, sustainability and better responses to local needs.

Other necessary participatory aspects of social capital have also been shown to be directly associated with a positive impact on cooperative performance. This is active participation in the decisions made, which intensifies members feelings of ownership and accountability to produce higher levels of obeying its rules and being motivated to participate (Birchall & Simmons, 2004). Wide representation, particularly of other marginalised groups, also brings forth different opinions that can bring about innovation and inclusiveness. Moreover, participatory governance provides better prerequisites for the determination and solution of local problems which in turn increases member satisfaction and cooperative legitimacy. African and Latin American cooperative research results demonstrate that a high level of participation is positively linked to financial results, transparency and even the quality-of-service delivery (Majee & Hoyt, 2011). Social capital further moderates external relations and institutional connections, which enhances cooperative performance under changing market conditions. That is, cooperatives with well-anchored institutional connections have a higher chance of receiving financial assistance, capacity building and technical assistance from the government, non-government organizations and donor agencies (Narayan & Pritchett, 1999). External social capital allows cooperatives to exploit their internal strengths and respond to changing external opportunities and threats. Krishna's (2002) research in Indian villages found that cooperatives with strong ties to external partners were in a better position to deal with crises and introduce new programs. Consequently, social capital not only strengthens internal operations but also improves cooperation with maze-like institutional environments. Social capital is also discussed in relation to the organisational learning and adaptive performance of cooperatives. The driving forces of learning organisations are trust, open communication and collaboration, which are the characteristics of high social capital (Senge 1990). Social capital in cooperatives enables permanent learning through integrated feedback, mutual mentoring and reflection. These processes increase resource use, accelerate problem-solving and increase flexibility to abide by changing markets. For example, credit unions characterised by high rates of member

involvement and group solving of problems proved to be more resilient when facing a financial downturn Hermes et al. (2011). In short, social capital not only enhances present performance but can also develop long-term organisational agility.

This empirical evidence shows that the economic performance of social capital in cooperatives is reflected in terms of productivity, profit and sustainability. Fukuyama (1995) and Uphoff (2000) found that cooperatives with strong social capital tend to perform better (financially and in terms of social effect) than other cooperatives. Good social capital is related to reduced member turnover, increased loyalty and increased member equity deposits, which ensure financial stability. In addition, the mutual support produced by common norms and networks supported ethical rulers and community involvement, which are the keys to preserving long-term cooperative efforts in the long run. With the pressure of competition and the growing level of rules and regulations, social capital investment is both a strategic imperative and a developmental need. As an important intangible resource, social capital can be described as the combination of the various networks, relationships and understandings that are shared among the members of a community; therefore, it allows the members of a cooperative to work harmoniously as a group. Adler and Kwon (2002) suggest that social capital allows access to information, power and solidarity dividends, which enhance coordination and reduce opportunism. Cohesion in such cooperative societies aids better operations and makes individual interests compatible with the overall objective of an organisation, resulting in organisational effectiveness and lower transaction costs.

A large amount of literature has explored the instrumental aspect of social capital in enhancing good decision-making in cooperatives. Members embedded in networks characterised by reciprocity and mutual trust are more willing to participate in democratic procedures, contribute to shared plans and accept organizational judgments, even when the result is not of direct utility. Nahapiet and Ghoshal (1998) argue that the creation of intellectual capital is made possible by embedding social capital, which already provides a common context and generates mutual understanding, thus improving group problem-solving and planning. This collective thinking and action directly affect the adjustments made by cooperatives to resist competitive forces and sustain themselves. There is also a connection between social

capital and elevated financial and operational performance. According to empirical findings by Karlan, Mobius, Rosenblat and Szeidl (2009), trust and social ties positively impact credit repayment practices and the operational stability of rural financial cooperatives (RFCs). A high relational relationship will help create peer surveillance and group responsibility, thus reducing the chances of default loan creation and favouring long-term financial well-being. In addition, cooperatives with more social capital tend to perform better in achieving social goals, including community empowerment, poverty reduction and social inclusion.

The relational aspect of social capital also helps to nurture emotional attachment and loyalty among cooperative members and convert them into stronger commitments and active input in organizational growth. As suggested by Lin (2001), social capital which is propagated in social networks, serves to increase access to support and trust, as well as shared values, which in turn further strengthens organizational identity. This has been realised in dairy cooperatives within South Asia, where cohesiveness and trust in each other encourage higher rates of milk procurement and regular involvement of the members in the activities of this cooperative, finally leading to increased productivity. The other way in which social capital leads to improved cooperative performance is through knowledge and innovation. To fit local needs and preferences and adapt services to local needs, cooperatives depend on their members' locally generated knowledge. Reagans and McEvily (2003) clarify that when networks hold high levels of social capital, the transfer of trustworthy knowledge is accelerated and the adoption of best practices is rapid with less resistance. As another example, the effective transfer of knowledge in agricultural cooperatives allows the rapid spread of new methods of farming, pest extermination methods and pricing models to raise the overall performance and competitiveness in the local markets. Social capital also provides a source of protection when an uncertain or external shock occurs. In the face of economic crises or natural calamities, cooperatives with well-developed internal social networks and trust are more resilient. According to Cohen and Prusak (2001), social capital can also be likened to organizational glue which empowers members to swing into action and overcome tribulations. An example is the community-based fishing cooperatives of Latin America, which showed superior survival at the time of ecological regulation because they were supported by a strong

social fabric and solidarity of their group members, whereas the more disjointed groups did not restructure in a collective manner.

Bridging social capital relationships between cooperative members and external parties, including NGOs, government agencies and other cooperatives, also heavily influence cooperatives' performance. According to Burt (2005), these bridging ties are known as structural holes and when well-utilised, they facilitate the availability of vast resources, policies and market opportunities. In the case of cooperatives in emerging economies, they will be able to innovate more, practice better governance and access best practices through external partners; thus, they will be more effective in their operations and growth. Social capital also helps achieve long-term sustainability by promoting ethical and accountable governance. When cooperative members do business with a culture of responsibility and shared assets, there is a very slim chance of corruption, mismanagement and elite acceptance. According to Leana and Van Buren (1999), this may be referred to as institutional social capital, which allows the creation of governance systems based on transparency, mutual norm-sharing and mutual supervision. These structures guarantee cooperative mission-centredness and the capacity to maintain trust among communities, funders and regulatory authorities in terms of financial, social and environmental performance.

2.6 Impact of Social Capital on Performance of Cooperatives

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Definition and Scope of Social Capital	Social capital includes trust, norms and networks that enable cooperation and reduce transaction costs.	Putnam (1993); Bourdieu (1986)	Fundamental to cooperative performance through fostering shared norms and mutual trust.
Trust and Efficiency	Trust reduces need for monitoring, enhances legitimacy and supports innovation.	Glaeser, Laibson & Sacerdote (2002); James & Sykuta (2006)	Improves financial performance and member retention while enabling risk-taking.
Social Networks and Information Sharing	Networks facilitate knowledge transfer, emotional support and market access.	Woolcock & Narayan (2000);	Bonding and bridging networks increase decision-

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
		Granovetter (1973)	making speed and adaptive capacity.
Shared Norms and Governance	Collective identity and values lead to responsible participation and ethical conduct.	Ostrom (1990)	Norms reduce internal conflict and enhance alignment with cooperative goals.
Member Participation and Accountability	Active involvement increases ownership, transparency and compliance.	Birchall & Simmons (2004); Majee & Hoyt (2011)	Participatory governance enhances innovation and service quality.
External Linkages and Institutional Ties	Relationships with NGOs, donors and state actors support performance, funding and technical aid.	Narayan & Pritchett (1999); Krishna (2002)	External social capital enables better policy adaptation and resilience.
Organizational Learning and Adaptation	High social capital fosters continuous learning, feedback and strategic flexibility.	Senge (1990); Hermes et al. (2011)	Critical for resilience during market shifts and financial crises.
Economic Outcomes and Financial Health	Strong social capital improves profitability, loyalty and sustainability.	Fukuyama (1995); Uphoff (2000)	Member equity and low dropout rates contribute to stable cooperative operations.
Access to Information and Coordination	Social capital provides solidarity and power benefits while reducing opportunistic behavior.	Adler & Kwon (2002)	Improves organizational coordination and reduces friction.
Decision-Making and Collective Action	Trust and reciprocity enhance democratic participation and collective strategy formulation.	Nahapiet & Ghoshal (1998)	Enables members to support cooperative plans even when personally disadvantaged.
Operational Sustainability and Repayment	Social capital influences repayment, reduces defaults and ensures fiscal health.	Karlan et al. (2009)	Peer monitoring and collective responsibility improve financial discipline.
Emotional Loyalty and Member Identity	Strong relational ties enhance member commitment and cooperative belonging.	Lin (2001)	Emotional bonds increase member contributions and program participation.

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Knowledge Sharing and Innovation	Trust and network density improve adoption of best practices and knowledge flow.	Reagans & McEvily (2003)	Accelerates innovation in agricultural and service cooperatives.
Crisis Response and Resilience	Social capital enables collective coping strategies during external shocks.	Cohen & Prusak (2001)	Strong networks buffer cooperatives during ecological and financial disruptions.
Bridging Capital and Market Access	External networks (structural holes) provide access to policies, technology and capital.	Burt (2005)	Increases innovation and performance through cross-boundary resource mobilization.
Ethical Governance and Accountability	Embedded accountability norms reduce corruption, elite capture and mismanagement.	Leana & Van Buren (1999)	Builds institutional trust and improves cooperative legitimacy and community trust.

2.8 Leadership and Governance in Social Capital Formation

Leadership plays a central role in determining the cultural, structural and relational situations which form the basis of social capital advancement in organisations, especially in cooperative enterprises. The two paradigms of transformational and participative leadership have also been known to foster trust, inclusion and strengthening of shared values, all of which are key determinants of social capital (Bass and Riggio, 2006). Leaders who cultivate open communication, empowerment and a formulation of an overall picture that is shared with a group are encouraged to form a stronger bond between members and enhance their sense of ownership and reciprocity. These behaviours serve as the glue of relations, allowing them to create dense social networks through mutual obligation and long-term collaboration (Burt 2000). Governance systems in cooperatives play a critical role in determining social capital development. Fukuyama (1995) indicated that governance systems based on transparency, participation and accountability promote the elements that foster trust which forms the cornerstone of social capital. Models of democratic governance which entail inclusive decision-making provide opportunities for members of society to raise concerns, establish solidarity and contribute to shared objectives. These

structures prevent the centralisation of power and elite capture because there is fair participation and multi-directional trust by stakeholders (Bijman, 2016). This cultivated trust is not restricted to the individual level, hence, strengthening the organizational bond.

Leadership values aligned with cooperation are vital for practising the normative aspect of social capital. The internalisation and enforcement of certain values, such as solidarity, mutual benefit and community welfare, by leaders of a group can be regarded as a symbolic sign of cooperative ethics; therefore, they provide an example to group members. Moral leadership can be attained, as Putnam (2000) pointed out and leads to the establishment of civic norms which promote collective behaviour along with social learning. Leaders in most successful cooperatives are consistent in their words and actions, thus forming a common moral text which strengthens the integrity of relations and the stability of the groups (Paldam & Svendsen, 2000). Another factor associated with how well leadership works is the capability to connect different groups within the cooperative and actors outside it. Bridging social capital, which spans socio-economic, ethnic and caste cleavages is vital for establishing a more robust and resourceful social fabric (Woolcock & Narayan 2000). This focus is especially applicable when there is heterogeneity within cooperatives in localities such as Kerala, where social and political diversity necessitates integrative government approaches to collective action.

Adaptive leadership is another crucial social capital maintenance mechanism during times of change or crisis. Leaders are forced to become agile as organisations either morph or face some external flash and still build relationship harmony in the process of making decisions. According to Heifetz (1994), adaptive leaders can mobilise people to address challenging issues without compromising relationships. In cooperatives, where the most important reiteration of trust occurs, leaders need to struggle to contrast the structural evolution with institutional experience and norms. Their ability to decipher common interests and realign strategies increases confidence among members and sustains the existence of social network. Institutional governance structures also affect social capital development patterns. These are rules, policies, codes of conduct and accountability measures that guarantee similar behaviours and reciprocal responsibilities. According to Ostrom (1990), in the case of self-governed

organisations, well-made institutions create cooperation and trust. Cooperatives also have systems of governance that promote frequent general body meetings, proper elections and grievance redressal to the members, all of which create vertical trust in the leadership and a system that ensures that the organisation functions within the values that are shared by the community.

The systems of communication and information exchange engraved in governance systems offer an enabling function in the formation of social capital. Leaders who promote the idea of timely, transparent and two-way communication create an atmosphere in which members feel informed and appreciated. Tsai and Ghoshal (1998) state that such communication leads to the development of common understanding, increases cognitive social capital. They have also enhanced communicative trust and knowledge equity through digital governance tools, such as member portals and community radio, which have made participation more democratic and informed. The continuity of institutions and the substitution of leadership are vital for maintaining social capital developed over time. Activities concentrated on the development of leadership without scheduled plans will expose cooperatives to a possible decay of relational capital, since the change of leadership may be corrupted due to abrupt changes or the politicised nature of the process. Leana and Van Buren (1999) postulate that social capital is sustainable based on individual leadership and institutionalised procedures that predate any leader. Crucial governance practices include mentorship, leadership pipelines and the preservation of institutional memory, which can guarantee that social capital embodies a sustainable asset of the cooperative.

In cooperative and community-based organisations, leadership has been seen as the main sword in developing a culture of collaboration and mutual trust which are two pillars for developing social capital. Modern leadership theories emphasise the significance of fostering relationships rather than merely exercising influence. An authentic leader tends to make their followers trust and feel loyal to them, as noted by Avolio, Walumbwa and Weber (2009), who state that authentic leaders are authentic persons with self-awareness, transparency and ethical behaviour. In this situation of cooperation, this kind of leadership arouses democratic participation and concern for group welfare, which directly serves the bonding dimension of social capital.

Governance, a term with a limited scope in terms of a collection of formal rules, must also cover informal treatments and cultural principles through which a decision is made and the relationship is sustained. More democratic governance systems related to participative decisions, ethical responsibility and decentralisation of power have a higher tendency to trigger active member engagement and allow more pluralistic forms of dialogue (Aguilera et al. 2008). Members' belief that governance structures are legitimate and participatory enhances their confidence in the institution and contributes to the onset of the desired social cohesion required in the context of long-term cooperation, particularly in grassroots cooperative organisations.

The purpose of cooperative leadership is to dynamically manage the tension between economic efficiency and the ideology of democracy. Leadership that is effective in moving between these two imperatives helps to build what Moore and Westley (2011) call generative governance, which is a governance structure that is changing in form and adjusting itself to the needs of members while still supporting social learning. Social capital in this construct appears as relational and not as unchanging as fixed; it is enhanced by the consistent modelling of reciprocity, cordial resolution of conflicts and acknowledgement of collective input by the leaders. This leadership practice keeps organisations together and creates a common sense of purpose that takes the form of both bonding and bridging capital. The mechanism through which leaders influence social capital is complex, with strategic communication in a central position. Bennis and Thomas (2002) mention so-called crucible experiences, defining them as events in the path of a leader that impact relational competencies, that everyone who has experienced such an event is likely to portray greater empathy and interpersonal sensitivity and in this way, contributes to group conflict management, interpersonal networks and cohesion within a group. Soft leadership qualities are essential since the achievement of cooperation depends not only on economic results but also on relationship health.

Structurally, governance design is associated with the institutionalisation of social capital. According to Chaves and Sajardo-Moreno (2004), besides establishing power and accountability through governance, governance ought to formalise mechanisms that would serve to promote both trust and participation, such as policies to frequently rotate leadership, open elections with results, budgetary discussions and a system for

scheduling member responses. These types of procedural arrangements not only promote procedural justice but also reduce the perceived risks of engagement, which spawns denser and more robust trust networks. Effective leadership should also be enabled by the ability to leverage external partnerships. According to Mulgan (2009), these leaders are referred to as boundary spanners, whose connections are made with governmental organisations, non-governmental organisations and other entities to increase access to external resources, innovations and legitimacy. Such networks reinforce reputational capital, influence policymakers and integrate cooperatives into wider networks in the socio-economic system. Therefore, leadership further sets the usefulness of cooperation in terms of scope and flexibility, which is outside its relationship with its own relations.

Another important dimension is leadership transition and the transfer of social capital. Cooperatives that plan for their future through development programs and succession planning are more likely to maintain relational capital than organisations that have failed due to young or forced transitions or transitions full of politics (Spears, 2004). Mentoring, shared leadership practices and group engagement in vision making will aid in fulfilling the cultural and ethical expectations of each new generation to internalise the cultural commitments made by the cooperative and pass trusting attitudes to the next generation, which will aid in achieving social capital (transmission of social norms). Evidence also shows that gender-sensitive leadership and participation in governance play significant roles in expanding social capital. Cornwall and Edwards (2010) prove that empowering women to lead others leads to collaborative forms of relationships, making those favoured to be inclusive and empathetic in decision-making. The outcome is a fair distribution of welfare and better community integration. Diversity, regardless of its type, increases the adaptability and social embedding of the social capital base and inclusive leadership expands the range of forms of social capital.

2.7 Leadership and Governance in Social Capital Formation

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Transformational and Participative Leadership	Enhances trust, inclusion and shared values among	Bass & Riggio	Promotes bonding social capital and strengthens internal

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
	cooperative members; fosters mutual obligation and sustained collaboration.	(2006), Burt (2000)	networks essential for cooperative functioning.
Democratic and Transparent Governance	Encourages trust, equity and participation; discourages elite capture; promotes legitimacy and organizational cohesion.	Fukuyama (1995), Bijman and Iliopoulos (2014)	Governance frameworks need to ensure active member involvement and prevent power centralization.
Moral and Value-Aligned Leadership	Reinforces cooperative principles and builds civic norms and collective ethics; contributes to group stability.	Putnam (2000), Paldam & Svendsen (2000)	Leaders act as role models, strengthening moral dimensions of social capital.
Bridging Social Capital and Inclusive Networks	Leaders who build cross-group networks enhance resilience and access to external resources; promotes social inclusion.	Woolcock & Narayan (2000)	Crucial in socially diverse contexts such as Kerala; helps cooperatives connect across communities and sectors.
Adaptive Leadership and Crisis Response	Ensures organizational trust during change or adversity; balances innovation with relational continuity.	Heifetz (1994)	Necessary for preserving institutional memory while embracing change.
Institutional Governance Mechanisms	Rules, policies and accountability systems reinforce member trust and cooperation.	Ostrom (1990)	Good governance institutionalizes cooperation and reduces opportunism.
Communication and Information Sharing	Transparent and timely communication enhances cognitive social capital; builds shared understanding and knowledge equity.	Tsai & Ghoshal (1998)	Digital tools can amplify governance communication effectiveness and participatory trust.

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Leadership Succession and Continuity	Planned succession ensures relational continuity and trust; avoids politicization of leadership.	Leana & Van Buren (1999)	Institutional leadership development programs safeguard long-term social capital.
Authentic and Ethical Leadership	Builds trust and loyalty; encourages democratic engagement and organizational identification.	Avolio, Walumbwa & Weber (2009)	Authentic leadership aligns closely with cooperative ethics and member welfare.
Generative Governance	Evolving governance guided by member needs; supports social learning and relational investments.	Moore & Westley (2011)	Supports both bonding and bridging forms of social capital; adaptive to cooperative evolution.
Transformational Experiences in Leadership	Leaders with deep personal experiences show stronger empathy, conflict resolution and relational cohesion.	Bennis & Thomas (2002)	Helps create resilient cooperative cultures rooted in shared identity and emotional solidarity.
Governance as Formal and Informal Norms	Beyond rules, governance includes relational practices and shared culture; strengthens inclusive dialogue and ethical behavior.	Aguilera et al. (2008), Chaves & Sajardo-Moreno (2004)	Embedding informal norms improves procedural justice and reduces participation risk.
External Partnerships and Linking Capital	Leaders connect cooperatives to broader networks—NGOs, governments, markets—thus expanding influence and resources.	Mulgan (2009)	Strategic external alliances build organizational legitimacy and innovation capacity.
Gender-Inclusive Leadership	Inclusion of women in leadership improves empathy, equity and community engagement; diversifies relational dynamics.	Cornwall & Edwards (2010)	Gender-sensitive governance enhances both bonding and bridging social capital; promotes social justice.

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Leadership Development and Mentorship	Ensures cultural continuity and ethical adherence across leadership generations; supports intergenerational trust.	Spears (2004)	Mentorship and vision-sharing sustain the cooperative identity and long-term relational assets.

2.9 Role of Social Capital in Economic and Social Development

In the broad sense of networks, norms and trust of social capital that enable coordination and cooperation for mutual benefit, social capital has been increasingly identified as a distinctive but critical intangible resource in the realisation of economic and social development. Coleman (1988) has placed social capital on the same line as physical and human capital and asserted that trust-based relations and common norms reduce transaction cost and make transactions easier to do, greater cooperation and easier sharing of information. Contrary to financial capital, which can be amassed in the market, social capital dwells in social structures; thus, it must be fostered within relationships. Such relationships play a critical role in economic activities run through communal economies, such as cooperatives and small businesses, particularly in developing countries. Empirical investigations have continuously associated social capital with economic development because it has been shown that social capital leads to entrepreneurship, innovation diffusion and market efficiency. Knack and Keefer (1997) also discovered that the higher the rate of trust and civic norms in a country, the more effective its economic performance, indicating that social capital is higher in the quality of institutions and lower in opportunism. Similarly, Glaeser, Laibson and Sacerdote (2002) argued that people with better social networks have the potential to start businesses, access credit and exchange market information. These conclusions underscore the economic value of social capital as a lubricant of economic exchange and a spur for institutional performance.

At the local level, social capital contributes to ensuring inclusive and sustainable development is much felt. In their case study of rural Tanzania, Narayan and Pritchett (1999) showed that in villages where intra-community trust and cooperation networks were stronger, household income and public goods delivery were higher. When these

types of communities are affected by any shock, such as natural disasters, economic crises or pandemics, they can be more resilient because of the ability of the affected social infrastructure to take collective action and adapt quickly to the new situation. Bonding social capital (within-group trust) can help improve solidarity in such contexts, whereas bridging social capital (across-group connections) can help access wider resources in times of need. In terms of policy, the incorporation of social capital into development strategies has already become an important consideration for international agencies and governments. According to a report released by the World Bank (2000), social capital plays a key role in poverty reduction and sustainable development as a whole and development projects should be community-based; therefore, development projects that utilise local social capital are better. Programs that invest in network creation, civic associations and participatory governance systems tend to have a lasting impact beyond top-down strategies. Such initiatives enhance horizontal ties between citizens and vertical ties with institutions, fostering better governance and accountability.

Access to people, education and healthcare is a transformative process of human development, which is contributed to by social capital. Woolcock and Narayan (2000) develop four-dimensional conceptualization of social capital that is based on the concepts such as bonding, bridging, linking and cognitive and demonstrate how these dimensions come together in creating an ideal social environment toward social development. For example, parents living in rural communities are likely to have their social networks impact their choices, such as sending their children to school, because most of the norms regarding education are enhanced by peer networks and faith in the establishment. Similarly, stronger social capital leads to healthier communities, where community members who trust one another and freely exchange information increase the strength of public service provision. In addition to economic measures, social capital leads to civil society and democracy. This was exemplified by Putnam (1993) in his classic work on the Italian regional governments, the results of which revealed that regions with well-established civic associations and networks of horizontal trust showed better performance regarding their institutions and improved socio-economic conditions. These communities featured reduced corruption rates, better administrative decisions and greater citizen involvement. The results show that social

capital is not a development byproduct but a prerequisite for good governance and quality institution.

The intersectionality of social capital in terms of gender, caste and class also fixes its developmental role. Social networks tend to be uneven and lead to exclusionary outcomes depending on the societies involved. As noted by Bourdieu (1986), social capital, like economic capital, can be distributed unequally and applied to strengthen existing hierarchies. Therefore, on the one hand, social capital is likely to mobilise the power of disadvantaged people, such as women, through mutual cooperation (as in the self-help groups of women in India); on the other hand, social capital is prone to being used by elites to empower themselves, depriving social capital as a resource. Therefore, the capacity of people to develop can be diverse based on the existence of social capital, alongside its equal distribution and mobilisation. These new platforms of social capital formation through digital technology and social media have revolutionised development in urban and rural environments. Civic participation is being redefined, markets are becoming more accessible and grassroots action is being facilitated through online networks. Nevertheless, digital social capital is evaluated by the possibility of transferring online activity to the real world in terms of cooperation and trust, using it according to Steinfield, Ellison and Lampe (2008). With the use of digital tools as an extension of local social capital strategies, there is a potential that cooperative societies and decentralised models of governance will have a larger developmental impact, which makes social capital an asset that is fluid and dynamic in the 21 st century.

Of most interest is that social capital has proved to be a multidimensional development spur that goes beyond being supplementary to the development drivers of traditional economic factors. In many cases, social capital, especially in under-resourced environments has substituted economically driven factors. Fukuyama (1995) argued that trust is the lubricant of modern economic activity. In his analysis of the role of culture in economic systems, he also insisted that societies with generalised trust and strong associational life, which are elements of social capital, have superior entrepreneurial performance and stronger institutional structures. The kind of coordination this trust maintains minimises the use of legal contracts and surveillance, thereby minimising transaction costs and enhancing economic dynamism, especially

in the setting of small and middle world enterprises. Another important aspect is social capital and its contribution to labour market results and employment creation. According to Grootaert and van Bastelaer (2002), social capital has a strong bearing on access and mobility to jobs in developing nations, particularly in countries where the formal amount of foundation is low. Access to non-pension work, training courses and funds frequently depends on social affiliation and group membership. In rural India, informal employment opportunities, occupational training and financial support are frequently allocated through these channels. Such informal connections are developed at the community level to distribute economic opportunities, ensure livelihood security and provide upward mobility for marginalised populations.

In addition to economic benefits, social capital plays a significant role in promoting civic activities and participatory democracy. Relying on the analysis of village development due to various types of social capital, Krishna (2002) found that bonding and bridging forms of social capital are required to strengthen democratic accountability. He stated that bonding capital forms an internal unity among people, while bridging capital forms a relationship between communities and outside agents, resulting in better service provision, better infrastructure and accountability of locals to governments. Such processes play a key role in decentralised governance, including all Panchayati Raj institutions in India. More equitable development results are also associated with civic norms and associational participation which are elements of social capital. Beugelsdijk and Smulders (2003) stated that areas with greater civic activities tend to have reduced income inequality because of their reliance on social networks as a parallel distributor of wealth via group insurance schemes, neighbourhood savings and mutual aid. Such informal systems are especially important for vulnerable groups that are excluded from formal financial infrastructure. Thus, social capital not only brings about growth but also launches the margins of benefits and opportunities, thereby rendering development more inclusive.

Social capital is immensely important in the recovery and rebuilding processes in regions where disasters occur. Colletta and Cullen (2000) described the importance of intergroup trust and cross-community networks in sustaining livelihoods and the process of community operation in post-conflict Cambodia and Rwanda. Social capital enabled the reestablishment of institutions, rebuilding of market connections

and castigation of the relations of previously disconnected communities. It provides space for dialogue, trust-building and collaborative governance, which preconditions long-term peace and resilience. Another promising field of social capital is environmental sustainability and resource governance. Resource management systems, such as irrigation systems, forests and fisheries, which are commonly used by communities, rely heavily on community trust and cooperation, as argued by Pretty and Ward (2001). They established that local groups with higher social capital increased the chances of using sustainable practices, settling conflicts and implementing community rules. In this sense, social capital is an informal system of regulations that complements legal frameworks in the environment and increases resource management efficiency.

In the academic literature, social capital has a dual role: it provides access to schooling and raises learning outcomes. Horvat et al. (2003) reveal that parental social networks support their abilities to promote the education of their children as well as helping them to cope with the school system. Consequently, communities with strong intergenerational ties and shared learning norms are better educated than those without. Social capital also operates in schools: when teachers collaborate, there are parent-teacher associations as forms of improvement, innovation and accountability of the school to parents. Social capital in urban development refers to neighbourhood revitalisation, increased safety and improved service access. Sampson, Raudenbush and Earls (1997) proposed the term collective efficacy (a kind of social capital) to explain the collective ability of community members to approach shared opportunities. They found that neighbourhoods with high collective efficacy have lower crime rates, higher upkeep of common-ground areas and enhanced civic action. Against this background, urban planners and policymakers have concluded that social capital is essential infrastructure, like transport networks and sanitation systems and that social capital can only be as important as transportation networks and sanitation systems in the creation of liveable and equitable cities. Thus, it is evident from the existing literature that social capital acts as a productive recourse and it helps in lowering transaction costs, enhances trust, supports cooperation and efficient information flow and complements physical and human capital.

Table 2.8 Role of Social Capital in Economic and Social Development

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Social Capital as Economic Lubricant	Lowers transaction costs, enhances trust, supports cooperation and efficient information flow and complements physical and human capital.	Coleman (1988), Knack & Keefer (1997), Glaeser et al. (2002), Fukuyama (1995)	Fundamental to market functioning, especially in informal economies and cooperatives.
Role in Entrepreneurship and Innovation	Richer social networks support access to credit, knowledge sharing and entrepreneurial activity.	Glaeser, Laibson & Sacerdote (2002)	Critical for fostering entrepreneurship in contexts with limited formal institutional support.
Community-Based Development	Higher intra-community trust leads to better public service delivery and economic outcomes.	Narayan & Pritchett (1999)	Especially effective in rural and resource-constrained settings.
Social Capital and Resilience	Enhances community capacity to respond to crises such as natural disasters or economic shocks.	Narayan & Pritchett (1999), Woolcock & Narayan (2000)	Bonding capital enhances internal solidarity, while bridging capital expands resilience capacity.
Social Capital in Poverty Reduction	Effective poverty alleviation occurs when development strategies integrate local networks and norms.	World Bank (2000)	Development outcomes are more sustainable when built on existing social capital structures.
Four Dimensions of Social Capital	Bonding, bridging, linking and cognitive forms of social capital intersect to enable inclusive development.	Woolcock & Narayan (2000)	A multidimensional lens helps capture the full developmental impact of social capital.
Human Development and Education	Parents' networks influence educational decisions and outcomes; school-level social capital	Horvat, Weininger & Lareau (2003)	Strong family and institutional networks increase children's educational attainment.

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
	improves school performance.		
Public Health and Service Utilization	Trust and cooperation increase health information flow, access and service efficacy.	Woolcock & Narayan (2000)	Public health programs benefit from socially embedded networks of trust and information sharing.
Governance and Institutional Performance	Civic networks lead to better government accountability, lower corruption and higher institutional quality.	Putnam (1993), Krishna (2002)	Civic norms and associational life improve democratic functioning and service delivery.
Labor Market Access and Mobility	Social capital determines access to jobs and skills, especially where formal institutions are weak.	Grootaert & van Bastelaer (2002)	Essential in informal economies and marginalized communities.
Income Redistribution and Equity	Social networks act as informal redistributors of resources through mutual aid and collective savings.	Beugelsdijk & Smulders (2003)	Promotes inclusive development and reduces inequality in settings with weak formal safety nets.
Gender, Caste and Class Dynamics	Social capital may reinforce exclusion if access to networks is uneven across social groups.	Bourdieu (1986)	Development policies must address equity in social capital access and distribution.
Social Capital in Post-Conflict Recovery	Facilitates rebuilding, reconciliation and institutional trust after conflicts or disasters.	Colletta & Cullen (2000)	Trust-building and intergroup networks are crucial for peacebuilding and recovery.
Environmental Governance and Sustainability	Community cooperation and trust improve resource management and adoption of sustainable practices.	Pretty & Ward (2001)	High social capital supports collective environmental stewardship.
Urban Development and Safety	Collective efficacy, as a form of social capital, contributes	Sampson, Raudenbush & Earls (1997)	Urban planning increasingly incorporates social

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
	to safer and more cohesive urban neighbourhoods.		capital as infrastructure.
Digital Social Capital and Technology Platforms	Digital networks enhance civic engagement and market access but must be linked to real-world trust.	Steinfield, Ellison & Lampe (2008)	Online social capital is effective only when it fosters offline cooperation and meaningful participation.
Social Capital and Democratic Engagement	Associational participation improves accountability, responsiveness and local governance effectiveness.	Krishna (2002), Putnam (1993)	Both bonding and bridging capital are needed for effective decentralized governance (e.g., Panchayati Raj).
Cooperatives and Collective Action	Trust and shared norms in cooperatives support long-term collaboration and resilience.	Coleman (1988), Fukuyama (1995), World Bank (2000)	Social capital is foundational for the success of collective economic institutions in rural and marginalized communities.

2.10 Institutional Support and Policy Frameworks for Social Capital Building

Institutional support fungibles must be seen as a necessary pre-condition of formation and, even more importantly, the long-term economic viability of social capital, not least in the collective forms that are so shallow and under-extensive in the developing context. North (1990) argued against formal institutions, which include laws, policies and regulatory systems and presented the idea that informal institutions, which include norms, traditions and values, organise the benefits and constraints on individual and group behaviour. In turn, governments and other socially oriented agencies that define well-understood legal standards, equitably render services and allow participatory activities provide an empowering environment that fosters the development of social capital. Open, participatory and responsible institutions are more likely to foster confidence and collaboration, hence social networks and inhibit collective action and end it instead of concentrating it in a few people's hands. This is the major avenue through which institutions aid social capital in decentralised governance systems.

Manor (1999) affirmed that devolving authority and resources to local governments enhances citizens' active participation in public life, thus strengthening horizontal (peer-to-peer) and vertical (citizen-to-state) social capital. Panchayati Raj in India is such an example in government participation especially to the marginalized groups like women and the lower castes. Such decentralised arrangements encourage deliberation, conflict resolution and development by the community in which they are found which are key ingredients for trust-building and social cohesion.

The strategic importance of social capital has also been displaced by international development organisations, most notably the World Bank and United Nations, which have placed themselves at the forefront of policy design. According to the community-driven development (CDD) strategy adopted by the World Bank (2003), this recommendation implies the need to launch social capital-friendly policy reforms, as they should focus on promoting development actions that improve physical infrastructure and enhance social infrastructure. These frameworks underscore local ownership, legitimacy and empowerment by supporting community-based organisations, local associations and cooperatives. Institutions' contributions to strengthening social capital are also evident in educational policy. Schuller (2001) suggested that school is not only a place of the transfer of knowledge, but also a place of mutual conditionality socialisation, which has its own norms of partnership, civil responsibility and collective identity. The existence of national policies that stress the importance of inclusive curricula, parent-teacher associations and peer mentoring networks automatically creates bonding and bridging capital for the CWD. The Bolsa Família program in Brazil, which provides welfare grants through organizational ties to education, exemplifies the power of such policies in supporting institutional trust and/or participation among low-income families.

Social protection systems stimulate the creation of social capital if they are inclusive. Deacon (2000) argues that a welfare regime in which beneficiaries have a sense of being rights-holders, as opposed to passive recipients, generates civic identity and collective solidarity. Transparent management of conditionally transferred cash programs, public employment programs and social insurance mechanisms reinforces the trust and support of the masses. This movement can be illustrated by the Kudumbashree project in Kerala, India, which consists of women empowered

economically by a system of government-sponsored self-help groups which form strong social bonds, share responsibilities and practice democracy. Legislative and regulatory systems provide structural forms of social capital, mostly in cases where they guarantee associative rights and civic liberties. Ostrom (1990) theorised that locally created and managed rules for common pool resources enhance norms and credence in a community. Likewise, safeguarding freedom of association, conferring legal identity and ensuring access to justice through policies give civil society an opportunity to thrive. With the prevailing conflict, societies transitional justice processes and truth commissions have found a central institutional niche in the attempt to rectify shattered social ties and facilitate reconciliation, as in the case of South Africa's post-apartheid Truth and Reconciliation Commission (TRC).

E-participation and digital governance are new and developing areas in which institutions can maintain their social capital. Bertot, Jaeger and Grimes (2010) noted that the use of open government initiatives and digital public services retains governmental transparency and interpersonal interactions with citizens, increasing the level of trust. Online sandboxes for grievance-addressing, e-democracy hubs and participatory budgeting modalities help citizens co-design policies and ensure their mode of operation. Such technological interventions have the potential to create new types of bridging and linking capital, even though access and digital literacy are still issues that must be addressed. Good social capital policy frameworks incorporate context sensitivity, adaptability and local ownership. Woolcock (2011) stated that highly technocratic methods invalidate these local realities. Rather, he proposed what he called hybrid models, whereby formal policy joins with informal sets of connections; he realised that social capital is place-bound and should be developed and not coerced. In this respect, policy strategies can positively impact the development of sustainable and equitable outcomes at the level of social capital more significantly when they incorporate traditional leadership, community-based institutions and local knowledge systems, while simultaneously reflecting the principles of democratic and human rights values.

Institutions are at the centre of the structural conditions that maintain social capital. This outcome is likely to be especially conducive to the existence of formal mechanisms instilled in state laws that promote civic engagement and the formation

of networks. According to Levi (1996), institutional trust, which forms a major component of social capital, depends on behaviour characterised by consistency and procedural fairness. Vertical social capital links citizens and the state and is facilitated by public bodies that respect the rule of law, provide equal service and practice procedural justice, which fosters democracy, a stable society and social trust. Countries that enact participatory forms of governance, such as partiality budgets or community supervision organisations, often record increased rates of civic association and trust. Development policies that consider community institutions have been found useful in entrenching social capital in structural governance. Narayan and Cassidy (2001) explain how donor-based development agendas to facilitate local associations, such as water-user groups and parent-teacher associations, improve trust among people, civic life and mutual accountability. This type of institutional assistance is essential in post-disaster and post-conflict situations for reconstructing infrastructure and social connections. Locally oriented policy frameworks are associated with the enhancement of not only developmental outcomes but also ownership and legitimacy among community actors, which reinforces social cohesion and decision-making capabilities.

Social capital and institutional design also have a synergy in cooperative governance, especially where there are strong cooperative legislations. Birchall (2004) claimed that state policies allowing autonomous operation, democratic control and financial accountability of cooperatives encourage the organic development of bonding and bridging social capital. High institutional frameworks, such as the India Multi-State Cooperative Societies Act and the Kenya Cooperative Societies Act, establish legitimacy for cooperative organisations, empower members and provide incentives for collective agency. Cooperatives outperform existing institutions (capital markets and private firms) as venues of trust, reciprocity and social learning when the legal environments in which they operate promote member involvement and reward distribution. This institutional support is also evident in national structures which bring civil society as partners in development. Edwards (2004) asserted that governments which see civil society as allies and not enemies are likely to implement measures that embrace pluralism, transparency and partnership. These dynamics can be traced through Sweden's manner of integrating civil society into international development activities and its decentralisation policy, which requires the involvement

of NGOs in local governance planning in Ghana. Social capital is institutionalised as a mode of governance through the formalisation of civil society processes, contributing to policy-making and service delivery dialogue and processes.

Furthermore, institutional support for the inclusive contribution of the population in planning and evaluation is extremely important for the creation of social capital. The Local Government Code of the Philippines provides participatory mechanisms, such as development councils, which require civil society involvement. According to Gaventa (2006), these structures are what he calls invited spaces because it is through them that citizens can interact with structures of power in an institutionalised way, thereby bringing about empowerment, trust building and civic identity. These structures democratise the decision-making process and expand the connection of social capital relationships among groups and the connection between the state and the communities. A growing number of studies have indicated the significance of national anti-corruption systems and institutional integrity in establishing social trust. Rothstein and Stolle (2008) posited that interpersonal trust is higher in societies with good and fair public institutions, where citizens feel they are treated and given an even playing field. Institutional mechanisms serving as safeguards for social capital include anti-corruption agencies, transparency commissions and ombudsman offices, which prevent clientelism and favouritism. An institutional setting that supports meritocracy, equity and procedural justice offers a moral framework on which networks of trust and civic cooperation are developed.

The institutional arrangements put in place in urban development and housing policy have been used to generate new modes of social capital that are participatory and neighbourhood-governed. Tasan-Kok et al. (2013) show that the neighbourhoods using such municipal policies as stimulating the existence of neighbourhood councils, citizen-led planning and mixed-use zoning form dense networks of interactions among residents. These small-scale models of governance support social urbanism because they allow different people to cooperate, negotiate and co-produce urban solutions. The emergence of social fabrics in rapidly urbanising regions is impossible without the institutional facilitation of relevant processes. Responsiveness, transparency and other reforms, coupled with citizen charters, have made significant contributions to institutionalised social capital. By co-producing services, as Bovaird

T (2007) discovered, citizens and state agencies make themselves dependent on and accountable to each other. Such models of collaborative governance make the field of public services a canvas for social learning, trust and community development. Governments institutionalise trust and reciprocity by building policies that serve as conduits for co-production.

Table 2.9 Institutional Support and Policy Frameworks for Social Capital Building

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
Role of Institutions in Social Capital Formation	Institutions shape incentives, norms and behaviours crucial for trust and cooperation	North (1990); Levi (1996)	Effective institutional behaviour promotes both vertical and horizontal social capital
Decentralization and Local Governance	Local governance enhances participation, trust and community-driven development	Manor (1999)	Panchayati Raj in India serves as a practical model of inclusive, trust-building governance
Community-Driven Development (CDD)	Development programs with community ownership foster legitimacy and empowerment	World Bank (2003)	Emphasizes the importance of social infrastructure alongside physical infrastructure
Education Policy and Social Capital	Schools nurture civic norms, cooperation and social identity	Schuller (2001)	Education acts as both a transmission mechanism and generator of social capital
Social Protection and Welfare Programs	Rights-based approaches to welfare reinforce trust and collective identity	Deacon (2000); Bolsa Família example (Brazil)	Programs like Kudumbashree in Kerala empower through both economic and social pathways
Legal and Regulatory Frameworks	Laws that protect associational rights support vibrant civil society and trust-building	Ostrom (1990)	Legal safeguards are essential for sustaining local norms and trust-based cooperation
Digital Governance and E-Participation	Online platforms improve transparency, service	Bertot, Jaeger and	Digital tools can strengthen bridging and linking capital,

Theme/Aspect	Key Findings/Issues	Supporting Studies (Year)	Remarks
	delivery and civic interaction	Grimes (2010)	but digital divide persists
Hybrid Institutional Models	Combining formal structures with local norms yields context-sensitive development	Woolcock (2011)	Avoids technocratic pitfalls by recognizing local realities in policy implementation
Institutional Trust and Anti-Corruption	Institutional fairness builds interpersonal trust and social cohesion	Rothstein and Stolle (2008)	Anti-corruption bodies and transparency commissions protect and reinforce social capital
Civil Society Partnerships	Governments that collaborate with civil society nurture pluralism and accountability	Edwards (2004)	Institutional support enables civil society to become agents of participatory governance
Cooperative Governance Frameworks	Cooperatives foster democratic participation and bonding/bridging capital	Birchall (2004)	Legal backing (e.g., India's Multi-State Cooperative Act) critical for cooperative success
Participatory Planning and Evaluation	Formal spaces for public engagement led to empowerment and civic identity	Gaventa (2006)	Mechanisms like development councils institutionalize citizen-state interaction
Urban Governance and Neighbourhood Networks	Municipal policies supporting citizen-led planning enhance urban social capital	Tasan-Kok et al. (2013)	Urban institutions must facilitate interaction and collaboration among residents
Service Co-production Models	Joint service delivery fosters accountability, reciprocity and mutual trust	Bovaird T(2007)	Public services become platforms for social learning and community cohesion

2.11 Interpersonal Networks among Cooperatives

Social networks are an essential element of cooperative performance because they involve a relational structure within which trust, reciprocity and cooperation are grounded. Such networks are integrated into the daily interactions between members,

thereby helping to disseminate information, make decisions collectively and, in most cases, informally enforce common rules. Granovetter (1985) explicated the concept of embeddedness, where economic action is introduced in the social relations background as an alternative to abstract market logic. Such pre-existing interpersonal relationships are often the antecedent to formal membership in cooperatives, especially those located in rural or semi-urban locations and provide a pre-existing supply of trust that can improve coordination and minimise transaction costs. These networks are particularly useful when formal governance processes are immature. Under such conditions, informal institutions (i.e. socially agreed-upon rules which act outside officially approved institutions) have a decisive ancillary effect because they strengthen the norms of mutual help, solidarity and participatory action. Helmke and Levitsky (2004) classify informal institutions as complementary, accommodating, competing and substitutive to formal institutions. In many cooperatives, especially in the Global South, verbal agreements, decisions reached by elders and traditional rules work alongside or sometimes in place of formal bylaws. This structure encourages a feeling of belonging and increases legitimacy, especially in situations where formal rules are still inaccessible or externally perceived to be imposed.

The scale of cooperation in interpersonal networks has a determinant effect on knowledge dissemination and innovation processes. Nahapiet and Ghoshal (1998) argued that the social capital inherent in relationships facilitates the exchange of tacit knowledge that cannot be codified and transferred officially. Interpersonal relationships serve the same purpose in agricultural and producer cooperatives, where personal experience is the core ingredient for success. In this situation, informal mentoring and peer-to-peer learning outperform formal training; thus, the idea of synergy between informal institutions and cooperative learning can be described as follows. Based on empirical observations, cooperatives with strong interpersonal networks are resilient during crises. Evidence on the management of common-pool resources provided by Ostrom's (1999) illustration shows that communities with well-defined informal norms and a communication system have a better ability to monitor resource use, establish group rules and resolve conflicts. Similarly, cooperatives based on trust, where the enforcement mechanism among individuals is informal, can survive economic shocks or even external threats without disintegration. Such social

solidarity based on informality assures that group purposes are of primacy when compared to personal and immediate benefits.

Interpersonal networks and informal institutions can promote or limit cooperation participation in terms of gender and inclusivity point of view. Pandolfelli, Meinzen-Dick and Dohrn (2008) emphasised that women's access to informal networks, which is usually mediated by their roles as kin or community members, defines their power in cooperatives. Although these networks amplify the voices of those who have been excluded, they can recreate exclusionary processes that are realised once they are dominated by elitism or patriarchal values. Therefore, efforts to check the entrenchment of hierarchies in cooperatives should be encouraged by continuously reviewing the informal institutions that govern them. Leadership emergence and sustainability also depend on interpersonal relationships. Cross and Parker (2004) affirm that the core people in informal networks who are in constant request of advice, emotional needs or information supply frequently play the main part of de facto leaders regardless of formal position. These individuals are important for engaging members in support, conflict resolution and strengthening cooperation cultures. Nevertheless, accountability problems may be associated with the obscurity of informal power networks; therefore, systems that can balance formal leadership with informal power relations are essential.

Trust-based informal institutions are considered a central point of credit and savings cooperatives financial stability. Financial reliability is not guaranteed by law but rather by social regulation and reputation monitoring. Empirical findings indicate that such institutions in low-income environments often perform better than formal interventions in microfinance because they can utilise local norms and social capital (Gugerty 2007). Therefore, policy must not attempt to substitute these informal financial cultures but accept and promote them in a collaboration that is termed a cooperative policy. The interaction between informal and formal governance systems is dynamic and situation-specific. Scott (2008) draws the line between regulative, normative and cultural-cognitive institutional pillars, which in turn interact with each other shaping organisational behaviour. Informal institutions normally form the normative and cultural cognitive basis that supports the values of cooperation, including solidarity, mutual help and democratic direction. Therefore, successful

cooperatives can blend these informal bases with structured procedures such as constitutions, audits and general assemblies. This acceptance makes it possible to develop a hybrid form of governance which is legally strong yet culturally appealing, thus improving the degree of cooperation and its survival.

Interpersonal networks form the pillar of interdependence and general cooperation. These networks emerge from recurrent social interactions, trust exchanges and stable long-term relationships. Such networks as sources of social capital also act as instruments of action that provide the obligations, expectations and information channels that influence behaviour (Coleman 1988). These relationships (within cooperatives, the key feature of which is a common sense of ownership and a democratic decision-making system) are designed to align individual interests with overall objectives. Through this, they substitute or minimise the use of formal monitoring, as peer approval and scrutiny act as informal regulation styles that govern the actions of members. Informal institutions In most cooperatives, especially in the Global South, norms can take the form of culturally specific ways of doing things, whose guidance tends to cover day-to-day activities, including dispute resolution and profit sharing. Rituals such as rotating headship, joint working days or lending based on honour are still practiced, even given formal guidelines in the form of written bylaws which underline the effectiveness of unwritten norms over written commands.

Interpersonal networks have an established role in facilitating collective action in agricultural and worker cooperatives. According to Krishna (2002), social capital in the form of informal communication and relationship bonds plays a critical role in group activity coordination, resource management and local governance. Interpersonal connections also allow cooperatives to recruit labour, transfer technical skills and react to opportunities or threats when financial or human resources are in short supply, as is often the case in rural areas where institutions may be weak. Members of these organisations tend to adopt written codes to local practices and connections; embedded informal institutions may partly fill the disjuncture between written and on-the-ground realities; Cleaver (2001) terms the process of locally adapting formal structures and practices as a phenomenon of bricolage. Thus, informal institutions are not evidence of weak institutions, but of flexibility and cultural responsiveness that can be embedded.

The might of informal institutions also determines the power of cooperatives. According to Fox (1996), despite all informal accountability mechanisms, such as gossip, peer criticism and social sanctions, they may limit or strengthen power relations. These mechanisms in inclusive cooperatives facilitate transparency, peer learning and empowerment of marginalised members. Conversely, elites can take over informal institutions, thus limiting voice and participation. Therefore, it is crucial that interpersonal networks are viewed in light of informal rules, as this leads to equitable governance and helps avoid entrenching informal gatekeepers. Conflict resolution is also possible through informal channels based on such ties. Uphoff and Wijayaratna (2000) conclude that cooperatives whose decisions are mediated by interpersonal relations, either through peers or esteemed elders, have fewer formal conflicts and greater member satisfaction. These mechanisms tend to act either within the context of or instead of avenues of formal legal systems, where there is a lack of legal literacy or access to law. They are not official and written, but they are often viewed as more valid because they reflect the common values and traditions of solving problems within the community.

Trust also provides the opportunity for change, or those moments of uncertainty are upheld by interpersonal networks. Bourdieu (1986) considers social capital a factor of power through networks of mutual recognition and fidelity. These relationships offer continuity, cushion turbulence and keep spirits up in cooperatives (those going through market liberalisation, any policy change and new leaders). It is common for individuals to desire informal support or advice from respected peers or leaders during periods when formal structures become ineffective or bureaucratic. This demonstrates the importance of developing informal institutions in addition to formal ones. In addition, the advent of digital communication has begun to transform the functioning of interpersonal networks and informal institutions in cooperatives in China. According to Lewis and Westlund (2015), social media and mobile platforms allow members to take informal relationships into geographic spaces and make decisions in real time or even have informal decisions, such as WhatsApp or online voting during general body meetings. Undocumented as they may be, these new emergent digital practices are another level of informality institution-building that confirms the adaptation of the cooperative movement to modern circumstances.

Table 2.10 Interpersonal Networks among Cooperatives

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Interpersonal Networks as Foundations of Cooperation	Trust-based interpersonal ties enhance collaboration, reduce transaction costs and improve coordination in cooperatives	Granovetter (1985); Coleman (1988)	Social relationships are core to cooperative identity and operational efficiency
Embeddedness of Economic Action in Social Ties	Cooperative decisions are embedded in pre-existing social relationships, not isolated market logic	Granovetter (1985)	Highlights how informal networks lower barriers to collective action
Role of Informal Institutions in Governance	Informal norms complement or substitute formal rules, shaping cooperative behaviour	Helmke & Levitsky (2004); North (1990)	Informal institutions can enhance legitimacy where formal rules are weak
Diffusion of Tacit Knowledge through Networks	Knowledge sharing in cooperatives often occurs through interpersonal ties, not formal training	Nahapiet & Ghoshal (1998)	Informal learning and mentorship are critical in agricultural and producer cooperatives
Crisis Resilience and Social Cohesion	Informal institutions and interpersonal trust help cooperatives adapt to shocks and maintain unity	Ostrom (1999)	Resilience is grounded in norms of reciprocity and shared responsibility
Gender and Inclusivity in Informal Networks	Women's participation in cooperatives depends on access to informal ties and norms within kin/community groups	Pandolfelli, Meinzen-Dick, & Dohrn (2008)	Informal systems can both empower and marginalize, depending on social norms
Informal Leadership and Influence Dynamics	Network centrality often determines leadership roles more than formal authority	Cross & Parker (2004)	Informal leaders play key roles in mobilization, though may lack accountability
Trust-based Finance in Cooperatives	Repayment and financial discipline in credit cooperatives often rely on peer monitoring and social sanctions	Gugerty (2007)	Informal enforcement mechanisms can outperform formal microfinance models

Theme/Aspect	Key Findings/Issues	Supporting Studies	Remarks
Normative and Cognitive Dimensions of Governance	Informal norms act as the cultural foundation sustaining cooperative values	Scott (2008)	Effective cooperatives integrate both formal rules and culturally rooted norms
Adaptation of Formal Rules to Local Realities	Cooperative members often "bricolage" or reinterpret formal rules to fit social contexts	Cleaver (2001)	Informal adaptations reflect contextual responsiveness rather than rule-breaking
Informal Accountability Mechanisms	Peer criticism, gossip and social sanctions regulate behaviour and promote transparency	Fox (1996)	These tools can reinforce equity or deepen hierarchy, depending on usage
Informal Conflict Resolution Systems	Peer-led mediation and customary arbitration enhance dispute resolution in cooperatives	Uphoff & Wijayaratna (2000)	Culturally grounded mechanisms often seen as more legitimate than formal channels
Social Capital as Resilience during Change	Informal ties buffer cooperatives during leadership shifts or policy uncertainty	Bourdieu (1986)	Social capital acts as an anchor of trust and continuity
Digitalization of Informal Networks	Social media and messaging platforms extend informal engagement and collective coordination	Lewis & Westlund (2015)	New technologies are reshaping how informal institutions operate within cooperatives

2.12 Research Gaps

Social capital has also been extensively recorded as a construct that enhances the operations of cooperative society. However, most available studies focus on macro-level and community-wide phenomena at the expense of micro-level interpersonal categories that define the relations between members. On the one hand, scholarship may be highlighting general concepts like trust, ties in the network and shared norms, but in doing so, it may downplay the specifics of fitting that into the context of local institutions governing practices the way Kerala does in cooperatives. Although the complementing role of informal institutions in enhancing formal rules is widely recognised, little is understood about how cultural practices, interpersonal trust and norms of interpersonal relations contribute to cooperative behaviour and decision-

making at the grassroots level, where formal policy followed for many decades coexists with informal traditions.

Although the establishment of social capital and member empowerment has been the subject of theoretical enquiries, a few empirical models of the mediating and moderating impact of empowerment and satisfaction in a cooperative environment exist. There is little literature on the extent to which different faces of social capital i.e., bonding, bridging and linking capital can ramify into some sort of measurable result in the form of increased member confidence, increased power to influence decision-making and general member satisfaction with cooperative performance. Moreover, such studies tend to bundle the empowerment process into a one-size fits-all approach which does not evaluate the influence of single demographic factors in shaping such a path (age, gender, education or length of membership etc.). The above omission points out a major research gap in investigating the causal linkages through which social capital contributes to the enhancement of economic benefits, political, legal, personal and participatory empowerment, which will ultimately lead to member retention, loyalty and cooperative effectiveness.

Another methodological weakness is associated with the measurement and operationalisation of social capital in such institutions. Most of the tools that have been developed to measure social capital were intended to be applied to the larger community rather than cooperatives and may not be sufficient to comprehend the multidimensional and subtle mechanisms that characterise cooperation. There are hardly a few validated instruments of cooperative scenes, particularly in pertinent regional currents, such as that of Kerala. In addition, there is no longitudinal design or mixed-method study mapping the changes in social capital over time related to satisfaction and success of members and their cooperation. This means that the development of a model that combines the individual concepts of social capital, member empowerment and satisfaction, particularly in the framework of a regional cooperative-oriented setting, has not been highly researched, which is one of the goals of this study.

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Chapter III
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Chapter III

Theoretical Framework

3.1 Introduction

Social capital is becoming a major explanatory variable for studying the dynamics and performance of collective enterprises in the context of cooperatives, especially in an economy like Kerala, where social exchanges are prevalent. Cooperatives rely on common trust, a working relationship and common values among members, making the creation of social capital necessary for their formation and performance. In this study, a multidimensional view was used to explore how trust, networks, norms and values, communication and governance overlap to form cooperative social capital. It covers Relational Theory which emphasises interpersonal relations and Social Exchange Theory which emphasises reciprocity and commitment as a way of putting the theory in a certain perspective regarding the interactive processes that help to foster bonding and cooperation between members of the organisation. These theories prove that the creation of enduring relationships, trust-based transactions and a sense of fairness in the process of running cooperative dealings and the activation of social capital that processes the individual member-level outcomes and overall organisational performance.

To explain the transformation of social capital into concrete psychological and operational empowerment, the framework necessitates the engagement of Empowerment Theory and the Expectancy-Disconfirmation Paradigm, which states that social capital widens member empowerment, an intermediate variable in the attainment of member satisfaction. Network Theory plays an important role in explaining how social connections and structural embeddedness allow resources to be accessed, information to be disseminated and collective action to be achieved, all of which are important aspects of continued involvement and democratic arrangements. Stakeholder theory and organisational communication Theory provide an understanding of the processes through which communication takes place in an effective manner. The efficient information exchange can contribute to creating strong accountability and transparency and delivering results focused on feeding the members. The integrated theoretical methodology of the composite provides

comprehensive knowledge of the interconnectedness between social capital, member empowerment and member satisfaction. Hence, there is a ground zero for the empirical investigation of how membership in cooperatives leads to developmental change among people and communities in Kerala. This framework not only highlights the components of social capital formation but also points out the potential cooperatives have in transforming as agents of socioeconomic empowerment in a participatory institutional environment.

3.2 Theoretical Underpinnings of Social Capital in Cooperative Contexts

Studies on social capital have received significant academic interest in the past decades, especially in studies of collective or community-based institutions such as cooperatives. This domain connotes the networks, norms, values, trust and mutual obligation that facilitate collective action and the resultant cooperation between and among individuals and groups (Putnam, 1993; Coleman, 1988). The cooperative sector in Kerala may be considered to have a high degree of social capital because economic activities have been layered with community and local cultural relationships that play significant roles in member participation, mutual governance and sustainability. The cooperative model is based on democratic ownership and management which requires a great degree of social integration and trust between individuals in the cooperative to be effective. According to Putnam (2000), there is a distinction between bonding and bridging social capital; the former develops close relationships and groups up in closed groups of homogeneous individuals, while the latter connects opposite ends of the social ladder, where diverse people are tied together through social boundaries. These two forms are essential in societies where people coordinate their efforts, especially in the socially pluralistic society of Kerala.

Relational approaches provide additional clues to the affective and cognitive aspects of social capital by accentuating the quality of interpersonal relationships and emotional trust among members. Relational theory construes interpersonal relationships as vibrant and stable, which is pertinent in the establishment of mutual confidence, besides promoting collaboration in community-based organisations like cooperatives (Dovidio, Piliavin, Schroeder, & Penner, 2006). This depth of relationship in the cooperative ecosystem goes beyond contractual and legal conformity and is realised in the regularity of interaction, history, shared decision-

making and closeness between members. This can be explained by the distinction made by Granovetter (1985), who introduced the concept of embeddedness, understanding economic actions as performed based on an intricate net of social relationships that enable sharing information, reducing transaction costs and forming a sense of common responsibility among members of the cooperatives. In Kerala, where cooperatives are generally run in a closely knit community context, the power of relational networks is a decisive aspect of developing institutional credibility and ensuring long-term stability. Therefore, relational theory emphasises that social capital is not only a structural process but also far more emotional and normative.

Blau, (1964) suggests that the process of exchange regulates interactions among human beings, where they strive to derive maximum benefits with minimum expenses. Members also enjoy psychosocial gains in the form of status, respect, security and inclusion, in addition to economic gains in a collaborative context. By understanding that their involvement has resulted in fair paybacks, such as reception to services, their influence in the decision-making process or reciprocity, members can devote their reliance and devotion to the institution. This giving and taking over time creates streams of cooperation norms and strengthens members' participation. When community accountability and informal sanctions are important within society, such as in Kerala, social exchange serves as an influential means by which cooperation and trust are maintained in the community. Social capital is grounded on favourable exchange relationships, which also results in further generation of social capital, creating an atmosphere that is essential in achieving collective goals, empowering each other and raising the satisfaction level among cooperatives (Cropanzano & Mitchell, 2005).

The theories of structure and organisation present important information on how social capital is institutionalised in cooperatives. Collective action theory, as formulated by Olson (1965), attempts to deal with issues of coordination of group efforts at group goals and the issue of individual interest (usually spoken of in terms of rationality which can inhibit participation), especially in circumstances where there is the possibility of free-rider problems. Social capital alleviates this problem by internalising common norms and imposing accountability through social relations. Among Kerala's cooperative societies, social closeness, peer control and informal

punishment discourage opportunistic behaviour. Simultaneously, network theory, which utilises some of the works of Burt (2000) and Wasserman and Faust (1994), emphasises the structure of social relations and the flow of resources within these relations. The strength of information flow, innovation spreading and collective efficacy of cooperatives tends to grow with the density, centrality and multiplexity of the network; the more these characteristics are tight and interconnected, the stronger the cooperative ability to develop trust, spread norms and adapt governance. Impliedly, it can be discerned that relational, behavioural and structural models reveal social capital as a dynamic and developing capital, established as a result of confidence-based interactions, fair transactions and friendly social webs, which, by extension, adds to the power of member satisfaction and institutional strength in the cooperative movement.

The Current literature increasingly discusses the role of social capital as a prerequisite for strengthening organizational resilience and adaptive capacity in organisations based on the concept of a member-driven structure, such as cooperatives. Social capital, as opposed to the earlier understanding, is now envisioned as a strategic resource that affects the innovations, resource mobilisation and learning of an organisation (Nahapiet and Ghoshal, 1998). Social capital acts as a lubricant and glue in cooperatives by lowering transaction costs by facilitating the balancing of individual intentions to act collectively and simultaneously creating a sense of identity and belonging. Krishna (2002) and Woolcock (2001) argue that the development performance of community-based organisations depends significantly on the quality of the social capital at hand. The dense social capital in Kerala's cooperative sector, where cooperatives thrive in a grassroots democratic environment with a collective ethos, has been found to significantly shape efficiency in governance, transparency and member satisfaction. One of the main aspects of this study is how institutional trust affects the level of member agency, with both factors mutually contributing to the sustenance of cooperative performance. Leadership and peer networks enable compensation for any asymmetry of information and power, leading to horizontal governance and participatory management (Fukuyama, 1995). As Uslaner (2002) points out, trust cannot only be treated as a passive social norm; as a positive value of civic participation, trust empowers marginalised voices in institutions. In a cooperative environment, where members believe that their voices are heard and their

efforts are appreciated, trust can be built on a more profound level which in turn contributes to improved reciprocity and accountability. The experimental results in Ostrom (2000) also indicate that cooperatives can self-organise, apply their rules and adjudicate their internal disputes with little reliance on external authority, especially in Kerala, where most cooperatives are located in rural or semi-urban settings with limited access to formal dispute resolution systems.

Norms and informal rules, as one of the components of social capital, have also been explored by scholars to define how behavioural expectations fostering cooperation and curbing opportunism are generated by norms and informal rules which also strengthen group solidarity. Uphoff (2000) adds that such norms are usually implicit but highly internalised by cooperative members as a result of shared knowledge, culture and frequent contact. This type of informal governance is essential when formal legal systems are weak or unavailable. These informal norms, together with the constitutional machinery, provide discipline, ethical behaviour and accountability through cooperatives. Moreover, Lin (2001) emphasises that social capital developed on the foundation of mutuality and respect leads to the strengthening of individual power through the enlargement of access to information, the amplification of opportunities and the supportive attitude of the institution. As a result of associating cooperative norms with the concept of fairness and inclusion, members who have such perceptions tend to be more involved in the organisation as well as its long-term objectives.

In addition to trust and norms, the sharing and communication of information have become essential platforms through which social capital is disseminated and strengthened. The research done by Adler and Kwon (2002) prove that an open communication system in cooperatives enhances organizational alignment and transparency, particularly when coupled with a participatory leadership style. Cognitive social capital depends on collecting information fairly and often among the members involved. Periodic meetings, open discussions and participatory audits exist in Kerala's cooperatives as formal avenues for sharing knowledge and learning among members. These are not only mechanisms that increase the level of operational transparency, but also feelings of co-ownership and empowerment among members. Mansuri and Rao (2013) assumed that cooperatives that openly encourage

communication and information circulation have a higher chance of attaining sustainable and inclusive development. Therefore, social capital in a cooperative setting is not fixed; rather, it is a continuous process that is developed through trust-filled interactions, compliance with common norms and the existence of communication channels, which are essential to the success and survival of cooperatives that must operate within a dynamic socio-economic landscape.

3.3 Relational Theory and Social Capital Dynamics

Relational theory provides a critical lens through which one can examine the fluid nature of the interrelationships which run the process of attainment and structural existence of social capital. In contrast to structural approaches which value impersonal networks and institutional structures, relational theory emphasises the depth, affective power and fine quality of personal relations. The given orientation is close to the cooperative model, where the long-term involvement of members depends on trust, reciprocity and common values. In 1985, Granovetter claimed that economic enterprises are enclosed by interpersonal systems of relations filled with prospects, anticipation and past experiences of interaction. These embedded relations encourage participants to feel like they are part of the group in cases of cooperation, particularly in Kerala. These strong relational ties not only support the daily decision-making process but also serve as sources of informal governance that control and maintain behaviour and enforce group norms. The essence of relational theory is the notion of trust, which serves as both the outcome and condition of social capital. Trust results from frequent social interactions, experience, participation and investment (Lewicki & Bunker, 1996). Since members rely on a fellow member economically and emotionally, trust enhances solidarity and lessens the necessity of employing formal enforcement. According to Nahapiet and Ghoshal (1998), social capital has three dimensions: structural, cognitive, and relational dimensions. Relational social capital which includes dimensions such as trust, obligations, expectations and identity, is central to the mobilisation of resources and stimulating cooperative behaviour. The long-term relationships in Kerala's cooperatives have led to the development of trust that promotes participation, reduces opportunistic behaviour and facilitates the process of goal-setting. Moreover, institutional support for trust, including

participatory leadership and transparency, is a self-strengthening resource that determines cooperative identity and collective efficacy.

Relational theory also brings to the fore affective elements in social capital, consisting of empathy, mutual care and emotional reciprocity, which are usually side-lined in formal analyses. These relationships make up the glue that sticks cooperative members together more than economic advantages so that they can venture to move through the reality of conflict, overcome uncertainty and maintain long-term cooperation (Molm, Schaefer, & Collett, 2007).. These features are common in the communal nature of Kerala's culture, where informal social interactions, social get together and solidarity in times of crisis promote the emotional foundations of social capital. Such relational investments enhance group resilience and create an environment in which economic and social outcomes are optimised simultaneously.

Moreover, relational theory explains the importance of identity development and recognizing one another in the context of social capital. When people feel that, they are a part of a large group with a group history, values and vision, then their relational ties with each other become stronger and more insightful (Ashforth and Mael, 1989). This feeling of a common identity brings forth internal legitimacy and strengthens collaboration traditions. Economic interest in Kerala cooperatives is not the only reason why many members join them; social attachment and the history of being with them also play a role. This identity-based devotion further raises trust in and between people, thus improving governance, civic engagement and service provision. Empirical research reveals that relationship-based social capital instils a form of long-run institutional commitment and organisational integration (Heaphy & Dutton, 2008). Relational theory provides a subtle and rich understanding of how interpersonal interconnections, personal emotional investments and joint group identification interact to create social capital, which is essential for the viability and vitality of cooperative institutions.

The relational perspective of social capital distinguishes itself with respect to transactional logics in the sense that this approach gives a lot of emphasises the changing nature of relationships in terms of inseparable, bilateral influence, continued engagement and commitments based on mutual participation. This view is opposed to the classical network theory because it places interpersonal dimensions at the forefront

of the explanation of cooperation, compared to structural configurations (Cross & Parker, 2004). These relational aspects are significant in co-op environments, especially in culturally entrenched ones, such as Kerala. Sustainable relations are built during processes of interaction where cooperative behaviour is not influenced only on the basis of obligatory necessity but also on the basis of emotional investment, social knowledge and perceived mutual profit. According to Brass, Galaskiewicz, Greve, and Tsai (2004), members share a consistent perception of being respectfully treated, treated fairly, and that they share common goals, which contribute highly to the strength of relational capital in organisations that depend heavily on member perceptions and is supported by relational depth and not the structure in place. Relational theory also stresses the formation of mutual role expectations and identification among cooperative members which strengthens mutual decision-making. This new we-ness, which is created through relational embeddedness of individual members, leads to an increased willingness to cooperate among members, even without explicit payoffs (Kilduff & Tsai, 2003). In an environment where the aim of functioning is democratic and participation is voluntary, ambiguity will be reduced and inclusiveness bred by such role clarity and identity-bound relationships. Respect for one another and non-formal obligation are the means by which social capital is converted into action. These are qualitative changes in relationships that breed a context in which power is decentralised, with trust being the currency of collaboration and sharing of resources. In the long run, they develop a culture of openness, learning and solidarity, which are common features of successful grassroots cooperative movements in India, especially those originating in Kerala.

The relational theory is a sociological-psychological-organizational theoretical approach that is inevitably associated with psychological safety as a construct of crucial importance for innovation and productive involvement in cooperatives. People are more willing to participate in open dialogue, express their dissenting points of view and present their ideas when they live in an environment where mutual recognition and benign interactions are observed (Edmondson, 1999). In cooperative endeavours, psychological safety supports participatory governance and dampens inertial hierarchies. Thus, it is possible to say that relational climate is one of the main conditions for social capital formation and organizational resilience. In line with the results of Carmeli, Brueller and Dutton (2009), an environment of empathy and

compassion provides high-quality relationships that simultaneously improve the well-being of individuals and the performance of a group at the same time. These values are particularly important in collaborative environments, where social relationships are the heart of the fabric of functioning and governance. The relational approach emphasises that social capital is not a fixed resource but a dynamic resource influenced by situational variables and the quality of the experience of the relationship. It requires authentic, continuous and mutually beneficial interaction which is facilitated by intergenerational community meetings and shared economic efforts, along with a combined crisis response which collectively represents recurrent points of contact in relations that promote increased mutual trust and reaffirm mutual obligations. Such rituals have both symbolic and functional meanings in settings like Kerala, where there are many cooperatives that are both community-based and generational. In the long term, such relational patterns become sustainable to generate relations embeddedness that makes fluid coordination, common adjustments, and alignment of collective intent with one's own desires possible. Therefore, relational theory provides an influential analytical basis by which the social reality of working members in cooperatives supports the development of social capital and the effectiveness of cooperatives.

3.4 Social Exchange Theory: The Basis for Trust and Member Commitment

Social Exchange Theory (SET) is a central construct in sociology and organizational behaviour, where humans are theorised to engage in reciprocal exchanges in the form of transactions intended to gain maximum benefit and keep the cost at a minimum. Originally stated by Homans (1958) and later developed by Blau (1964), SET presupposes that social behaviour is determined by the exchange of resources, both tangible and intangible, between persons expecting a mutual benefit. This principle is especially significant within cooperative organisations, where relations between members are not exclusively transactional and are within the context of long-term relationships. Collective members invest time, resources and trust in exchange for the mutual benefits of access to credit, shared knowledge, support and social recognition. This dynamic becomes the basis of long-term interaction, where trust is not only a matter of ethics; association is also an anticipated result of stable, honest and favourable interactions. Thus, trust appears to be a core element in cooperatives in the

exchange process. Trust is a formation process that is carried out by good experiences on a regular basis, where parties feel fairness, respect and commitment to each other. When there is trust, power imbalances in relationship exchange diminish (Emerson, 1976), and members will cooperate out of free will, even without such formal measures. When cooperative leaders fulfil their promises and do not discriminate against members, they produce what Cropanzano and Mitchell (2005) call high-quality exchange relationships. These relationships create affective trust which is based on emotions and cognitive trust, which is based on competence and reliability. In Kerala, where cooperatives exist both in rural areas and towns, the success of the organisation and the possibility of its survival depend on building trust among members and between members and management.

In cooperatives, member commitment is directly linked to the feeling of value reciprocity. Molm (2003) demonstrated that fair and beneficial exchanges characterise more substantial emotional attachment and behavioural commitment. In this respect, commitment is emotional and normative, not contractual or rational in nature. When members feel that their efforts are recognised and rewarded, they become loyal and play active roles in cooperatives through cooperative governance. The same is applicable in Kerala, where social solidarity and collective identity are given heavy emphasis and spread in the cooperative culture; the perception of mutual benefit strengthens both psychological and normative commitment. This is consistent with the study of Masterson et al. (2000) on employees' organizational commitment and perceived procedural fairness. Social Exchange Theory can also be used to provide information about informal rules that control member behaviour in cooperatives. Social exchanges are contrasted with market transactions, which are frequent and impersonal (Cook & Rice, 2003). Such norms are institutionalised in cooperative cultures over time. Members are not ready to support the organisation only to get immediate benefits and value it because of their long-term expectations, history and community values. In Kerala, where most cooperatives are located in small towns and villages, these relational exchanges have manifested themselves not only in terms of formal roles but also in terms of relationships that encompass a larger community. The SET illustrates how these types of informal social norms internally promote accountability, discourage opportunistic behaviour and strengthen trust and group commitment.

Another application of the Social Exchange Theory is in the area of leadership and governance. Leaders who exercise openness, justice and inclusivity instil a great deal of trust and ethical credibility in their members, creating a psychological environment in which members feel respected and valued, thereby demonstrating stronger devotion and collaboration behaviour (Dirks & Ferrin, 2002). Social interactions among members and leaders would turn into high-trust relationships when leaders develop supportive behaviour and not favouritism. Democratic leadership usually occurs in Kerala cooperatives in the form of participatory decision-making, general body meetings and consultative governance, which match the norms of equitable exchange proposed by SET. Such interactions are the foundation of organizational citizenship behaviour when members are ready to go beyond their given roles to assist the cooperative. This aspect of SET is further emphasised by stating that violations of perceived equity or reciprocity have the potential to undermine trust and reduce member commitment. When members feel that their efforts are not appreciated or rewarded by the organisation, their participation may be withdrawn or they may acquire a sense of cynicism towards the organisation. According to Rousseau (1995), this phenomenon is the inequity of the so-called psychological contract which is a basic concept of SET where informal expectations are testified. In such cases, trust is reconstructed by re-establishing fairness through clear communication and the corrective actions. In the case of Kerala cooperatives that could face political influence or even financial mismanagement, compliance with SET principles will help them resolve conflicts and retain members. When cooperative leaders pay attention to interpersonal relationships by noting that trust and commitment can be developed as a result of consistent, fair and transparent social interactions, they create an atmosphere in which social capital can be developed more efficiently, and their shared objectives can be easily reached.

Modern research on cooperatives increasingly places the theory of Social Exchange (SET) in a larger relational perspective that emphasises emotional exchange and interpersonal sense-making. Originally, early suggestions by Homans (1958) and Blau (1964) emphasised the calculation of cost benefit, but newer implementations have emphasised the importance of affective commitment, shared meaning and moral responsibility to maintain cooperation. Such an enlarged orientation is particularly relevant in cooperative ecosystems in which participants act as both contributors and

beneficiaries. These two functions support the significance of equitable exchange and trust between people as conditions for organizational success. Scientists are increasingly looking at SET in collectivistic societies such as India, where group identification is interconnected with national values and social ties. The SET is visible in the informal commitments that make up the social solidarity and inclusive economic activity of the cooperative movement in Kerala, where moral requirements are enforced by self-decided prescribed norms as opposed to legal ones. In line with Uhl-Bien and Maslyn's (2003) results, exchange quality (respect-based and socio-emotional support-rooted leader-member exchange) is more likely to predict members' commitment than authority. In the hierarchical structure of cooperatives, this interaction plays a pivotal role as a driving force of efficiency.

The reciprocity process has become an object of scholarly attention in recent years. The idea of reciprocity that people are likely to be rewarded with the same in the future as a result of giving them a gift occurs in the norm of reciprocity (Gouldner (1960). According to Wayne et al. (1997), organizational support positively contributes to the emotional commitment of organizational employees, which can easily be the case in cooperatives, as emotional embeddedness guides long-term participation. In addition, SET has been implemented to investigate the possibilities of restoring trust following perceived infractions or crises in organisations. Member distrust can result in low member trust due to internal politics, poor financial control and changes in leadership. Restubog et al. (2007) revealed that fairness in communication and corrective action after a breach of contact nullifies negative perceptions and restores commitment. In cooperatives, it is precise corrective measures which are conducted transparently and genuine leadership that helps accomplish relational repair, allowing members to make commitments again with an emotional charge. Thus, organizational resilience and continuity are driven by the self-correcting properties observed in social exchanges.

SET also elucidates the motivation of members and voluntarism. Although economic incentives are common in corporate environments, cooperative members are typically motivated by intrinsic rewards and community identity. According to Eisenberger et al. (2001), the perception of an organisation's valuation of its members' contributions and well-being makes members feel stronger in obligations and loyalty. Emotional

compensation and peer acknowledgement commonly supersede other incentives in Kerala, particularly in cooperatives anchored in community identity, making them much more durable, with the potential for lean turnover. The explanatory scope of SET extends to cooperative unions and federations. Ring and Van de Ven (1994) define inter-cooperative relations as relational contracts, implying the importance of trust, common norms and reciprocity, instead of the formality of law. In the cooperative sector in Kerala, federations grow within mutual trust, a common vision and the habit of success; therefore, they foster the trust of the team and the spread of member loyalty throughout a network and multiply social capital within cooperative systems. On this basis, SET continues to prove itself as a powerful theoretical framework within which intra-and inter-organizational trust and commitment can be examined.

3.5 Theory of Collective Action and Cooperative Behaviour

Collective action theory articulated by Mancur Olson (1965) states a basic organizational puzzle, in which circumstances do rational actors choose to collaborate despite the incentive to free-ride? Olson argued that collective contributions rarely arise persistently without selective benefits or intrinsic inspiration among participants. This presents a serious dilemma for collective ventures that rely on voluntary engagement. However, the empirical history of Kerala's credit societies, dairy cooperatives and agricultural collectives shows an obvious weakening of the free rider problem, a tendency that other scholars assign to the strength of social capital, normative proscriptions and a general commitment within the culture to collectivism. Although Olson's first formulation did not provide explicit information on the size of groupings or internality, subsequent research findings revealed that smaller, tightly knit groupings enjoy better levels of collective action, a trend ascribed to better monitoring, communication and mutual accountability. At the Kerala level, the vast majority of cooperatives exist at the village/panchayat level, establishing communal identities and historic relations which help curb individualistic tendencies and underline group involvement. Empirical findings also show that self-help organisations, like those that are most common in Kerala, tend to develop their own regulations and oversight systems that lead to improved obedience, making external enforcement less essential.

Collective identity has also become an important parameter in the discussion of explanations for cooperative behaviour that are not limited to narrow economic rewards. According to Melucci (1995), shared meanings and symbolic structures are sufficiently appealing to motivate the activities of the participants who are not always seeking to achieve measurable benefits but are responding to the appeal of the shared missions, values and collective identity of the cooperative itself. In Kerala, the cooperative movement is closely associated with anti-colonial struggle, self-help in rural areas and social justice movements that augment the feeling of belonging and moral duty, which contribute to the increase in the levels of participation. Therefore, Kerala's cooperative behaviour cannot be attributed to calculative utilitarianism, as it is incorporated in social-political and emotional systems.

Governance systems are also crucial for sustaining cooperative efficacy. Ostrom (2005) proposed the notion of polycentric governance, which implies the decentralisation of authority into various decision-making units that would increase local authority and involvement. The cooperatives of Kerala are a good example of such an approach: deliberation is participatory and decentralised, as decisions are made by elected boards, general body meetings and frequent consultations with members. This style of inclusive governance enhances the level of member ownership and restrains alienation, a factor that is directly linked to the survival of any organisation. Bardhan and Ray (2008) noted that in situations where participants initiate their own rules, there is increased compliance, which causes the monitoring of the rules to be through community-not imposed method, which made it a favourable environment to establish long-term collective action.

Cooperative behaviour is also supported by social norms and peer-monitoring. Fehr and G. Auter (2000) experimentally proved that subjects are more generous when they expect others to behave similarly and that non-compliance will receive social flak. Within most cooperatives, norms such as reciprocity, honour and shame act as informal mechanisms of control, especially in those located in the Global South. The social embeddedness of cooperatives is strong in Kerala; social disapproval by any existing group norm can cause insignificant penalties to enact punishment on those who do not conform with group expectations which keeps social participation high,

even when the law does not have strict penalties. Thus, social visibility, symbolic compensation and peer-group solidarity are significant motivators.

Current updates of the theory of collective action focus on the transitional nature of cooperative conduct to available transformations in contexts. Poteete, Janssen and Ostrom (2010) argue that collective action is not fixed but changes over time through learning, institutional adaptation and feedback. The issue in Kerala is that cooperation is now faced with globalisation, disruptive forces of technology and changing value systems of new generations. The modern-day use of ICT as a means of communication, digitalised voting strategies and specific training initiatives demonstrate the potential of the sector to enable institutional flexibilities and flexible control, which may further be regarded as an improvement of the initial theoretical framework offered by Olson without reconsidering the changing framing of members.

In addition, recent cooperative studies have revisited the old foundation of collective action within classical economics in unprecedented magnitude through an interdisciplinary paradigm of study that covers a wider scope than it used to. Researchers have integrated ideas from behavioural economics, sociology and institutional theory to explain why people behave in herds, despite the fact that such action does not correspond with narrow rational self-interest (Bowles and Gintis, 2002). The reliance on a cooperative choice has now changed to patience and scrutiny of bounded rationality, identity affiliation and aspects of social learning. In the cooperative sector in Kerala, the players are not always driven by personal interest to make profit; instead, they are driven by a cultural inclination of solidarity and interdependency, as passed down through their culture of communal self-help and deep social integration in the villages. This cultural stock serves as one of the main drivers of prolonged mass involvement, which makes the classical image of utility-maximising human beings more difficult to comprehend. New trends also explore the combination of personal agency and scaffolding by institutions. Olson believed that the original framework focused on individual rationality, but the modern paradigm shows that credible mechanisms of commitment, reward-sharing norms and democratic governance systems can determine collective action (Chatterjee and Krishna, 2021). The Kerala cooperatives, with their participatory features, including annual general meetings, participation in voting and decentralisation of decision-

making yield procedural justice, which is highly linked with member turnout and volunteer compliance according to research (Tyler, 2006). Therefore, this kind of cooperation is sustained not only by material incentives but also by the legitimacy of the organizational procedures.

Behavioural experiments provide empirical data on the psychological basis for collective action. Evidence shows that people are even ready to collaborate despite incurring a certain personal cost, as long as they have a feeling of justice in giving and receiving contributions (Fischbacher & Gächter, 2010). This understanding applies most specifically to that type of cooperative, where a lack of power or contribution balance might discourage member participation. In Kerala, cooperative societies have reduced such risks by accounting for them openly, running committees of rotation and having the community keep them in check, resulting in a sense of shared ownership. Moreover, the principles of prosocial norms and frequent contact with other rural members foster the principles of reciprocity of altruism and the long-term orientation to economic changes and politics which is an absolute necessity to not withdraw oneself but be a cooperative unit. According to scholarly interest, the role of identity-based mobilisation in collective action remains novel. Identity theory hypothesises that the more people identify themselves with a group, the more they are susceptible to modifying their actions towards communal objectives (Ashforth and Mael, 1989). In Kerala, cooperation has frequently occurred among caste or occupational or religious groups, where group identity is well-developed. Such embeddedness creates more intra-group cohesion and makes the process of mobilisation easier. Kudumbashree units in Kerala are a very good example for the same.

Changes in governance and communication have also occurred due to digital transformation and changes in the terrain of collective action. Ethics and transparency have improved with the integration of information and communication technologies (ICTs), including mobile alerts regarding meetings, monetary transactions via the web and virtual wallets. Janssen et al. (2014) propose that ICTs reduce the cost of transactions, and increase the symmetry of information, which enables the collective action to grow beyond geographic boundaries. The digital literacy programs offered in the context of the cooperative sector in Kerala allow remote members of society to stay connected with the rest, resulting in their inclusion and long-term interaction.

This shift determines a new frontier in the theory of collective action, generating new variables and patterns of interaction that require ongoing innovation in theory. Collective action has a gendered aspect that scholars are increasingly interested in, as it is a concern in cooperative movements aimed at empowering women. Classic approaches to collective action are generally gender-neutral, but feminist critics have shown that patriarchal rules can greatly limit the capacity to organise and participate in collective action (Agarwal, 2000). In Kerala, these constraints are addressed through the Kudumbashree movement and other female-focused cooperatives which establish safe spaces for women to develop economic autonomy and the power of group action. These cooperatives are not only an economic but also a social change platform against domestic violence, access to credit and for political representation. The issue of women as participants in collective action in cooperatives shows that any behavioural incentive and institutional design should be gender-aware and it has to be effective at the same time as being fair.

3.6 Network Theory and Cooperative Social Structures

Cooperative societies are a tight structure, including social constructions. Networking theory presents a stringent analytical perspective, according to which the social structure of cooperative communities can be examined. On the theoretical side, network analysis examines how the relationship patterns among individuals and organisations operate and how these patterns affect behaviour, information flow and shared output (Wasserman & Faust, 1994). In the context of cooperation, these forms of relationship play a decisive role in shaping trust, collective identity, group decision-making and resource use. Cooperative institutions in Kerala are less independent and have more interpersonal and inter-organisational networks that are rich in density. Such networks support the spread of mutual cooperation, foster reciprocity and social enforcement mechanisms, forming the basis of long-term cooperation. One of the main arguments of network theory is that the relational configuration, such as centrality, density, clustering and bridging, strongly determines both the internal dynamics and its reach to the outside. Strong internal relationships raise confidence and team spirit, while strong relationships with external parties, such as banks, the government and other cooperatives, offer new opportunities and advancements in innovation (Granovetter, 1973). An example of this is a dairy cooperative in Kerala

that uses internal bonding to control the efficiency of its operations. However, survival depends on the strong ties between marketing federations, veterinary services and state-sponsored welfare programs. The need for such a combination of bonding and bridging social capital highlights the core importance of network architecture in cooperative resilience.

Cooperatives are also networked, and this influences the flow of knowledge and information. The structural holes concept (Burt 2004) suggests that people who are considered to be between other groups which otherwise carry no connection act as intermediaries of information and power. In cooperative contexts, the interconnections among members of different clusters (marketing teams, production units or other sub-units of the organisation) act as sources of knowledge transfer and coordination of planning. These boundary spanners increase the ability of cooperatives to innovate and adapt to changes. Even in Kerala, where cooperatives are always faced with the problems of variable agricultural markets, fluctuating weather and policy uncertainty, the dissemination of relevant information through formal and informal networks in an affordable and quick manner is vital for making good decisions and management. Management and responsibility in cooperative societies are also determined by underlying social networks. According to empirical research, it is pointed out that norms of cooperation and mutual monitoring serve the similar purpose on a tightly knit network better (Coleman, 1988). With the support of members, deviant behaviour can be effectively pinpointed, social sanctions exercised, and institutional integrity maintained. These effects are compounded by the physical proximity of members and the overlap of various social roles such as kinship, neighbourhood and common caste denomination, which in village-based cooperatives in Kerala permit the creation of overlapping incentives or interests focused on advancing collective interest, leading people to act together. However, researchers warn that too dense networks predispose groupthink, restrict access to outside views and slow down organisational change (Portes, 1998). Consequently, cooperative networks must sculpt an equilibrium between these two poles, cohesion and openness, in the sense that they maintain accountability without sacrificing dynamism.

Another aspect of the applicability of network theory to cooperative research is the social embedding of networks, which argues that economic behaviour is embedded in

social relationships (Granovetter, 1985). Informal reputational evaluations often appear in the form of loan approvals, leadership elections or conflict resolution efforts which normally rely on embedded social relations to come to cooperative decisions. This embeddedness is evident in Kerala, where credit cooperatives and the loaning process often consider community status and formal documentation. The digital and trans-local aspects of cooperative networks have been considered in newer scholarly investigations. With cooperatives increasingly resorting to digital tools for communication, financial activity and management, their network structure extends beyond their typical geographic scope (Molnar et al., 2020). A case in point is the instance of producer cooperatives in Kerala, which are currently involved in reaching out to remote marketplaces, as well as consumers and policy discussion groups via digital platforms, creating hybrid networks of local embedment and global connectivity. These changing arrangements challenge the conventional notion of geographic proximity and require new analytical theories. Additionally, the COVID-19 pandemic demonstrated the need for network flexibility, where cooperatives with robust digital and organisational connections proved more able to withstand shocks and continue making services available.

Network theory has increasingly shifted its focus towards the dynamic description of social ties rather than stagnant characterisations. The current science of networks considers cooperatives as complex adaptive systems with relational ties, alliances, partnerships or functional links that are constantly established, scrapped and rearranged owing to internal dynamics and external stimuli (Borgatti et al., 2009). In the case of Kerala, such dynamics can be observed in the realignment of members in the context of the leadership election process, the alteration of the communication flow due to the onset of new technology or a new regulation and the rearrangement of the line of trust and dependence in the aftermath of certain crises, such as the COVID-19 pandemic. These temporal aspects emphasise that the structural stability of cooperative institutions can be related not only to the inherent arrangement but also to the capability of networks to adapt to economic and social shocks.

Another less-researched area is the development of inter-cooperative networks involving various cooperatives connected to each other through federations, clusters or value-chain relationships. These meso level structures enhance synergies through

knowledge consolidation, transaction cost reduction and increased bargaining power (Valentinov, 2007). For example, the Kerala dairy industry has a multilevel chain of cooperatives, where the activities of primary societies are collaborated in regional federations which control procurement, processing and distribution, a structure necessary to access economies of scale and participate in policy dialogue. The interdependencies and governance issues of these nested systems are explained through network theory, the aspects of which require coordination in specific cooperatives and across nodes and various levels.

Location and geography based views have also become attractive in network theory, especially in rural cooperatives. The concept of spatial embeddedness assumes that networks of cooperation are influenced by the actual and social geographic features of the regional surroundings (Murdoch 2000). In Kerala, cooperative interactions are affected by topographical barriers, population density and urban-rural connections. Coastal regions are likely to deal with trade-based/marine-oriented partnerships compared to regions like Wayanad that are stained in agriculture, tribal-based and forest-related livelihoods. These spatial contrasts influence the frequency of interaction, establishment of trust and distribution of the informational edge, making place-based research an essential approach to the topic of cooperative networks. States intervention also play normative roles in collaborative topologies. Regimes, laws, subsidies and capacity-building processes affect the relationships to be promoted, nodes to be empowered, and types of collaboration to be legitimised (Sforzi & Bianchi, 2020).

Not all power in organisations is identified through formal organisational charts, as it is not clear through network analysis how informal power systems function within the organisation and play a significant role in cooperative operations. Informal leaders are long-tenured or respected members who act as opinion leaders, informal mediators, or brokers of information, placed in roles beyond formal jurisdiction, and who determine norms, resolve conflicts and guide collective actions (Krackhardt, 1990). In Kerala, this type of informal hierarchy has frequently worked alongside democratically elected boards, creating a tandem of power. It is imperative to identify these invisible networks to develop appropriate leadership-development initiatives and conflict-resolution systems. Additionally, sustainable development goals (SDGs)

have strengthened the process of linking cooperative networks to wider social and eco-networks. Cooperatives have become recognised as key institutions for meeting the objectives of poverty reduction, gender equality and livelihood sustainability (ILO, 2017). Network theory can provide analytical frameworks for analysing the relationships between cooperatives and NGOs, local governments and civil society organisations. In Kerala, cooperative societies are engaged in implementing sustainable agriculture, water conservation, and renewable energy programs in collaboration with Kudumbashree units, self-help groups and Panchayati Raj Institutions. These multisectoral linkages, based on relational trust and mutual goals, build multi-actor forms of governance that place cooperatives not only as economic institutions but as nodal institutions in developmental networks.

3.7 Empowerment Theory in the Cooperative Framework

To answer this question, one can rely on a critical lens provided by empowerment theory rooted in community psychology and participatory development, offering an understanding of the participatory potentialities of cooperatives. Traditionally, empowerment has been viewed as the mechanism through which people can achieve a sense of self-control in their lives, strategic decision-making ability and the ability to impact society or organisations as a whole (Zimmerman, 2000). In cooperatives, this process is realised concurrently at the individual, group and institutional levels. The members hold two positions: they benefit materially and, at the same time, get involved in decision-making and governance. A notable case study is the experience of Kerala cooperation, where the pattern of democratic control and the participation of the members is threaded into the very fabric of the movement. The theory of empowerment explains the process through which cooperative membership may transfer power held by external agents, such as landlords or corporations, to community-based groups and in doing so, foster local economic self-determination. Among its major contributions is the fact that it centres on psychological empowerment, which is considered as self-efficacy, sense of meaning in a member, and commitment to collective action (Spreitzer, 1995). Psychological empowerment is a very important precursor to civic involvement and leadership formation: members who feel competent and appreciated as a part of the enterprise are more likely to participate in meetings, vote in elections, and take the lead in the future. This

internalised agency and the related sense of agency can commonly be seen in the form of concrete efforts undertaken by the service cooperatives and agricultural societies in Kerala through their lobbying efforts to increase services or even by kicking against predatory intermediaries in the market. Consequently, both personal resilience and cooperative efficacy are reinforced by psychological empowerment.

These instrumental dimensions of empowerment, which are also realised in terms of resource access, skill building and decision-making channels, are areas that Kabeer (1999) describes as instrumental empowerment. Cooperatives are often drivers of new developments, probably by offering cheap credit, specific training and entrepreneurial opportunities to their members. Kerala has witnessed many cooperatives headed by women under Kudumbashree and credit societies which have made marginalised groups, especially women and Scheduled Castes, economically proficient by providing economic bases and enhancing the promotion of people. Therefore, cooperative principles complement empowerment theory, which states that institutional design is required to scaffold the agency of members through specific interventions and capacity building. Notably, a gendered interpretation of empowerment highlights the potential of cooperatives to disrupt patriarchal norms and expand women's power. In this case, empowerment entails confronting with limiting gender roles and integrating leadership equality in masculine-dominated fields. The empowerment of women in cooperatives focuses not only on numbers; in quantitative terms, it is substantive regarding decision-making, resource control and access to visibility in the public realm. In Kerala, gender development indices have been found to easily exceed national standards and cooperatives in Kerala have been vehicles of women's progress through dairy societies, handicraft units, and health cooperatives. The empowerment theory enables one to investigate whether these structures are redistributive as opposed to symbolic, which requires a critical evaluation of the results of empowerment.

The theory of empowerment also overlaps with participatory governance and democratic accountability. Arnstein's (1969) ladder of participation demonstrates that there are different levels of empowerment of participatory mechanisms and the most radical is a situation in which participants have real decision-making power. By design, cooperatives seek to actualise these maximum levels. However, practically,

the problem of power imbalances might come as a result of differences in literacy levels, political interference or elite takeover (Birchall & Simmons, 2004). The empowerment theory provides a basis for determining whether the governance arrangements in Kerala facilitate substantive member control or whether formal democracy underpins the informal control. To assess empowerment, it is essential to employ structural logics beyond the quality and equity of the participatory process. This analytical framework also associates empowerment with sustainable development and long-term socioeconomic change. Adverse members become more innovative and sustainable and are willing to partner with external stakeholders to increase their impact (Narayan, 2002). The cooperatives in Kerala normally take on development responsibilities that are not defined in the economic sphere of their work, such as contributions to education, health and environmental issues. This extended empowerment implies that cooperatives become community-level development institutions. By applying empowerment theory, scholars and practitioners can trace the ripple effects of cooperative membership on household well-being, community leadership and intergenerational change. This holistic view shows that cooperatives, as empowering institutions, act as structural agents of change and not simply as service providers.

The history of empowerment in the sphere of cooperatives shows a gradual movement of power originating in centralised forms of governance to the local power agency. The concept of the cooperative movement was founded by a reaction to economic exclusion, beginning in nineteenth-century Europe, based on empowering workers and small producers. In India, colonial constructs brought in cooperatives which was a top-down approach with the state as the driver. However, the development process in Kerala, born of post-independence policies, created a unique pattern in which cooperatives were used as a form of democratised control over resources. In an empowerment approach, Kerala's cooperative sector depicts how historically contingent institutions and localised political awareness gave rise to participatory structures. Land reforms and democratic movements increased the political knowledge of the people in the countryside and, in this way, laid the foundation for bottom-up cooperative action. Empowerment here does not only involve economic gains but also involves empowerment in the political sense of the word, for example, the improvement of civic abilities and advocacy capacities. Cooperatives are often

used by members to participate in broader democratic activities, including service in Panchayati Raj Institutions and lobbying for policies (Craig & Mayo, 1995). Furthermore, a large number of cooperative leadership figures have risen to political stardom and the system of cooperatives usually feeds into the arena of governance at the local level. Empowerment theory can be viewed as a parallel to Freirean ideas of critical consciousness, where collaborative participants can develop the ability to challenge and confront the challenges of the system (Freire, 1970). This political involvement is essential to ensure that cooperatives do not act as economic actors but as providers of interactive governance and active citizenry.

Less scholarly attention has been given to intergenerational empowerment, although this aspect of cooperative development is turning out to be crucial. Empowerment is not a one-time phenomenon but a multigenerational process, and it is impossible to do so without youth participation which is essential to avoid the stagnation of the institution and spur innovativeness. Cooperative education courses and clubs targeting young people have started emerging in Kerala with the hope of empowering young people in terms of leadership qualities and financial literacy at a young age. The idea that empowerment theory should be used throughout generations highlights the need to pass on agency, knowledge and decision-making to younger generations, who can then reform cooperative governance. This leadership transition also protects the life of cooperatives and prepares them to adapt to changing economic and technological situations. The other contemporary aspect is technological empowerment, especially with the aid of digital applications to improve transparency, participation and access to information. The diffusion of ICT allows members to attend virtual meetings, keep track of financial transactions, cast e-votes and eliminate reliance on middlemen or elite gatekeepers (Unwin, 2009). Through the E-Cooperative project of the Government of Kerala, digital literacy and inclusiveness have been encouraged. Empowerment theory in this field considers capacity increase and curtailed asymmetries in information flows. With digital power, members are in a better position to protect rights and bargain with outsiders such as banks, trade markets, and other state players.

Identity change is another deeper and less focused approach to empowerment in cooperatives. Unity of membership has the potential to remake the sense of self and

promote people from the position of passive beneficiaries to that of active stakeholders in the community. This transition is most notable in historically deprived communities, such as women, dalits and tribal communities in Kerala, whose involvement in cooperatives has, in many cases, resulted in the formation of new social identities and meanings. When applied as a sociological concept, empowerment theory allows scholars to question how economic participation disorganises identities, belonging, and aspiration. Social roles and intergroup relations are recreated by symbolic capital related to the leaders or entrepreneurs' positions. Empirical observations emphasise the variations in his localised models of cooperation based on differences in the cultural definition of power, agency and collective good. Matrilineal customs and high literacy rates have resulted in a relatively equal social environment in Kerala which promotes inclusive empowerment efforts. In contrast, elite domination may be lifelong in cooperative systems in patriarchal or caste-stratified environments (Heller, 2000). From an anthropological perspective, empowerment theory promotes the need to contextualise both the expectations of intervention and the measuring standards of the interventions; an action that is considered empowered in one geographical place or region may not be the same in others. The presence of such cultural sensitivity is crucial in developing empowerment strategies that are more appealing to members based on their lived reality and values.

3.8 Stakeholder Theory and Member-Centric Governance

Stakeholder theory, as originally discussed by Freeman (1984), argues that the organisational generation of value should be directed to all parties involved in operations, known as stakeholders, instead of shareholders only. In the cooperative sector, the doctrine has a parallel ground, as cooperatives are structurally marked to promote the interest of the members against external capital. Unlike investor-owned companies, which are dominated by profit maximisation, cooperatives use stakeholder logic, where members, employees, consumers and communities have legitimate claims to governance and results (Bijman, 2016). The cooperative principles of concern for community and democratic member control fit well with the stakeholder model, as they both focus on the management of organisations in a pluralistic and participatory manner. Stakeholder theory provides a strong theoretical basis for studying how cooperatives serve various interests during decision making

and service delivery. The operational counterpart is member-centric governance, where it is emphasised that no party should be treated as a passive member but as a contributor to building outcomes of organisations (ICA, 2015). It is through this participatory approach that the principle of one-member-one-vote is crystallised and separates cooperatives from traditional business firms. However, member-centric governance is not only about the right to vote; it needs to be transparent, follow inclusive consultation and have accountability channels that also require maintenance. According to Cornforth (2004), the quality of the relationship between the boards and members in a cooperative determines the level of good governance which is made up of trust, shared values and the availability of information. Therefore, stakeholder theory can offer a structured perspective through which to evaluate whether governance is based on the participation of members or is distorted by elite capture, political patronage or bureaucratic centralisation.

The democratic credentials of cooperatives are based on their ability to balance the conflicting expectations of various stakeholders and to maintain the centrality of their members. Stakeholder theory states that the source of legitimacy is found in sharing the signs of recognition, where everyone is accountable to one another (Donaldson & Preston, 1995). In producer-centric cooperatives, this typically involves a balance between the demands of the producer members, consumer members and employees, a situation that is exacerbated by multipurpose cooperatives. For example, dairy cooperatives must compromise between high prices for milk producers and low prices for consumer cooperatives. Similar tensions between financial viability and social mission present themselves during the trading off between primary agricultural cooperatives and credit societies in Kerala. Thus, member-centric governance requires constant priority rearrangement using communal values and decisions. Stakeholder theory prepares researchers to trace such tensions and evaluate changes in cooperative governance systems to meet the current member requirements. In addition, stakeholder theory notes that relations among different stakeholders are part of a communication, power and trust system. The performance of governance structures lies in such cooperative networks. Member-centric governance will not thrive without healthy stakeholder communications which are ensured by frequent consultations, grievance redressal systems and feedback schemes (Fulton & Hueth, 2009). This participatory culture has been supported in Kerala through mass meetings, public

audits and member education programs. However, there are still inequalities, especially in large federated cooperatives, where grassroots voices may have an attenuating effect. Stakeholder theory calls for redefining these designs within organisations, pointing to decentralisation and subsidiarity as necessary to defend member primacy. In this regard, theory as a tool of analysis can be seen as a prescriptive tool for institutional reforms.

In addition, stakeholder theory considers the moral aspects of governance by assuming that cooperatives have ethical responsibilities to all stakeholders, future generations and marginalised groups. Kerala cooperatives have fostered social justice by offering credit to landless farmers, offering services to tribal people and creating job access for women (Kurien, 1988). Stakeholder theory strengthens the normative case for inclusive governance because all parties affected by an organisation's actions must be represented. As long as this ethical orientation governs member-centric governance, cooperatives can be used as devices for fair development and not just economic output. Equity, literacy and social mobilisation are politically relevant in Kerala, enriching the cooperative model from this normative perspective. The future of cooperatives depends on how far stakeholder involvement is institutionalised and how far member-centred governance is followed. As organisations increase in size and complexity, they become more prone to mission drift and bureaucratisation, where decisions are made by managerial elites and not by the members. The instrumental approach of stakeholder theory implies that organisations that value stakeholder interests perform better over time due to increased trust, loyalty and reputation capital (Jones et al., 2002). The exemplars indicated by the Uralungal Labour Contract Cooperative Society and the primary agricultural banks in Kerala follow this principle by maintaining dialogue with members, reinvesting profits into the region and anchoring social values within their practices. Therefore, stakeholder theory offers a complete outline for evaluating both the internal governance strategies of cooperatives and their external legitimacy in sustaining their missions over the years.

In the literature on cooperatives, the localisation of governance has come to be viewed as an important area of application of stakeholder theory, especially in the Kerala region, where cooperatives have increasingly become central to the framework of

local governance. Decentralisation in cooperative context functions as an administrative decision and a normative requirement: stakeholder theory postulates the devolution of power and decentralisation of authority to those most impacted (Sundaramurthy & Lewis, 2003). The People Plan Campaign wave in Kerala has also strengthened the compatibility of the sector with local democratic institutions. In this light, stakeholder theory opposes the established hierarchical command structure and targets participatory, non-resistant, responsive systems and regulations. Decentralisation increases the voice and exit power of members, thus promoting the practice of organizational accountability and the adaptive capacity of governing policies. The most perceptive idea of stakeholder theory in cooperative governance studies is the concept of stakeholder salience, which is regarded as the most crucial concept, as proposed by Mitchell, Agle and Wood (1997). As much as the way of cooperatives treats all members equally, there is the presence of degrees of power and legitimacy as well as urgency. Trade unions, discussion groups and credit cooperatives sometimes have the problem that large depositors or borrowers within the organisation wield excessive power in decision-making. Stakeholder theory allows theorists to diagnose this type of asymmetry and its consequences for organizational inclusiveness and fairness. The use of the salience framework in Kerala's cooperative climate indicates that marginalised groups, including landless women farmers and migrant workers, remain underrepresented despite formal equality. With the explicitness of salience, governance reforms can be directed toward actively reaching out to and representing vulnerable members.

Transparency tools, such as member dashboards, performance scorecards and participatory budgeting have emerged as tangible vehicles through which stakeholder theory has become an aspect of cooperative governance. These tools are regarded as not only providing information to members but also empowering them to make use of information, thus making members informed stakeholders who can influence institutional decisions (Ostrom, 1990). The number of cooperatives that have embraced digital platforms for governance and grievance redressal applications is growing, which seems to indicate the technological use of stakeholder theory. Transparency is not just in the form of audit reports, but is interactive, real-time and multilingual, which makes it more inclusive and participatory. Institutional norms are not sufficient in determining the success of member-centric governance, but also in

the presence of tools linking knowledge and action. Accountability by leadership is another segment that can be used to harness the value of stakeholder theory, especially in cooperative situations where political affiliation or election into positions causes a change in the leadership team. Leaders do not control an organisation's resources, as discussed in stakeholder theory; instead, they act as custodians of organizational resources (Davis et al., 1997). The concept of leadership is more ethical, fiduciary and moral in the sense that leaders should satisfy the interests of their followers. Although Kerala's cooperative polls have been largely inclusive and frequent, there remains a demand for the institutionalisation of ethical practices and a reduction in political involvement. Solutions to member-centred governance thus involve practices including performance-based leadership assessment, peer responsibility meetings and leadership development programs based on cooperative ethics. Governance should also shift towards substantial accountability based on the well-being of its members rather than personal or political interests, as promoted by stakeholder theory.

The idea of cooperative federalism, the vertical integration of primary society, a district union and an apex body, adds further layers of stakeholder involvement and challenges to governance. There will be economies of scale and bargaining power in this structure, but it can cause a lack of touch with the grassroots realities. Stakeholder theory disagrees with this riskiness by focusing on the aspects of proximity and voice business that the federated layers are not to endanger the autonomy of the base levels and their relevance to the tasks (Birchall & Simmons, 2004). In Kerala, the effectiveness of credit and consumer cooperative unions is frequently explained by the ability to mix the directions of apex bodies with local authority. Such a federation, driven by stakeholders, needs to harmonise policy directions without undermining the input of stakeholder members at lower levels. Vertically integrated structures require the integration of stakeholder rights at all levels, as member-centric governance must be maintained.

The value of stakeholder theory also increases during a crisis when cooperative strength is strictly challenged. The approaching COVID-19 pandemic offered a real-time laboratory to monitor the responsiveness of member-oriented cooperatives to the needs of their stakeholders based on their understanding, responsiveness and flexibility. In Kerala, many cooperatives have established credit moratoriums, health

packs, digital learning support, and food security programs for their members (NABARD, 2021). These actions have no regulatory constraints but involve stakeholder responsibility, portraying the enhanced institutional power emerging from member-based governance. Stakeholder-theoretical approaches to crisis response can not only re-assert cooperative identity but also develop trust, solidarity and viability over the long run. Finally, cooperatives which internalise the idea of stakeholders amass social and institutional capital which can withstand any uncertainty in the future.

3.9 Organizational Communication Theory and Information Sharing

Organizational communication theory is a fundamental paradigm that examines the dynamics within entities and clarifies how cooperatives can produce strong governance, encourage participation and enable shared learning. The theoretical lens brings to the fore the direction, frequency and quality of the flow of information among people and examines its consequences in decision-making, the development of trust and coordination between people (Putnam & Cheney, 1985). We need to examine the role of communication in the process of cooperative businesses. When we arrive at the level of cooperatives, where participation in decision-making forms the basis of the organisational culture, it is perhaps reasonable to say that communication is not one of the means of accomplishing operational requirements; it is one of the organisational structures. According to Miller's (2014) field impression, the availability of clear, accessible and reciprocal contacts induces membership engagement and the development of a common organisational identity, which are of utmost importance in terms of mission convergence and the formation of social capital within cooperative environments. Anything to do with Information sharing is essential for transparency, accountability and empowering members. Roberts (2004) explains that transparency functions as both a value and a process, allowing members of an organisation to access information related to decisions, finances and strategic intent. Healthy communication processes can guarantee that members are not voiceless subjects of dictation of policies by an elite group but are full participants in discourse and discussion. In the Kerala cooperative sphere, there are regular trends of both the declared monthly/quarterly member meetings of such institutions, such as credit unions and the collective businesses of women who blend brief reporting with issue-

by-issue invention of solutions, thus influencing organisational effectiveness. Communication effectiveness is gauged by the ability to deliver information to constituents at the grassroots level in a timely and understandable manner, thereby narrowing the literacy divide and attaining informed consent.

Theorising explorations also reveal that cooperatives employ communication as a stratagem to prevent conflicts and form a consensus. The symmetrical concept of open and inclusive practices has the potential to turn otherwise controversial issues into healthy feedback loops (Tourish and Robson, 2006). This is especially pertinent to the cooperative sector in Kerala, where differences in caste, gender and economic roles may lead to internal conflict. Based on communication theory, deliberative institutional processes such as member assemblies, feedback surveys and community consultations can be referred to as effective means of mitigation. Organisational legitimacy and trust are strengthened through mechanisms that involve systematically combining different voices to strengthen organisational legitimacy and trust. The transparency of the governance process, in its turn, depends on the institutionalization of communication procedures. They found that formal channels, such as circulars, newsletters, noticeboards and digital alerts, should be accompanied by informal exchanges among peers and interpersonal networks to ensure that members are fully informed (Hackman and Johnson, 2013). This type of dual mode has been appraised in Kerala as being effective in sustaining information flow horizontally and vertically. However, the imperative of design is still to prevent bureaucratisation which can possibly jeopardise the member-centric approach of cooperatives. Therefore, the design of participatory communication systems by cooperatives should be done deliberately in a way that will enable the response of the members and drive the organisational policy.

Cooperative communication practices are greatly affected by cultural differences. As Hofstede (2001) analysis of cultural characteristics suggests, open and participatory communication is promoted by high collectivism and low power distance which are typical in the socio-political environment of Kerala. Nonetheless, infrastructural hierarchies that hurt open conversation are given, such as those based on caste, gender disparities and intergenerational divisions. Communication theory can further aid in addressing such limitations through inclusive language, the use of pictures to present

information and the use of the community as a medium of education. These cultural issues are easy to solve and promote inclusiveness in cooperative governance.

Simultaneously, the introduction of digital technologies is transforming organisational communication in Kerala's cooperatives. Generating mobile devices, cloud-based accounting systems and feedback systems with digital feedback encourage cooperatives to complete real-time and simultaneous communications (Ramírez et al., 2020). The use of digital space will offer past financial records, loans and updates in society; WhatsApp groups and SMS can be used for fast coordination. However, the continued existence of a digital divide warrants the establishment of coordinated measures to provide equal opportunities for all. These can be used along with digital literacy programs and to provide information in local languages to promote the democratic ideals of participatory sharing of information.

Organization communication theory provides an important prism through which the processes by which cooperating societies produce, reproduce and interpret information in vertically and horizontally structured constitutions can be viewed. The free flow of information is absolutely mandatory in the context of enabling the transformation of democratic hopes into collective action in a cooperative environment. Taylor and Van Every (2000) argue that for the success of organizations, effective communication is essential. In an organization, member participation, trust and shared goal determination depend on how talk is deployed and performed at the organizational level. One of the most striking expansions of organisation-theoretical knowledge is the shift from transmission-based models to dialogic forms of communication. Traditional linear models prioritise a sender-receiver chain which continually maintains power imbalances (Shannon & Weaver, 1949). In comparison, dialog interaction has a greater emphasis on mutuality, openness and reciprocal sense creation (Buber, 1970, Isaacs, 1999). Within cooperative frameworks, such a sea-change becomes revolutionary: the paradigm shift introduces new possibilities, as it welcomes leaders to disengage with communication as a tool of control and instead think of it as a means of group creation. The kinds of practices that are exemplary of a dialogic orientation are assemblies of members, suggestion boxes, participatory planning meetings and collective bargaining processes, where the flow of the

conversation itself is a source of empowerment and learning within the institutions concerned.

The theory of organizational communication also deals with the development and sustenance of collective identity and culture through symbolic interactions. In cooperatives, identity is constructed not only through legal codes and economic functions but also through storytelling traditions, rituals and rules of lexicon that define a common cause (Cheney, 1983). Cooperative-specific language, such as member dividends, patronage and solidarity funds, satisfies symbolic unity and feelings of belonging. Cooperatives in Kerala operate through cultural, religious and linguistic communities, and this situation demands communicative strategies that balance the need for inclusivity with that of cultural sensitivity. Cooperative identity is essential to loyalty and participation, as well as the peaceful management of inter-group conflict and it is accomplished by design via language. Another major theme of organizational communication theory is trust-building, especially in cooperatives, where the line between members and management is deliberately thin. Trust is not an inherent product of membership in cooperatives, nor is it a natural result; instead, its establishment and maintenance require constant attention through transparent, consistent and responsive communication (Mishra, 1996). Trust can also be destroyed by communicative failures such as covert communication policies, excessive delays in decision-making or unclear messages. In contrast, communication that expresses attentiveness, listening and mutual understanding can support relational trust and institutional legitimacy. Consistency in the use of multilingual bulletins, frequent newsletters and grievance redressal forums is regularly utilised not only to spread information but also to develop and maintain trust among people with diverse expectations and levels of literacy.

Modern cooperative governance increasingly depends on boundary-spanning communication established among cooperative and regulatory organisations, community institutions and financial partners. According to Jablin (1987), boundary roles are imperative for the adaptation and survival of an organisation in a turbulent environment. Kerala's cooperatives are integrated into a wide socio-political web encompassing Panchayats, NGOs, SHGs and state agencies. According to organizational communication theory, to achieve successful external communication,

there must be mechanisms of translation, literal, symbolic and linguistic, to match external insights with internal values. For example, a cooperative society that presents a NABARD application is required to frame its internal priorities in a way that is both compatible and acceptable to the expectations of the institutions instead of compromising its grassroots character. Cooperative sustainability relates to the use of communication as a routine that simultaneously bridges and preserves the boundaries. The interaction and coexistence of formal and informal communication networks is a recurring theme in the theory of organizational communication, especially in pluralistic organisations like cooperatives. Formal communication includes notices, memos and policy manuals, whereas informal communication includes word-of-mouth and peer-to-peer communication and social rituals. Two types of communication are essential: the official one that keeps people accountable and the informal one rooted in warmth, spontaneity and peer learning (Kreps, 1990). Cooperation meetings in Kerala habitually overflow into tea breaks, local festivals and house visits, where trust is built and tacit knowledge is dispersed. The challenges in governance cannot unbox without recognising informal communication spaces as well as exclusion by creating a sense of regime or group belongingness. Organizational communication theory provides a set of analytical tools to bring together the two communication tones of formal and informal communication to strengthen the cooperative's democratic spirit and efficiency.

3.10 Member Satisfaction and the Expectancy-Disconfirmation Paradigm

Expectancy-disconfirmation paradigm (EDP), which was developed in the consumer-behaviour research, has come to constitute the central paradigm theory studying satisfaction in the organizational fields, which embrace the topic of cooperatives as well. According to Oliver (1980), satisfaction depends on how far antecedent expectations and later experiences differ, that is, the minutes when later experiences and antecedent expectations match; positive disconfirmation enhances satisfaction, whereas negative disconfirmation causes dissatisfaction. The given theoretical construct assumes even greater relevance in Kerala's cooperative societies, wherein members simultaneously act as beneficiaries, co-owners and stakeholders. Therefore, satisfaction does not just involve transactional utility but also the satisfaction of economic and socio-emotional needs. The EDP enables scholars to unbundle these

expectations and determine whether cooperatives meet or underperform anticipated member results. The development of cooperative expectations is complex and depends on previous experiences and peer pressure. Zeithaml, Berry and Parasuraman (1993) emphasised that expectations are distilled from a synthesis of word-of-mouth recommendations, marketing communication and individual needs. Expectations are often culturally and historically framed, members can join cooperatives to seek financial support, communal cohesion, democratic organisation or opportunities to act as empowered individuals, a tendency that, in the context of Kerala, is often further accentuated by achievements in a long leadership tradition of people-oriented development and cooperative activism. Negative disconfirmation can occur when cooperatives market themselves as being inclusive in terms of governance or offering subsidised services on one hand but provide disappointing service on the other hand, resulting in disillusionment and withdrawal. On the other hand, low expectations with some service beyond the standards result in positive disconfirming expectations, which, in turn, strengthen satisfaction and loyalty.

Contemporary scholarship can adjust the concept of disconfirmation in EDP by distinguishing between predictive expectations (what the member thinks is likely to happen) and normative expectations (what the member thinks should occur). In a cooperative environment, a member can predict delays, which are bureaucratic but normatively expect fairness and transparency. In case experience exceeds the levels of predictive expectation, there may be a higher level of satisfaction when normative ones are not fulfilled, a process that is highly relevant in cooperatives in Kerala. This intricacy implies that member satisfaction comprises both cognitive judgment and emotional diagnosis. According to Bagozzi (1992), satisfaction is created through both cognitive assessments and affective responses. Cooperative members can rationally evaluate service delivery and meet expectations out of the promise and also react emotionally to staff contact or inclusion of membership. For example, procedural delays can be tolerated as long as members feel honoured and welcomed. Such affective responses are crucial in Kerala, where relationships and dignity are central concerns in institutional participation. The EDP thus enables a comprehensive evaluation of satisfaction through the combination of the emotional connection with the performance evaluation, especially in service-based cooperatives such as credit societies, women associations, and agricultural unions.

The influence of EDP on service quality is another overlapping area of cooperatives research. The SERVQUAL model proposed by Parasuraman, Zeithaml, and Berry (1988) essentially follows the same train of thought as EDP, as it revolves around five service dimensions: tangibles, reliability, responsiveness, assurance and empathy. If these dimensions match or exceed the targets, positive disconfirmation helps strengthen satisfaction. Many cooperative organisations in Kerala have established member feedback systems, digitised platforms and quality certification regimes to formally reduce service gaps. Empirical research shows that both responsiveness and empathy play pivotal roles in positive disconfirmation in service cooperatives. These results support the EDP claim that satisfaction depends not only on the result but also on the mechanics of delivering services and relational aspects. This implies that the EDP has major implications for the long-term sustainability of cooperatives, member retention and loyalty. According to Anderson and Sullivan (1993), satisfaction among members would lead to a positive word of mouth marketing about the institution. In cooperative societies, this is associated with continued attendance at meetings, reinvestment of dividends and the arrival of new members. Cooperatives that continue to achieve or surpass the expectations of their members have high rates of participation and trust, even during external crises or under financial stress. Thus, the EDP provides not only a theory-based diagnostic tool that allows for the evaluation of satisfaction but also a tool that can be utilised to develop organizational resilience, focusing on expectation management, consistency of values and feedback tools.

Expectancy-disconfirmation paradigm has subset over a period of time into a theory used in analysing how consumers attain their satisfaction to a blueprint of how organisations learn as well as strategic organisations. In cooperative enterprises, satisfaction is not only an after-service effect but also a pointer to the correspondence between internal operations and the expectations of members. According to Fornell and Wernerfelt (1987), satisfaction acts as a control mechanism through which organisations can minimise behavioural uncertainty and maximise the allocation of resources. This can be observed most clearly in Kerala cooperatives, which have frequent feedback mechanisms, member meetings, suggestion boxes and grievance forums, all of which are used to adjust strategies for the future. As the patterns of negative disconfirmation become recurrent, progressive cooperatives perceive the occurrence as demonstrating system or structural flaws to validate the potential of the

paradigm as a productive management system. The implication of the paradigm of expectancy disconfirmation, which is becoming visible in cooperative practices, is proactive expectation management. Because expectations are a social construct, they are constantly being developed in regard to communication, branding and experience with peers (Johnson & Fornell, 1991). Counteracting disconfirmation fallout thus necessitates that cooperatives become active in their expectation management efforts through features such as expressing service standards in a tangible manner, issuing performance reports and contacting members fairly. These attempts not only limit unrealistic anticipations but also ease positive disconfirmation when services achieve high standards of recalibrated indices.

Another vital dimension based on which the expectancy disconfirmation paradigm can be re-evaluated is cultural context. Based on Hofstede's theory of cultural dimensions (Hofstede, 2001), satisfaction among collectivist cultures such as Kerala is usually more about group harmony and relations between satisfaction (relational equity) in preference to individual utility maximisation. As a result, members can refer to satisfaction even when there are insufficient services when the cooperative encourages solidarity and a sense of belonging. In contrast, technically efficient service delivery, which seems impersonal or transactional, can lead to customer dissatisfaction. Based on this, the disconfirmation mechanism must be given context to acknowledge that cooperative expectations often include less tangible aspects of cooperation, such as respect, participation and moral reciprocity, especially when older members or those who are more embedded in the community are involved. Another adaptation emerges in the situation of cooperation through the interaction of trust and satisfaction. The relationship between trust and satisfaction may be circular: a previous high level of satisfaction increases trust and high trust increases the standards of dissatisfaction in future interactions. In Kerala's cooperatives, this dynamic is realised through established organisations that emphasise effective communication and responsibility. An accumulation of trust may compensate for any incidence of dissatisfaction following a veteran operational problem, adding strength to the positive level of expectancy, which affects how individuals perceive their future experiences. This view builds on the paradigm of more than being a fixed expectation performance gap, given the dynamic role of trust.

A longitudinal view of the expectancy disconfirmation paradigm highlights that satisfaction is cumulative rather than patchy and is formed in the process of recurrent dealings and organisational remembrances. According to Bitner and Zeithaml (2003), episodic satisfaction eventually leads to relational satisfaction over time, especially in circumstances where a service can be identified as a persistent contact. This is the progression modified in cooperative organisations; the member may range through stages of initial enthusiasm, critical appraisal and attachment or disillusionment: cooperatives are inherently relational organisations. The most peculiar case is to observe disconfirmation movement through the stages of life of the members in a cooperative environment that Kerala has had for many decades. This is another strong point in terms of the cooperative environment. The longitudinal camera makes more receptive satisfaction approaches, addressing the fact that an individual member might have different standards and perceptions over time. The institutional behaviour of cooperatives that internalise the expectancy disconfirmation paradigm is adaptive. Oliver (1999) suggests that, stakeholders who are content with what they get resist change much less easily, as well as promote innovation more easily. Satisfaction as the key organisational value is likely to facilitate the introduction of digital systems, the adjustment of loan policy or diversification of services, a process that is particularly sensitive in Kerala, where economic and financial regimes, changes in technologies and demographics require constant changes. Ultimately, member satisfaction is not only a metric of past performance but also a means of institutional agility and resilience under unpredictable socioeconomic conditions.

3.11 Theoretical Framework for Social Capital, Empowerment and Satisfaction: The Linkages

The connection between social capital, member satisfaction and empowerment is based on the fundamental understanding that cooperatives go beyond economic calculus and are social ecosystems. In this context, social capital, as described by Putnam (2000), which comprises networks, norms and trust that ease the process of taking action collectively, becomes the shared catch break that allows co-operators to interact with each other profitably in both conceptual and emotional manners. Such a construct is based on member empowerment, which is the shift enacted between individuals as handlers of outcomes instead of passive recipients of services. In this

way, empowerment is the product and propagator of social capital and its assumption acquires acute significance when the interested parties perceive individual gain in their participation. This synergistic effect constitutes a positive feedback loop in a collaborative environment, so that both institutional strength and the confidence that stakeholders can place in it are increased simultaneously.

Available empirical studies on community-based organisations establish the utility of social capital as a creator of empowerment. According to Narayan (1999), high levels of social capital foster inclusion, shared responsibility and participatory governance, all of which are vital to empowerment. Densely interwoven local relationships, similar cultural ethos and mutual commitments of the local fishermen in the Kerala cooperative scenario give material shape to social capital, which leads to transaction cost reduction and institutional trust building at the member level. Once people are exposed to such relational and structural circumstances, perceived feelings of mastery, purpose and significance are enhanced, which directly leads to one level of satisfaction.

Empowerment is an extremely effective antecedent of employee satisfaction. To measure the theoretical framework, Spreitzer (1995) divided psychological empowerment into four aspects: meaning, competence, self-determination and influence. When an individual feels that they have a purpose in their place of membership, has the necessary skills and their influence on results, the same level of satisfaction will follow. Such is the case when the Kerala cooperative sector is mentioned in particular; it has kept to routine practices of extending engagement beyond its established financial services to encompass community developments, educational programs and training opportunities. Empowered members are thus likely to develop loyalty, increased activity and external promotion, thus strengthening the correlation between empowerment and general satisfaction. Empirical evidence has also proven that empowerment mediates between and thus enhances the effect of social capital on satisfaction. For example, Seibert, Silver and Randolph (2004) determined that workplace empowerment partially mediates the connection between support situations (equivalent to social capital) and job satisfaction. Projecting such results in the cooperative domain assumes that social capital provides the structural and relational foundation of action, whereas empowerment transforms such resources

into affective and effective return on investments. Thus, cooperatives that possess both strong interpersonal relations and a weak participatory structure can still experience lower satisfaction due to an inadequately elaborated empowerment architecture.

The second important dimension is reciprocity. Fulfilment does not only end but also maintains the social capital-empowerment cycle. Social systems are renewed through such feedback loops; satisfied members conserve networks, maintain cooperative norms and confirm collective ventures, thus renewing the same social capital on which they relied to become empowered in the first place (Coleman, 1988). Intergenerational participation in Kerala is endemic and member satisfaction has become the norm. This helps maintain the existing stakeholders in the institution and attracts those who come forward to join and enrich it further. In this wider socio-political context of the decentralisation of administration, adult literacy and grassroots involvement, the cooperatives of Kerala provide the right setting to execute the proposed model (Harilal and Joseph, 2003). However, there are long-term issues: politicisation, bureaucracy and the transformation of demographics require cooperatives to not only participate in open management systems, capacity-building programs and regular evaluations of satisfaction.

Recent literature emphasises that social capital, empowerment, and member satisfaction are two sides of the same pivotal axis that explains performance and sustainability in cooperative enterprises. Social capital, traditionally viewed as the sum total of existing and potential resources inherent in the relationships among actors (Bourdieu, 1986), provides both structural and cognitive environments upon which the exchange of information, mutual obligations and common norms are based. In cooperative societies, communities with economic aims that converge with social missions, such resources can help provide more trust-based coordination, provide solidarity among members and strengthen the sense of commitment toward common goals. Portes (1998) postulates that social capital can facilitate action and limit opportunism, thus making empowerment feasible and necessary in an inclusive governance system. Thus, empowerment is a culturally specific, multidimensional and structurally mediated process. Consistent with Sen's capability approach (Sen, 1999), empowerment in the cooperative milieu refers not only to those endowed with

resources and rights but also to those who can utilise them effectively. Trusting relationships and rich personal connections allow members to gain second hand knowledge, develop confidence and overcome institutional or social restrictions. Such performance is especially prominent in rural cooperatives in Kerala, where caste, gender and economic situations often combine with the opportunity systems. This means that empowerment is crafted in a socially constructed environment that is both relational and structural.

In this intellectual address, satisfaction is not simply considered a by-product of services provided but rather of perceived self-worth, agency and institutional belonging. According to Locke's value-percept theory (1976), satisfaction depends on how well outcomes match the values that most people hold strongly. In turn, when social capital leads to the empowerment and the realisation of the values of fairness, participation and recognition, satisfaction becomes the psychological attestation of a functioning cooperative. The issue of satisfaction is often grounded in the presence or absence of self-perceptions of member-perceived voice, representation and value acceptance within the memberships of egalitarian movements in Kerala, where historical movements have stressed the importance of egalitarian participation in the membership. These theoretical propositions have been confirmed through empirical research. In an investigation carried out by the World Bank, Krishna and Shrader (2000) provide data showing that increased social capital has a direct impact on the empowerment of individuals in community-based organisations. Respective results are provided by Malhotra et al. (2002), that empowered people will display higher levels of satisfaction along their multidimensional spectrum as far as participation in governance and accessibility to services is concerned. In the case of doing this in the cooperative sector, such evidence shows that throughout the cooperative sector, leaders and institutions need to understand the instrumental value of social capital in granting legitimacy to participation and the capacity to translate the participation into feelings of satisfaction and ownership of the members. Without such conversion, there is a danger of disengagement and apathy, even among carefully organised cooperatives in the region.

There is no linear relationship between the constructs being analysed; rather, the relationship is dialectical. The empowerment fostered by social capital further

strengthens social capital and satisfaction. A contented member is likely to get closer, build new social relationships and actively participate in cooperative governance. This is a dynamic compatible with the self-reinforcing models of organizational behaviour postulated by Argyris and Schon (1996), in which successful organizational learning is the result of internalisation of feedback and consequent influence on both individual behaviour and the systems of an institution. Practically, embarking on watching and reacting to indicators of satisfaction performs better in terms of flexibility, robustness and participation. As the cooperative sector faces a more digitalised and policy oriented world, characterised by changing and advancing ICT tools, innovative financial solutions and guidelines, conventional methods of social capital creation are under threat everywhere. However, digitally facilitated platforms present new avenues of empowerment, made possible by transparency, knowledge circulation and simultaneous automated feedback. Thus, the necessity faced by cooperatives in Kerala is to re-conceptualise how the traditional beliefs of trust, solidarity and empowerment can be nurtured or promoted within the changing scenario. The same types of theoretical models which consider social capital, political empowerment and job satisfaction to be interdependent and co-evolving conceptions offer not only an explanatory account but also prescriptive advice in institutional design and reform.

3.12 Conclusion

To conclude, the theoretical framework of this study promotes a multilevel approach that explains the reciprocal relationships between social capital, member empowerment and satisfaction in the cooperative sector. The four chosen theoretical lenses, namely, the relational, network-based, empowerment-oriented, and stakeholder-specific, allow us to gain a subtle understanding of the social and psychological processes that took place and led to the development of cooperation. Social capital plays the role of the foundation and creates trust, shared norms and binding between individuals with a high level of contact with these individuals, which not only enhances cooperation among them but also serves as a means of empowering group members. In this case, empowerment is more than mere involvement in the decision-making process; it is the process through which members are established as key players with agency, voice and influence in the decision-making process. The aspect of empowered membership, combined with the significance of the involvement

and support of the organisation, enhances the satisfaction levels of the members and, therefore, has reaffirmation effects on cooperative sustainability and vitality.

The framework also emphasises the nonlinear and reciprocal relationship between these constructions. This shows that social capital is not a closed entity; rather, it empowers processes that result in increased member satisfaction, which, in turn, contributes to strengthening the cooperative's social fabric. Such a recursive relationship is particularly sharp in the case of cooperative societies in Kerala, where the values of the community, participatory democracy and mobilisation through grassroots are core. The combination of these theoretical observations provides the basis for a strong filter through which the operations of cooperatives can be studied, understood and enhanced. In addition, the framework offers the intellectual background of an empirical study, allowing the study to go beyond descriptive judgments into a resolute, theory-enriched evaluation of cooperative relations in the area.

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Chapter IV
Conceptual Framework

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Chapter IV

Conceptual Framework

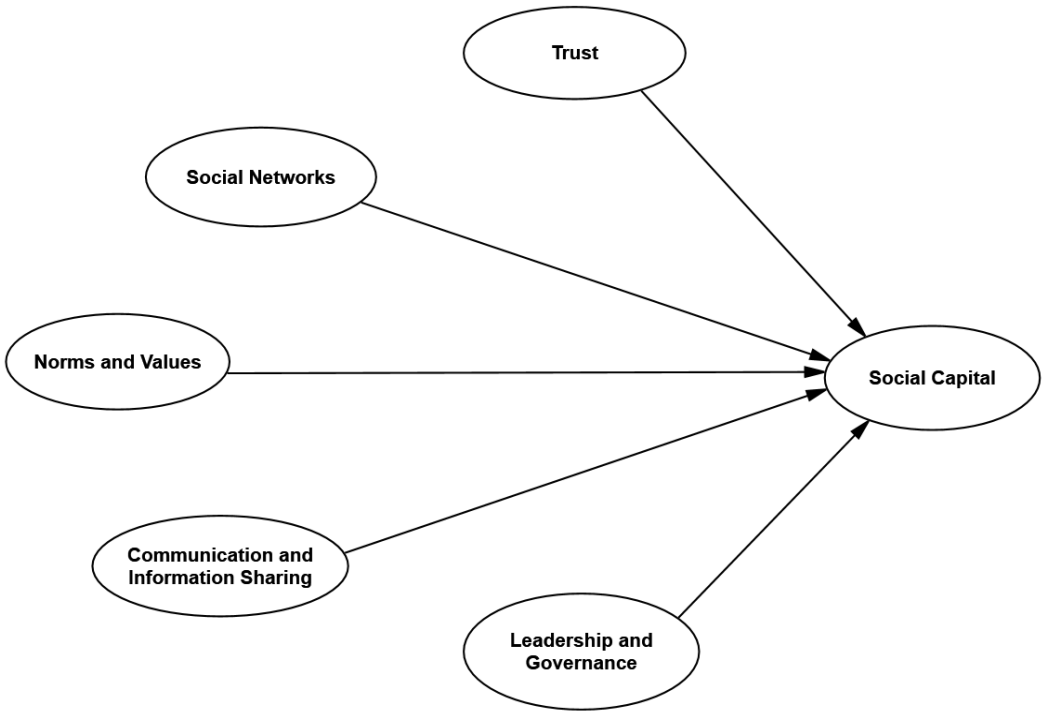
4.1 Introduction

The cooperative movement in Kerala has a long history of healthy and inclusive representation of community-based economic development, with a background of mutual trust, shared values and democratic community management. This background highlights the development of social capital, which is characterised by reliance on trust, social contacts, communications, common norms and values, leadership and governance and participatory regulation as the significant factors influences the performance of cooperative societies. Social capital functions as a process that supports collaboration among members, increases resource access and enhances group resilience. The available contemporary framework of social constructs used in the current study to demonstrate the combining of the above-mentioned dimensions into the social capital within cooperatives includes Trust, Social Networks, Norms and Values, Communication and Information Sharing and Leadership and Governance. It also outlines the channels through which social capital ensures the economic political, legal and social empowerment of participants and, as such, affects their overall satisfaction and long-term commitment to the cooperative model. The conceptual framework underpinning this study highlights how the interconnection of interpersonal relationships, organizational structures and community values leads to the establishment of an effective community cooperative ecosystem that is dynamic and trust-based.

It operates based on the knowledge that the empowerment of members and their satisfaction is not a one-way affair, as it is critically connected to the social capital inherent in cooperative forms. The mediating variable between social capital and member satisfaction is member empowerment, which means that the positive impact of social capital is achieved in full when the members enjoy a physical presence of positive changes in the levels of autonomy, opportunity and decision-making power in the institution. The model makes cooperative performance dynamic by providing a layered perspective of improving it through the identification of the factors that influence social capital, including the mechanisms that build trust, network power,

communication patterns and quality of governance. Furthermore, the framework adopts the change in empowerment that members undergo when they join cooperative societies, demonstrating how cooperative involvement affects individual progress and welfare. In this multi-dimensional and member-level framing, the study attempts to unravel the mechanisms by which social capital formation plays both direct and indirect roles in the sustainable cooperative success in Kerala.

Figure 4.1 Model 1: The Role of Key Influencing Factors in Forming Social Capital among Cooperative Members

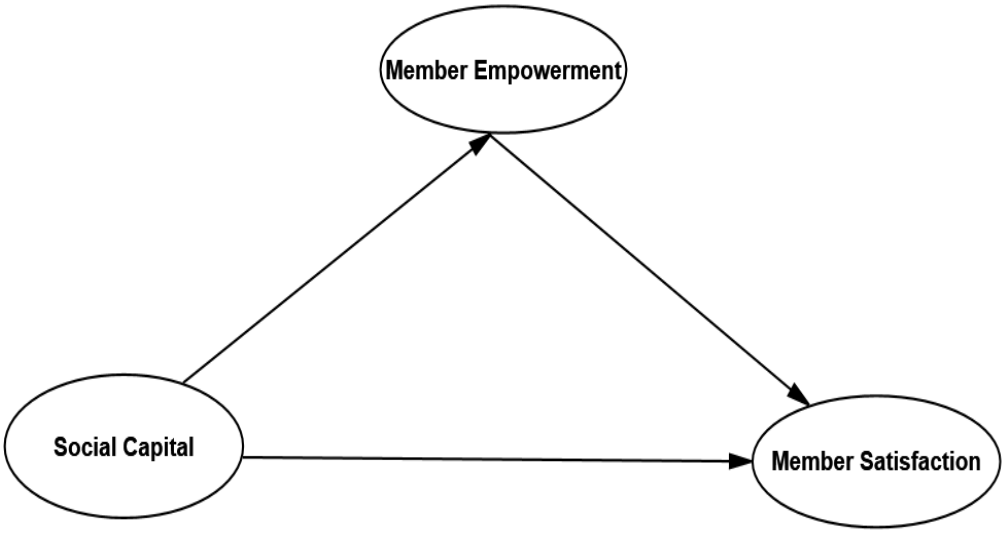


Model 1 The factors that constitute social capital within the members of the cooperative sector is a diagram that provides a visual representation of the main antecedents that can enhance the process of developing social capital within cooperatives. Social capital is framed as a key construct and the only independent variables expected to influence it are Trust, Social Networks, Norms and Values, Communication and Information Sharing and Leadership and Governance. All variables have their resulting nodes enclosed in a discrete node with directional arrows directed to the main node of Social Capital, thus indicating either a causal or correlational relationship. According to this setup, social capital does not develop in a vacuum; instead, it develops through the synergetic interaction of these

multidimensional socio-organizational constructs which balance and complement each other in their efforts to create a unified and mutually collaborative community of members.

The model embraces a holistic and integrative approach to developing social capital in cooperative environments. Trust is the bottom layer which cannot be avoided in cooperation, risk-taking and relationships between people. Social networks act as channels through which information, support and collaboration are exchanged among their members. Norms and values are used to provide the moral and cultural foundation on which the behaviour and expectations of the members are set and communication and information sharing increase the capacity for transparency, awareness and inclusiveness in decision-making. Finally, leadership and governance define institutional processes based on accountability, fairness and democratic operations. All five aspects are the main forces which drive the formation of social capital and shape the ways in which members connect, collaborate and assist the cooperative organizations in achieving success. Therefore, the model shows the conceptual context for conducting testing as well as strategic intervention into cooperative performance to promote internal social capital augmentation.

Figure 4.2 Model 2: The Role of Social Capital in Empowering and Satisfying Members and the Mediating Role of Member Empowerment between Social Capital and Member Satisfaction



The figure 4.2 known as Model 2, social capital in empowering cooperative members and member satisfaction, offers a conceptual framework that considers the direct and indirect impact of social capital on member satisfaction, with member empowerment as the mediating variable. The model starts with Social Capital as a basic construct because it has the ability to establish collective norms, confidence, networks and reciprocity of cooperative societies. There are two directional arrows, one going straight into Member Satisfaction and the other into Member Empowerment. This twofold pathway shows that social capital can affect satisfaction by directly increasing the empowerment of cooperative members.

The model postulates that member empowerment has a vital role in establishing connection between social capital and satisfaction. The arrow linking member empowerment and member satisfaction indicates that the concept of empowerment acts as a channel through which the blessings of social capital are channelled into the expressive representation of such favourable experiences by the members. Experienced members who are appreciative, respected and satisfied within the cooperative are empowered in the sense of having a voice, decision-making power, access to information and self-development. The mediating relationship conveys that when social capital is effectively developed, it results in the establishment of an enabling context which leads to a high level of interpersonal association as well as the ability of its members to connect to the cooperative in a meaningful way, resulting in overall enjoyment. Thus, the model highlights the significance of internal empowerment strategies alongside social integration as preconditions for sustained cooperative performance.

4.2 Mapping the Constructs: From Social Capital to Member Satisfaction

Social capital is a key concept used to explain a group of people in a collective movement, the involvement of people at the community level and institutional performance, particularly in the cooperative sector. As stated by Putnam (1993), social capital is defined as the features of social organisation, including norms, networks and trust, which can be used to enhance the effectiveness of society by increasing the degree of coordination of what people do. In collective establishments, these characteristics are actualised into collective beliefs, mutualism, helping one another, relation reciprocity and a sense of unity. Trust is especially the building block

of cooperation in the ability of those within the cooperatives to share resources and decision-making processes fairly and without the risk of being exploited by other parties. Social networks provide the system structure on which information flows, nourishes relationships and supports group objectives. Such multidimensionality of social capital (from structural, relational and cognitive categories; Nahapiet and Ghoshal, 1998) makes social capital indispensable in the analysis of cooperative success. It is necessary to understand how trust, norms, values, communication and governance practices contribute to the building of social capital to be in a position to assess whether there is cooperative resilience, member participation and economic development.

Trust is the primary characteristic of social capital and the analytical focus begins with this. Trust builds solidarity, reduces risk and builds the moral infrastructure that guides the behaviour of cooperative enterprise members (Fukuyama, 1995). In their absence, the cooperative structure becomes diluted, with members failing to extend cooperation or invest. Acting together with trust, social networks increase access to information and lead to the diffusion of innovation by facilitating cooperatives to change conditions effectively (Woolcock and Narayan, 2000). Such networks, bonding within groups and bridging across groups are essential in creating a common understanding and mobilising resources. Communication and information sharing can be considered a means by which expectations are aligned, feedback is received and transparency is achieved. The presence of leadership and governance processes, which are democratic and inclusive, acts as institutional scaffolding which keeps social norms strong and participatory, thus raising the stock of social capital. The constructs propagate in synergistic relations whereby a complete ecosystem is enclosed and the social fabric is the output and the ongoing reinforcement and redevelopment of the social fabric.

Empowerment in the current context has been defined as the process which enables members to have the ability to make choices and to realise such choices as desired actions and results (Kabeer, 1999). The role of social capital as an enabler and vehicle of empowerment is to lessen the hindrances to participation, magnify access to knowledge and skills and inculcate a feeling of ownership. The role of trusting relations and functional networks stimulates joint learning and group bargaining,

hence the generation of enhanced economic outcomes, such as good access to credit, equitable prices and variable sources of revenue. Internal motivation and self-efficacy are also reinforced by empowerment, which is a determinant of member satisfaction. Since members will feel appreciated, able and connected, they will be more loyal to the cooperative and a virtuous cycle will emerge, in which the empowered members will contribute to stronger cooperatives and find greater satisfaction in their engagement.

Member satisfaction is the outcome variable in conceptual mapping. This is mediated by the empowerment construct and influenced by the social capital. Satisfaction is also measured with reference to economic benefits, as well as on the subjective experiences of the members in terms of satisfying inclusion, recognition and trust in the leadership of the cooperative (Bhuyan, 2007). Hence, the satisfaction of the members is based on the degree to which the cooperative can accommodate their needs, give their voice credit and provide value in a socially bound context. The mechanism that mediates the benefits of social capital into both tangible and intangible results on the levels of satisfaction is empowerment. This highlights the significance of member orientation in cooperative governance, in which decision-making is participatory, relationship-building and information is democratically shared. Therefore, the identified conceptual framework provides a comprehensive picture of the way social capital has a complex connection to the area of member empowerment and satisfaction and offers both theoretical and empirical insights into building strong and efficient cooperatives in Kerala and other regions in India.

4.3 Trust as a Foundation for Social Capital Formation

The highest point of cooperative social capital is trust, which is essential for the formation and maintenance of sustainable relations, community action and aptitude to cooperate in cooperative societies. According to Mayer et al. (1995), trust can be defined as the willingness of a party to be vulnerable on the basis of the hope that another party will do something significant to the trustor, even in situations where they cannot monitor or enforce the action. Therefore, through this psychological mechanism, cooperation is possible in the absence of a legally binding contract. Trust pays off, especially considering its significant role in the cooperative sense, since such entities are massively based on membership which is voluntary and democratic. Trust

not only makes the daily operation of cooperatives easier but also enables members to actively participate in the decision making process. Such measures of trust by members of the cooperation reduce transaction costs by lowering the degree of monitoring, encouraging reciprocity and mutual respect (Fukuyama, 1995) and finally, making trust an operational requirement in the formation and sustainability of social capital.

The development of trust in cooperatives is both an output and input of the same interpersonal and institutional behaviour, which should be consistent and transparent. On the interpersonal scale, mutual trust is cultivated by positive interaction, experience and personal relations among members, thus creating bonding social capital and enforcing internal solidarity (Putnam, 1993). At the institutional level, trust is nurtured by credible institutional leadership, ethical institutional governance and the enforcement of rules and norms of equality. Institutional trust is enhanced when there is a perception of leadership being just, participatory and answerable which instils confidence in members in each other and the institution (Schoorman et al. 2007). Notably, trust strongly overlaps with other aspects of social capital, such as communication, norms and collective values, which are connected through a feedback loop in which each aspect strengthens the other. Thus, trust acts as a facilitator and as the output of the social capital building process, which develops through continuous performance and social relationships.

Moreover, in the present scenario, trust facilitates cooperative members' participation in shared ventures and risk sharing, which are the basic objectives of the cooperative economy. Trustworthy members will be willing to cooperate, share resources and help each other when it comes to financial or operational matters, especially in rural and community-based cooperatives whose access to external capital is low and whose resilience and sustainability depend considerably on the bond between members on a network level (Woolcock & Narayan 2000). Trust removes perceived uncertainty under these conditions and leads to combined investment and long-term planning. Additionally, it enhances the quality of communication, knowledge sharing and informal social controls, which are necessary for the integrity and performance of cooperative governance. In this respect, trust can be framed as the social glue affecting the interests of the members to the common goals of the cooperative organization.

On wider theoretical scales, trust has been viewed as a cornered ramping feature touching on cognitive, emotive and behavioural forms. Cognitive trust is based on sound calculations relative to the trustworthiness and fitness of others, whereas emotional trust tends to be rooted in associative relationships and values (Lewicki and Bunker, 1996). These two dimensions are crucial in collaborative environments. Cognitive trust allows members to have confidence in the competence and consistency of their colleagues, whereas emotional trust creates loyalty, solidarity and feelings of belonging. The mutual interaction of these dimensions makes trust resistant and flexible in novel situations. Finally, trust is the foundation on which cooperative social capital is developed; it triggers cooperation, empowering and increasing the level of member satisfaction and organisation success. When enhancing social capital in cooperatives, any program that may be used to achieve this goal should focus on what builds and maintains trust at both the individual and institutional levels.

4.4 Role of Social Networks in Enhancing Social Capital

Social networks form the relational supporting infrastructure around which individuals in an organisation or community engage in interaction, communication, collaboration and mutual support. In cooperative societies, these networks play an important role in shaping and strengthening social capital and are channels of interpersonal interaction, exchange, trust formation and mobilisation. Based on Granovetter's (1985) conceptualisation, social networks are inherent systems of social relationships that play a persuasive role in economic performance and institutional behaviour. These systems are social support networks that may include formal institutional arrangements, such as organisational committees, as well as informal peer associations, through which resources, information and other emotional support are circulated among the members of the cooperative. By maintaining and repetitive contact, the members build common norms, mutual anticipations and feelings of community, further enforcing the ethic of reciprocity and cooperative ethos, upon which social capital relies and making the cooperatives stronger and more formidable.

In cooperatives, social networks can exist in the form of bonding, bridging and linking social capitals (Woolcock and Narayan, 2000). Bonding social capital refers to close-knit relations among homogeneous groups, including family, close contacts or cooperative members with close socioeconomic or cultural affiliations who offer

emotional support and reinforce internal cohesion, thus keeping organisations intact. Bridging social capital is the interrelation between heterogeneous groups, between which it is possible to share new ideas, foreign visions and establish inclusive networks beyond the cooperative's native community. Linking provides an explanation of social capital as the sharing of contacts among members and external institutions or power structures, such as government agencies or financial institutions, whereby resources and opportunities otherwise unavailable are availed. The comparative proportion of the three types of social capital determines the strength and functionality of social capital in the cooperatives. A well-balanced network structure ensures that cooperative members are both loosely interconnected to allow innovation and are strongly connected internally, which allows sustainability.

Information sharing and knowledge dissemination are closely related to the process of developing social capital. Collaborative networks are essential channels for the flow of ideas, notifications and best practices. Information that is put across reliable networks is easily accepted, internalised and acted upon (Burt 2000). Peers are also used in terms of members to obtain information about credit schemes, training programs, market prices and aid systems within the institutions. Members make better and more informed choices because such knowledge flows minimise informational asymmetries. Moreover, social norms are supported by social validation, which is the result of network interactions that foster accountability. When positive behaviours, such as transparency in financial management or equitability in resource distribution are exhibited by any member of the network or the network leader, the cooperative member will be influenced to conform to these behaviours. Therefore, networks do not function as communication systems but as a system of behavioural coordination, reinforcing the moral and functional structure of social capital.

Moreover, societies that cooperate benefit from social networks that ensure a collective identity and agency among members. Commitment and active involvement are enhanced by strong networks and a feeling of belonging and shared purpose in the organisation. Members who are in contact tend to participate in meetings, express their concerns, make suggestions and take leadership, thus fertilising democratic management. During hardships, these networks act as safety nets by delivering emotional and material support. An example is rural cooperatives that can exchange

resources when they experience instability in their finances or community when they experience social unrest, as they have a collective strength fostered by high-density and trustful networks. Social distance has also been reduced by emotional intimacy and interpersonal familiarity that are essential in social networks, leading to increased participation being inclusive of gender, caste and class lines- a requirement of equity in the development of cooperative institutions.

From a policy and developmental perspective, enhancing social networks within cooperatives has significant implications. Policymakers and leaders in the cooperative sector must realise that it involves more than investing in physical infrastructure and monetary funding; it involves investments in the social structure that binds a cooperative together. Social networks can be enlarged and intensified through initiatives such as the induction of training programs and the use of peer-learning groups, participatory planning sessions and member-engagement strategies (Krishna 2002). The economic promotion of inter-cooperative relations and networks across sectors would also promote bridging and linking capital. Digital technologies also present new challenges to networking, especially for cooperatives located far apart and to enable the respective members to connect, collaborate and mobilise. Thus, the add-on utility of social capital of social networks is fundamental and transformative; the networks serve as a networking medium that integrates cooperative members into a unified, strong, powerful unit and enhances the performance, sustainability and social capital of cooperatives.

4.5 Influence of Norms and Values on Social Capital Development

Norms and values form the basis of ethical and cultural orientations to collective behaviour; thus, they are the most important determinants of social capital within cooperative organisations. Normative constructs, although generally not codified, establish the appropriateness of expectations, obligations and behaviour among participants. Within the framework of cooperation, norms and values act as guidelines that are not formally established but encourage consistency of behaviour and the creation of unity, as well as the establishment of a communal sense of purpose. The collective action that ensues when cooperative members incorporate concepts of honesty, reciprocity fairness and responsibility helps put together a mosaic of a moral environment that is likely to result in the development of cooperative behaviour and

trust (Coleman, 1990). These values are ingrained in daily operations and form the basis for other operations, such as decision-making, member relationships and governance. The strength of these common beliefs is firmly associated with the ability of cooperatives to resist external pressures, manage internal conflicts and provide fair inclusion, which are essential factors for accruing and maintaining social capital.

Norms and values have power because they offer predictability and mutual understanding of those who will play the part of cooperate. When members internalise collective norms, their actions align with the interests of the cooperative despite the failure to formally monitor or enforce its behaviour externally. For instance, a norm of mutual aid or a collective form of sharing labour encourages members to engage in collective undertakings, being contributors when another member is in a crisis or emergency without even requiring some kind of payback. Such collusive activities enhance trust in relationships, thus boosting the role of social capital. Rules of democratic engagement, such as the freedom to vote equally and having only elected leaders who change at intervals, also contribute to inclusive conduct and guard against the accumulation of power. According to Ostrom (2005), norms of fairness and reciprocity cannot be substituted for maintaining self-organised institutions and allowing collective actions. This is why norms are not created but explicitly constructed, transmitted and enforced as part of social interaction, cultural reinforcement and institutional practices.

The identity of cooperative societies, together with their long-term vision, is developed through values that are firmly cultural and ideological in nature. Values act as guides and advise the mission of the cooperative, the code of conduct and strategic decision-making. The focus on solidarity, equity and sustainability leads cooperatives to choose inclusive policies, invest in social development and work with the marginalised populace. Such value orientation adds to the legitimacy of the cooperation among its members and other stakeholders, thus widening its social capital base (Uphoff 2000). Moreover, when personal and institutional values are congruent in the minds of the members, this increases feelings of emotional attachment and moral commitment, making them active stakeholders who are willing to give their time, resources and expertise. This type of intrinsic motivation leads to social cohesion and organizational resilience. Values can, on the other hand, not only

reflect what cooperatives represent but also directly influence the nurture of social capital and its application.

Norms and values are also cultural filters on the activities of members who interpret events, solve disputes and react to change. In actively heterogeneous cooperatives, members are not economically, caste wise, religious wise or educationally similar and high norms of associative cohesion are useful for overcoming social distances and establishing mutual respect. Deliberative decisions are enabled through cultural values, including consensus building, respect for elders and avoidance of conflict, which reduces the threat of factionalism or marginalisation. However, it is necessary to transform these values under the conditions of the new reality, especially in the context of cooperative growth, digitalisation and participation in international markets. In changing environments, normative flexibility, which is the process of maintaining essential-based values by keeping central rules with the flexibility of peripheral norms, is fundamental to maintaining social capital (Narayan & Cassidy 2001). Opening up to collective reflection and the collective re-creation of notions of value in participatory planning sessions and ethics committees will help strengthen cooperatives' ability to cross cultural thresholds and retain their own social capital constructs.

Building social capital using norms and values is an ongoing process of strengthening and regenerating social capital. The decisive aspect of leadership is that it may demonstrate value-driven behaviour that sets ethical norms and generates accountability. Leaders who share the spirit of cooperation generate trust and loyalty among members and leaders who break common rules undermine the moral integrity of the organisation. Values can be shared with new members through education and socialisation and help maintain the continuity of social capital across generations. Cooperative norms can be inculcated through training, induction programs and storytelling and a feeling of belonging may be promoted. There are institutional means through which standards and values can be codified, that is, peer review systems, member charters and community audits through which norms and values can be operationalised and measured. The norms and values within this context are not fanciful notions but rather used as strategic resources that stabilise social capital and determine the behavioural direction and the collective fate of cooperatives.

4.6 Communication and Information Sharing in Building Social Capital

Communication and the free flow of information are crucial preconditions for the creation, sustenance and sustainability of social capital in cooperative societies. Communication, commonly described as the lifeblood of a social system, allows members to expound their views, share knowledge, level expectations and foster bilateral comprehension. Under cooperative conditions, free and frequent communication fosters trust, enforces common norms and makes cooperation possible, irrespective of the fact that social capital is cultivated on the basis of such conditions. Effective social capital is achieved through correct and prompt data in various circuits, which eliminates confusion, creates characterisations and strengthens bonds between members (Lin 2001). In contrast, a lack of communication or the existence of misinformation may lead to the loss of trust, as well as the disruption of social networks and collective efficacy. Consequently, communication not only serves as an operational coordination system but also acts as a strategic resource for creating organizational impermeability and cohesion in cooperatives.

Cooperative communication practices exceed three major dimensions: vertical, horizontal and external dimensions. These dimensions serve a purpose in social capital development. Vertical communication makes it easy to transmit the vision, policies and decisions of leadership to the members and at the same time, members have a chance to raise issues and provide feedback. Policy articulation by leadership helps close the gap between policy, transparency, and legitimacy, which are critical components of institutional trust (Heath et al., 2018). Bonding social capital is enhanced through horizontal communication, including peer-to-peer exchanges that generate solidarity and reciprocity. This allows for knowledge transfer, experience sharing and mentoring in collaborative practices. Outwards communication, especially to government bodies, federations and NGOs, not only helps to bridge and connect social capital but also creates interrelationships between cooperatives and larger socio-economic systems (Lee 2010). Well-organised communication systems in these layers enable cooperatives to run as functional enterprises and operate as socially integrated communities.

The sharing of information within cooperatives does not only mean sharing data; it also involves sharing knowledge, values, expectations and insights in usable and

meaningful forms that can be utilised by members. Trust and perceived psychological safety mediate the relationship between knowledge-sharing behaviour. Members are likely to interact openly and honestly when they feel that their contributions will be appreciated rather than misused. Information sharing also drives social learning, which enables cooperatives to adapt to market trends, policies and community needs. The exchange helps set goals, solve conflicts and negotiate decisions. Multiple inclusive and multilingual communications are important (Chiu et al. 2006) in heterogeneous cooperatives, such as those whose members have different levels of education, experience and languages, so that the marginalisation of any group is not possible and equal participation of members is achieved. In that regard, information can be empowering or alienating; it does not inherently draw any political or social consequences, but its management and distribution can be used to empower or alienate people.

The digitalisation of communication processes opens up opportunities as well as challenges for social capital formation in cooperatives. Mobile messaging, video conferencing systems and social media networks provide a faster range of interactions than their physical equivalents to users. Such technologies unite members over geographical barriers, provide real-time reports and allow participatory governance (World Bank 2021). For example, applications such as WhatsApp groups or Telegram channels have become a necessity in communication between rural cooperatives, where members can be notified, send pictures of crops or products and receive advice from their peers. Nevertheless, digital inequalities in access, literacy and affordability can amplify participation inequalities and disrupt information flow. Otherwise, these imbalances can become centralised in terms of knowledge and decision-making power in the hands of digitally savvy members, thus undermining social capital. Therefore, online communication should be supplemented by projects that develop media literacy, ensure equitable possibilities and preserve traditional first-hand relations, which, in many cases, have certain cultural and emotional meanings.

Finally, the importance of communication and information sharing in boosting social capital cannot be overestimated. Communication secures the potential to persevere in negotiations and renew the agreement on mutual values, helps in problem-solving and reinforces the memory of the institution. Cooperatives which institutionalise frequent

communication forums, member assemblies, feedback surveys, newsletters and grievance redress mechanisms develop situations where communication is normalised and inclusivity is emphasised (Kapucu, 2011). These corporate habits propagate transparency and accountability and foster the ideals of a transparent and mutually respectful culture. Communication is also closely connected to the notion of empowerment, which gives members the ability to spell out needs, apply co-construction of solutions and contribute to strategic orientations, which further empowers its agency as well as the voice of the cooperative as a whole. In summary, communication and information sharing are the pillars of social capital architecture. They can turn cooperatives into lively and trust-dense societies that can spur sustainable development in the case of strategic planning and ethical conduct.

4.7 Impact of Leadership and Governance on Social Capital Formation

Leadership and governance are core factors in determining social dynamics, institutional integrity and the culture of cooperation which promotes social capital formation. In cooperative situations, leadership becomes more than an administrative domain; it is a relational and ethical practice that fosters cooperation, builds trust and encourages collective action. Proper cooperative leaders are ethical, democratically inclined in the decision-making process and visionary in their approach, which facilitates the growth of both cross-boundary and cross-bridging social capital. Governance can be seen as providing the material and authoritative infrastructure for how cooperative principles of transparency, accountability and equality can be put into practice (Agrawal & Ribot, 1999). Leadership and governance control the establishment of norms, distribution of power and preservation of institutional legitimacy. Their quality directly affects the participation of members, interpersonal trust and a common sense of ownership, which are characteristic features of social capital.

Leadership is highly influential in building, maintaining and formalising relationships. Vision, inspirational and empowering transformational leadership build an environment where members recognise themselves as valued and are inducted to actively participate in interdependent activities (Bass & Riggio, 2006). This kind of leadership increases the atmosphere of trust because it encourages ethical behaviour, empathy and group goals. Transactional leadership, which is directed at performance

and compliance-oriented interactions, tends to curtail the intensity of the relational connection, which may hinder the long-term cohesiveness of members. Relational trust may have formed in member-owned organisations such as cooperatives due to a high level of interaction with leaders who are people-oriented, possess transparency in their communication and handle complaints constructively. When leaders are identified as having integrity and fair behaviour, they act as role models and instil the values of cooperation embedded in the culture of the organisation and the norms needed to bring strong social capital (Dirks & Ferrin, 2002). Therefore, the personal traits and predictability of cooperative leaders are central to social credibility and organizational strength.

Governance mechanisms provide an institutional framework through which social capital is controlled, secured and strengthened. The principles of good governance include inclusiveness, responsiveness, the rule of law and participatory oversight (UNDP 2007). These values ensure that members have equal access to expressing issues, input in strategic planning and the assessment of cooperative functioning. The relationship between cognitive trust and transparent governance is that opportunities to ensure clear governance promote cognitive trust. However, when governance is participatory, emotional ties are created among the members. The confidence of members in cooperative leadership and processes is enhanced through regular general body meetings, democratic elections and easy access to grievance redressal processes, among others. On the other hand, a lack of transparency in the decision process, elite control or failure to properly manage the cooperative destroys trust and social bonds within cooperatives. Bijman et al (2012) argue that cooperative governance should change in such a manner that manages accountability and flexibility especially in diverse or growing membership in a manner that leads to sustained growth of social capital.

Power and resource access are also affected by cooperative leadership and governance, which adjust the ideas of fairness and social justice. Resource allocation, sharing benefits, giving the right to influence decisions and be included in decision making process are to be promoted. By actively working with people who have traditionally been marginalised in society (women and lower castes or those who are economically weak), the leaders of the cooperative will demonstrate that they are

determined to empower all people through teamwork, which will also increase the amount of social capital of the given cooperative (Grootaert & van Bastelaer 2002). Equity-based governance decreases asymmetries of power, stimulates horizontal solidarity and reinforces inter-member relationships. Mediation processes based on participatory dialogs and cultural awareness serve the purpose of preserving stability and safeguarding social capital against internal ruptures. Therefore, leadership and governance are not only managerial systems but also normative systems that establish and maintain social relations in cooperatives.

The relationship between leadership and governance and social capital should be perceived as dynamic and changing. As cooperatives expand, face new challenges, handle digital transitions and experience market pressure or intergenerational life, leadership styles and governing frameworks need to change to ensure social cohesion. Such transitions demand adaptive leadership that incorporates strategic foresight, emotional intelligence and flexibility in participation to enable emerging leaders to deal with the transition without compromising inclusivity and reliability (Heifetz et al., 2009). Members will be supported to be engaged and informed by governance processes that decentralise authority, embrace technology as a source of transparency and formalise mechanisms for accountability. Furthermore, leadership training and governance audits generate a culture of constant recreation and moral accountability. In conclusion, leadership and governance are not an appendage to social capital but rather its products and custodians. What makes cooperatives effective is whether they will continue as strong networks of mutuality and collective prosperity or turn into collapsing hierarchies or something in between.

4.8 Social Capital as a Driver of Economic, Political and Legal Empowerment

Social capital is a central building block of economic empowerment, as it facilitates access to resources and cultivates trust in exchange and economic behaviour in communities. In collaborative industries, especially those found in rural or resource-limited environments, social capital plays a substitute role in formal institutions and markets where they do not exist or are not accessible. People integrated into networks characterised by a high degree of trust, reciprocity and shared norms engage in economic activities at low transaction costs and low risk (Narayan & Pritchett, 1999). Such networks do not merely show mutual encouragement, they also reduce

dependence on official guarantees and legal enforcement in financial matters. Social capital enables inclusion in the economy and coordinates individual action towards collective well-being through collective organisations, such as self-help groups, joint liability and cooperative credit and converts helpless units into empowered economic participants.

It is the information flow in social networks and the quality of this information that sustains the economic workings of social capital. Timely and credible information concerning market potential, prices, availability of inputs and consumer preferences will enable cooperative members to make better financial and entrepreneurial decisions (Portes 1998). Informal social networks act as a valuable source of market intelligence in most developing economies where formal communication networks are poor or biased. These networks can diminish information asymmetries, especially in the case of women, small farmers and microentrepreneurs who may be locked out of formal systems of credit. In addition, social capital allows its members to share their knowledge, develop joint approaches and innovate their solutions by combining experimentation and learning, which makes the economy more adaptable and competitive. Patterns of regular meetings, peer-to-peer mentoring and the use of community platforms as information nodes help solidify bridging and bonding capital and have a direct effect on the economic capacity of cooperative members.

Social capital leading to economic empowerment involves greater bargaining power, resource mobilisation and better access to credit. The cooperatives and community organisations that build their social capital often end up gaining better bargaining power with external stakeholders such as government agencies, financial institutions and private firms. By appearing as a unified and organised group, members boost their credibility and collective voice and gain access to grants, subsidies or bulk purchase programs that they could not otherwise access on an individual basis (Woolcock 1998). Financial intermediaries who are ready to provide credit under group lending models are also attracted to trust-based associations. The social costs of default, such as loss of reputation, expulsion from the group or other forms of punishment, work better than legal deterrents in forcing defaults in such frameworks. This has had the benefit of not only making more finance available, but also exercising financial discipline and tolerance, which is critical in light of the current financial crisis.

Social capital also enables inclusive participation and democratises access to opportunities. In contrast to capital held only by a small powerful group, social capital may be shared more evenly if intentionally nurtured in mutual organisations. Cooperatives also offer a window through which marginalised members of society can lay claim to their agency and livelihood resources by establishing networks between communities that cut across barriers of caste, gender and class (Mayoux 2001). Women and other disadvantaged groups are regularly provided with training, leadership opportunities and a voice in decisions that might otherwise never apply in socially inclusive cooperatives, which gives these groups better overall economic independence and self-confidence. In addition, the unity and emotional security created in such networks prevent exposure to financial crises.

In addition to personal empowerment, social capital is a resilient force in the economic landscape. Inspired people boost local economies through increased productivity, business establishment and smart consumption. Cooperative societies with high social capital also remain stable with high trustworthiness, good morals and responsibility which are appealing to partners, customers and investors (Grootaert et al., 2004). Moreover, social capital multiplier effects can be quite substantial: strengthened people tend to invest in community development, train others and have a ripple effect so that growth can continue in the surrounding group. In the long term, it becomes a virtuous cycle, with economic empowerment leading to strengthened social capital and vice versa. Therefore, incorporating social capital into economic plans not only positively influences cooperation performance but also plays a fundamental role in the development of inclusive and sustainable development in the future. Therefore, policymakers should consider social capital not as a soft or secondary capital but as a tool that is fundamental in instilling economic strength and resilience in communities.

Further, the relationship between social capital and political and legal empowerment is well illustrated by several empirical studies. Putnam's (1993) analysis of Italian regions demonstrated that areas with strong civic traditions and dense social networks tended to have more effective democratic institutions and responsive governance. Similarly, Narayan (1999) highlighted how rural communities were able to leverage social capital to influence local development decisions and secure access to entitlements, thereby strengthening their political voice. In the context of rural India,

Krishna (2002) found that social capital played a significant role in enhancing villagers' ability to engage with and influence local government institutions, underscoring the link between social embeddedness and political agency. Inglehart and Norris (2003) further argued that interpersonal trust and civic engagement are critical predictors of political activism, particularly in liberal democratic contexts.

4.9 Member Empowerment as a Pathway to Member Satisfaction

Economic empowerment is of great importance as one of the major determinants of member satisfaction, referring to the progress through which people gain control over their own funds, choices and opportunities. It neutralises passive users of economic decisions and makes them active subjects who can adjust their means of livelihood and future by actively engaging in the process of economic decision-making. Empirical forms of economic power in cooperatives entail a rise in income, widening employment opportunities, access to financial services and co-participation in economic decision making. These result in the creation of concrete benefits in the standards of living of members, thus creating a feeling of fulfilment, pride and loyalty to the organisation. Malhotra et al (2002) argue that economic empowerment enhances the capacity of an individual to make strategic choices in his or her life which is an aspect denied in situations where economic agency is restricted. The success of the cooperative organisation is that when the members feel economically secure and financially independent, satisfaction with the cooperative organisation increases. This is because of material gains and, even more so, feelings of self-esteem and dignity.

The connection between member satisfaction and economic empowerment presents many mechanisms that can be understood comprehensively. One such mechanism is improved financial stability and decreased vulnerability to poverty. Cooperatives providing microcredit, collective marketing, saving schemes and other income-generating activities directly provide economic well-being to members by facilitating the financing of small enterprises, meeting household needs and controlling financial risks. However, such empowerment is a cumulative process, with the main advantage being increased satisfaction among members, who will eventually view the cooperative as a reliable and responsive system for enhancing their livelihoods (Cheston & Kuhn 2002). Moreover, cooperative organisations allow collective action

to address systemic economic obstacles, including access to the market and price fluctuations by creating collective bargaining power and political legal awareness. Members get better deals through collective economic enterprises and eliminate exploitation by middlemen to enhance their feeling of success and prosperity, which strengthens their feeling of belonging to the organisation.

Satisfaction is another factor affected by member empowerment which increases the power of decision-making and agency at both the cooperative and household levels. As income and assets are controlled by the members, especially women and marginalised groups, participation in governance and decision-making has been enhanced. Embracing participation enhances the quality of organizational decisions, increases perceptions of fairness, openness and esteem and leads to increased satisfaction with cooperation. Self-confidence and assertiveness can also be ascertained through empowerment, according to which members are enabled to express their opinions, protest against unreasonable matters and support change (Kabeer 2001). Therefore, an optimal degree of reciprocity lies between economic empowerment and satisfaction.

Another aspect of economic empowerment that is often overlooked is the ability to build long-term resilience and adaptive capacity among its members. Empowered people are better placed to survive economic shocks, such as climate change, economic recession or health crises. Cooperatives incorporating resilience plans in their business (such as emergency mortgage funds, diversified income projects, capacity building training workshops and many more) are of great benefit to the financial safety of the members, enhancing organisation satisfaction and trust (Alsop et al., 2006). Emotional attachment and loyalty occur when members notice that the cooperative has the capacity to help them during distress. This kind of relationship, which is based on perceived dependability both in good times and in the crisis period, transforms satisfaction into a long-term commitment which is not a transient response. Consequently, cooperatives that prioritise economic resilience in their empowerment processes are likely to foster long-term member satisfaction.

Economic empowerment supports the value proposition and credibility of cooperative institutions. When members feel they can get direct measurable benefits, such as greater income, reduced dependence or higher social status, they become willing to

favourably endorse the cooperative and persuade others to join. This natural advertising enhances the brand name and sense of cooperativeness to boost internal satisfaction. In addition, due to the economic strength of concerned members, paying dues is regular and punctual among members with regular attendance at meetings and active participation in cooperative activities, thereby strengthening organizational performance and social unification (Sanyal, 2009). Satisfaction serves not just as an affective reaction as an entrant in this scenario but also as a strategic driver that has the potential to maintain productive development and empower social capital. Therefore, economic empowerment is both a product of development and access to emotional and psychological satisfaction, as well as the participation of its members. Therefore, cooperatives that aim to maximise member satisfaction should place economic empowerment at the centre of their strategic moves.

Along with economic empowerment, political and legal empowerment play a significant role in shaping member satisfaction within cooperative organizations. Political empowerment in cooperatives refers to the ability of members to participate actively in decision-making, influence policies and hold leadership accountable. Legal empowerment involves members' awareness and use of legal rights, protections and institutional mechanisms that support transparency and fairness within the cooperative structure. When members feel politically empowered, they are more likely to perceive their participation as meaningful, which enhances their sense of ownership and satisfaction with the organization (Kabeer, 1999). Empirical studies have shown that political participation and inclusive governance in cooperatives contribute positively to member satisfaction. Birchall and Simmons (2004) emphasized that democratic control and member participation are core principles of cooperatives that directly affect satisfaction levels. When members are involved in governance and policy-making, they develop trust in the system and feel more invested in the outcomes. Similarly, Craig and Pencavel (1992) found that cooperative members who perceive decision-making processes as fair and participatory report higher job and organizational satisfaction.

Legal empowerment also contributes to satisfaction by ensuring that members have access to grievance redressal mechanisms, clear rules and legal protections. Golub (2003) noted that when individuals understand and are able to exercise their legal

rights within an institutional framework, it not only increases accountability but also builds confidence in the system. In the cooperative context, this fosters a culture of fairness and transparency, which strengthens member loyalty and satisfaction.

4.10 Dimensions of Social Capital: A Structural Framework for Cooperative Success

Social capital is a multidimensional concept that is critical for the performance and survival of cooperative institutions. It is an advanced convergence of structural, cognitive and relational aspects that, in combination, facilitates shared power, governance, trust and inclusive development. Social capital is structural in network structures and institutionalised relations of coordination and flow of information between members (Burt 2000). Cognitive social capital refers to the collective norms, values, attitudes and beliefs that support cooperative identity and mutual understanding (Krishna & Uphoff 2002). Relational social capital, in its turn, denotes trust, obligations and mutual respect created by means of an interpersonal interaction. The dialectical relationship among these dimensions is used in the formation of organizational culture, strengthening groups and collectivistic effects in cooperatives. This identification and intentional development can provide cooperatives with an organizational basis for achieving economic sustainability, community-inclusive democracy and social unity.

The structural aspect of social capital is captured in visible network patterns and institutional setups that determine the relationship of individuals, both internally and externally in a cooperative organization. Activities in this dimension entail attendance at meetings, interaction with external stakeholders and participation in an array of committees and workgroups. Well-defined structural networks boost communication processes, resource mobilisation and responsibility (Lin 2001). The emergence of dense and overlapping networks is particularly beneficial in collaborative environments, where homogenous results in terms of efficiency are highly valued, as such structures promote the speed with which information is shared and reduce transaction costs. Bridging and linking capital is also produced through such networks by linking their members to external resources such as government programs, markets and support agencies. Structural resilience of the social capital of a cooperative is one of the pillars of institutional legitimacy and guarantees productive integration of

representation in decision making. Therefore, cooperatives should invest in inclusive structures that promote regular interactions and communication among different member groups.

The mental aspect of societal capital is the commonality in goals, language, values and beliefs, which results in mutual perceptions and feelings of belonging. This dimension plays the role of glue in cultures that hold the organisation together and provide a moral compass. The difference between successful and unsuccessful cooperatives is that, in the former, the members have a strong collective identity based on cooperative values, including equity, mutual aid and self-help. This thought pattern not only enhances collaboration but also reduces disagreements and simplifies collective decision-making (Harpham et al., 2002). In addition, cognitive capital stimulates moral commitment and in many cases, it can be more efficient than legal contracts in terms of the responsibility and integrity of members. Cooperatives that deliberately develop cognitive social capital through orientation sessions or stories enhanced by shared training develop a shared organizational culture that boosts internal unity and strength. The correspondence of individual values with a shared vision is transformed into an increase in the satisfaction of members and the stability of the organisation over time.

The relational aspect of social capital focuses on interpersonal trust, reciprocity rules and the strength of social ties between members. Successful cooperation is partly a result and cause of trust: trust lessens uncertainty, increases participation in risk-taking and removes the necessity for costly enforcement strategies (Fukuyama 1995). Therefore, relational capital is essential for developing loyalty and mutual respect in cooperative environments characterised by a high degree of interdependence. Reciprocity standards rule that members will help each other when necessary, whether financially, emotionally or in action. This type of relational strength is more meaningful in rural areas or marginalised settings, where formal support structures can be scarce. It can also assist in solving conflicts because close interpersonal relationships provide a stimulus to negotiate and grant compromises. The same applies to relational capital through transparent leadership, frequent communication and mediation processes. Cooperatives with high relational social capital tend to have

less attrition and enhanced participation and workability in terms of steady membership.

The three dimensions of social capital have the inherent power to transform by reinforcing each other through their interdependence. Although the dimensions have a set of uniqueness in them, they are interdependent; that is, structural networks build strong correlation to cognitive alignment and within relations; cognitive values are exchanged with relational ties and institutions; and relational trust is reinforced with meaningful interactions and common goals. Therefore, collaborative leaders must consider systems when pursuing social capital development. All three dimensions can be assessed using evidence-based assessments, audits and frameworks to gain strategic insights into the strengths and gaps in organisations. Then, strategic interventions can be developed to reinforce lagging dimensions and provide them with the unity of the whole by introducing mentoring programs, governance reforms and the use of member engagement platforms.

The long-term success of a cooperative is finally related to its ability to achieve, develop and use multidimensional social capital as much as it is to monetary investment or its presence in a market. It is an organizational structure that can serve as a blueprint for both people-capable and performance-based interventions. By adjusting structural capital, developing a shared meaning and collaborative identity (cognitive capital) and building trust and reciprocity (relational capital), cooperatives can create an environment in which members are economically knowledgeable and socially committed. This type of comprehensive investment in social capital increases flexibility, resilience and effectiveness, thereby supporting the dual mission of cooperative economic development and social transformation. Based on this, one of the strategies for cooperative governance, member satisfaction and sustainable development must be to comprehend and reinforce the dimensions of social capital.

4.11 Interlinking Social Capital and Empowerment: A Conceptual Model

Bringing together the two concepts of social capital and empowerment is one of the fundamental theoretical frameworks that scholars use to examine participatory development, especially in cooperative organisations. In this case, autonomous choice finds the enabling context constructed by social capital, which can be described as a

setting of trust, networks, norms and mutual relations (Kabeer, 1999). On the other hand, empowerment refers to a multi-dimensional process through which individuals and groups are enabled to exercise conscious life choices in situations where the ability to do so was previously denied (Kabeer, 1999). In this respect, the conceptual model that conceptually relates these constructs premises that the existence and build-up of social capital is both a precondition and a driver of empowerment at both the individual and group levels. Community-type societies with group action and support are particularly favourable for this interaction. Under these conditions, members of a trust-based network and those who participate in the collective decision-making system have the opportunity to access resources, recognition and agency, which are vital for empowerment.

The key to this interlinkage is the functional tripartite typology of bonding, bridging and linking social capital, which has different impacts on empowerment. Bonding capital joins society-based people, while their unity increases their internal solidarity and feeling of power when they develop a sense of belonging and emotional support (Putnam, 2000). Bridging capital is formed by horizontal ties between diverse groups, extending empowerment by making it more open to various perspectives, information and market opportunities. Through the vertical association of social capital to institutional structures, governments, financial institutions or non-government organisations can generate structural empowerment to stakeholders, which provide access to resources to them (Szreter & Woolcock, 2004). As cooperative members are integrated into networks providing them with mutual support, expanding their worldviews and making institutional participation easy, cooperative members are no longer passive recipients but active decision-makers. The effect in this case proves to be cyclical; empowerment is supported through social capital and empowered actors, in their turn, reinforce and increase social capital.

The causality between social capital and empowerment must be bidirectional and part of a comprehensive model of social capital and empowerment. Social capital facilitates empowerment by providing access to support systems and institutional mechanisms, whereas empowerment adds a dimension to social capital by encouraging actors to uphold relationships, engage in collective action and adhere to trust-based norms. In this way, relational trust is strengthened and social networks are

enhanced, thus propagating cooperative values or the process which builds social capital (Alsop et al., 2006). Such a feedback loop is essential, as it shows that social capital and its empowerment are co-evolutionary systems rather than one-way processes. Development efforts that fail to recognise this give and take are therefore likely to lead to short-lived or lopsided results.

Moreover, social capital and empowerment are mediated by the quality and culture of institutions. Institutions, both formal (e.g. cooperative bylaws and leadership structures) and informal (e.g. community norms and traditions), influence the accumulation of social capital and the perception and exercise of empowerment. Institutional environments characterised by elite capture, corruption or exclusionary practices do not permit the flourishing of any form of empowerment, despite strong social capital at the micro-level. In this regard, the model will be true to the extent of the social fabric formed among members through community norms and traditions. The notion of empowerment and social capital building are similarly culturally affected; norms of gender, hierarchies in castes or religion-based beliefs all affect the way a person feels empowered. Therefore, it is evident that a model should be sensitive to provide the context, where the variables, including institutional trust, leadership style and socio-cultural barriers, should be incorporated to comprehend the intricacy of their relationship.

Empowering interventions with marginalised members, for example, through leadership development, empower individuals and serve to diversify and strengthen the resilience of social networks within the cooperative. Similarly, openness in communication links enhances trust and participatory governance, strengthening social capital and individual agency. The instruments used to monitor these movements must be embedded in this conceptual model and their application must not only evaluate economic indicators but also the changes in the level of trust, density of their networks, the role played and the level of efficacy as perceived by the subjects (Krishna 2001). Finally, social capital and empowerment are interrelated not only on the theoretical level, but also they form part of the practical model that could transform cooperative movements in their quest for holistic and sustainable development.

4.12 Empowerment as a Mediator: Bridging Social Capital and Member Satisfaction

Empowerment acts as an intermediate factor and connects social capital to member satisfaction in cooperative situations, which offers a consistent explanatory grasp of the transformation of social resources into emotional and acting outcomes. As a resource, social capital, a set of trust, common norms, social networks and institutional involvement in social participation, is a primary resource that allows the interaction of the members and their participation in a common activity (Coleman 1990). However, social capital alone is insufficient to achieve member satisfaction. Rather, the change will be linked to the degree to which people feel empowered, economically, socially and psychologically. Thus, empowerment emerges as the process whereby intangible social capital to tangible social capital, i.e., the sensations of autonomy, influence and success. Therefore, the empirical analysis of empowerment as a mediating factor helps explain the channel that leads to the increase of subjective as well as objective satisfaction of the members of cooperatives by social capital.

At the psychological level, empowerment implies understanding a feeling of self-efficacy, meaning, perceived life mastery and the environment. Cooperation in the area of strong bonding and bridging social capital provides an open environment in which members share ideas, express their vision and criticise social or institutional limitations (Zimmerman, 2000). Self-esteem and the desire to act increase when people are listened to and their opinions are appreciated. This individual power is central to turning social capital into satisfaction, since the members are transformed into those who can contribute and are no longer passive beneficiaries of social capital. They are also enhanced by cooperatives that engage in inclusive governance and open communication, which are associated with members feeling a sense of agency, a direct relationship with an increased level of contentment, commitment and loyalty to the organisation (Spreitzer, 1995). Psychological empowerment then becomes a mental connector, making social capital a personal intrusion and an emotionally gratifying experience.

On a social level, empowerment as a mediator can also be defined by the fact that society can have the power to influence the dynamics of the group, people can

question discriminatory norms and they can contribute significantly to decision-making. When there is an abundance of bonding and bridging social capital in a given environment, the members tend to organise themselves into forces and build solidarity and action to act collectively (Narayan, 2002). This dynamic helps create empowerment not only at the level of personal interest but also at the level where marginalised groups of people, such as women and youth, as well as lower-caste individuals, take control in the areas of leadership and building cooperative agendas. The identification with and satisfaction in cooperative performance and relevance increase as their members receive social recognition and influence. Empowerment as a collective also leads to accountability and cooperation among people which enhances the quality of service and equitability of the resource. Such results fulfil instrumental and emotional needs with the help of an empowering social framework.

At the economic level, empowerment acts as an intermediary between social capital and member satisfaction by increasing the availability of resources, skills and income-generating opportunities. In cooperatives with established relational networks and trust, members can obtain loans, training and marketing assistance that is not available elsewhere (Alsop et al., 2006). Access of that sort enhances economic status and independence which are major determinants of satisfaction. The stronger the attachment of the members to the institution, the more they are willing to be involved in the activities of the institution when their participation leads to a quantifiable improvement in their livelihood. Members who are economically empowered also spend time on the cooperative and are more likely to ensure virtuous circle empowerment and satisfaction. This reiterates the role of economic empowerment in transforming the communal property of social capital into a personalised licence for prosperity and institutional devotion.

The mediation concept of empowerment also points to the need for moderating variables that play a role in determining the strength or direction of the relationship between social capital and satisfaction with life. In determining the range of empowerment experience and its effectiveness as a connector of social capital and satisfaction, leadership inclusiveness, cultural rules, gender relations and effective institutional governance are established (Ibrahim & Alkire 2007). On the other hand, women might gain the benefits of a social network in a patriarchal environment but

not participate in making decisions and earning money, which lowers the relationship between empowerment and satisfaction. Similarly, social capital can be concentrated in cases where the system of cooperative governance is either opaque or dominated by elitist hands, restricting its empowering role. Such reflections require a more variable and condition-specific use of the model, where empowerment serves as a context variable and output as a result of context enablers and obstacles.

4.13 Unpacking the Multi-Dimensional Nature of Member Empowerment

The concept of member empowerment in cooperative societies is multidimensional, encompassing economic, psychological, social, politico-legal and informational aspects. All these aspects work collaboratively to help cooperative members change into active players who can determine their destinies and make significant contributions to the common good. The process of empowerment is not unilinear; rather, it entails institutional changes to access resources, capacity improvement and the change of agency (Sen, 1999). In cooperatives, this multidimensional empowerment is not only required to develop individuals but also plays an important role in reinforcing the institution and making performance outcomes more positive. In line with this, a holistic approach to empowerment should surpass gross indicators of income generation or participation and penetrate the entire range of differences that members undergo regarding sense of autonomy, influence and belongingness in the cooperative ecosystem.

The most visible and measurable form of empowerment is economic empowerment, which consists of improved access to income, assets, financial services and economic opportunities. Most cooperatives have developed economic empowerment through collective bargaining, credit access, joint marketing platforms and skill development activities. Such interventions increase the livelihoods of members and make them less economically dependent, especially those from marginalised communities (Mayoux, 2001). However, economic empowerment is not only concerned with access to such resources; it is also related to how these resources are controlled and used. The ability to strategically prepare financial plans, invest in business and establish resilience against economic shocks is the substance of economic empowerment. This financial independence creates greater self-esteem and organizational commitment, leading to long-term involvement in cooperative activities.

Psychological empowerment is associated with internal attribute formation processes, such as self-confidence, motivation, perceived competence and sense of agency. All these attributes are essential to each cooperative and its growth, as they provide a favourable atmosphere where the members can express themselves, take responsibilities and get the feeling of achievement by sharing it (Thomas & Velthouse, 1990). Psychological empowerment is strictly related to identity and self-concept; members who perceive themselves as significant agents of value to their cooperative will be willing to take initiatives, innovate and impact decision-making. Empowerment is a snowball effect in the sense that members with a strong sense of psychological agency will find it easier to assist other members, participate in group problem-solving and invest in the cooperative's common interests. Therefore, psychological empowerment is an engine that keeps participation going and strengthens the cooperative's capacity to adapt.

Social empowerment focuses on changes in relationships, inclusion in society and the capacity to exert control over social conventions and processes. In the context of cooperatives, this entails breaking down caste, gender, ethnic or class barriers and a close approach to equality in terms of access to leadership and decision-making. Social empowerment enhances interpersonal networks, mutual accountability and the development of a culture of respect and recognition (Cornwall & Brock, 2005). By transforming cooperatives into places of inclusion, members gain social credentials and begin to feel confident about participating in a greater community. Socially empowered individuals often act as community leaders, resource persons, or mentors, thus strengthening the wings of the cooperative and deepening its social capital. Social empowerment plays a role in resilience, strengthening trust, solidarity and common values that are important in dealing with conflicts.

However, the need for politico-legal and informational empowerment is as important as that underscored in cooperative literature. Political empowerment concerns the capacity of members to engage in government, express issues, resist lines of power and affect policymaking. Cooperatives have democratic structures, such as elections, general body meetings and grievance systems, which provide space for exercising political agency. Informational empowerment can be described as having access to information, knowing one's rights and entitlements and being able to search and use

information well (Rowlands 1997). Informed personnel are in a better position to make decisions, have a say in leadership accountability and appraise the performance of cooperatives. A communication process in which information is shared using training programs, newsletters, ICT tools and peer education models results in the decentralisation of power, since no single element is endowed with more power than the other. Collectively, the two empowerment options of political and informational add volume to the voice and visibility of the members, which makes the cooperative more transparent, accountable and member-controlled.

Altogether, the multidimensional aspect of member empowerment shows that it is a dynamic and changing process, not a stable and rigid result, guided by both intrinsic and external factors. Empowerment requires an enabling environment in cooperatives that favours various forms of agency manifestation and interaction among economic, psychological, social, political and informational capabilities. Empowerment programme should be universal, universalistic and context-specific and should look at both barriers that inhibit empowerment and individual dreams (Ibrahim & Alkire, 2007). Moreover, empowerment cannot be perceived as a mere orientation or tool; rather, it works as a means to an end to member satisfaction, institutional sustainability and social transformation, but it is also an end in itself. Consequently, empowerment must become a core goal institutionalised under collaborative structures and policies and the process of its ongoing evaluation and improvement must be established among all member groups.

4.14 Conceptualizing Trust and Governance in Cooperative Systems

In cooperative systems, there are interdependent foundations of trust and governance, which define the performance of an institution, its sustainability and the participation of its members. In this context, the meaning of trust surpasses interpersonal confidence and touches upon the so-called institutional trust levels, the degree to which members rely on the justice, dependability and visibility of cooperative frameworks (Bijlsma-Frankema & Costa, 2005). Governance, in its turn, refers to the procedures, rules and practices according to which cooperatives are steered and regulated. Good governance creates a sense of certainty and responsibility, thereby building stakeholder confidence. Poor governance, which can be in the form of elite

capture, corruption or low participation, destroys the level of trust, satisfaction and participation. Trust and governance serve not only as operational aspects but also as conceptual elements that create legitimacy and functionality in cooperative systems. When combined, they provide a positive virtuous circle: when there is trust, it promotes governance and good governance strengthens trust.

Cooperative trust is built through three key dimensions: relational, systemic and procedural trust, which determine the financial commitment of their members, their active involvement and their ability to approach risk-taking on a collective basis. Relational trust is based on shared history, interactions between individuals and mutual trust. Systemic trust manifests when an institution provides the promised services and treats the affairs of its members equitably (Sako, 1992). Procedural trust is based on fair, consistent and transparent decision-making processes. Collectively, these dimensions make up the motivational framework other than which the members make a decision to participate in the study. Trust can also be used as an alternative to regulation and legal contracts in environments where enforcement resources are scarce, such as rural or unfortunate communities. In the presence of high trust, it is easier to mobilise resources, make collective decisions and survive external shocks within cooperatives. Thus, such a trust-governance dynamic has a direct impact on the long-term sustainability and survival of cooperative institutions.

Management in cooperative structures is not the same as that in either hierarchical or profit-making organisations; alternatively, it focuses more on democratic management participation, ownership and liability by the members. Successful collaborative governance encompasses clear guidelines, elected committees, open budgetary management and easy grievance handling (Cornforth, 2004), thus offering the organizational support that legitimises trust. However, cooperative governance faces the dilemma of being inclusive, democratic governance is more inclusive because all voices are heard, but it can be time-consuming when poorly administered. Equilibrium requires participatory and strategic leadership. In addition, governance practices must be responsive to local situations and the changing needs of members. Thus, the mechanisms of formal governance must be integrated with unformalized norms and networks that can be used to support everyday reliance and responsibility.

Governance in this sense is no longer a pathway of procedures but a real system maintained through relationships of trust.

The symbiosis between trust and governance has significant implications for cooperative development strategies. Trust potentiates governance because it results in voluntary compliance, minimises the costs of control and contributes to communication. Members who trust their institutions and leaders tend to adhere to cooperative policies, even when such policies require personal sacrifice. In contrast, open and inclusive policies accomplish this by trusting the leadership of some governmental processes, as this represents fairness, abilities and integrity. Empirical evidence has shown that cooperatives that report a high degree of trust and good governance are better off in terms of financial health, member retention and social impact (Spear, 2004). This indicates that capacity-building programs should simultaneously target both domains. Leadership training, financial literacy training and training in democratic practice can provide better quality governance and training, along with the establishment of more interpersonal skills and cultural standards, which ensure trust maintenance. Programs need to be created to yield results and simultaneously develop institutions in which members have belief and a sense of ownership.

The holistic and systems-oriented thinking approach to trust and governance in cooperative systems necessitates culture, context and power. In most developing areas, trust and governance structures are dominated by historical aspects of hierarchy, inclusion and patronage. These facts must be considered to ensure that cooperatives do not perpetuate current injustices. Transparency and rebuilding trust in such situations can be addressed by participation in audits, member scorecards, social accountability and digital governance platforms (Agrawal & Ribot, 1999). Moreover, governance should be empowering, allowing members to create solutions, solve problems and hold each other accountable. Trust and governance are not fixed qualities but dynamic processes that must be fostered through careful design, thoughtful leadership and long-term involvement. A cooperative system with a governance system infused with trust emerges to be more legitimate and efficient and is more resilient and transformative towards the realisation of social and economic development.

4.15 Norms, Values and Institutional Culture: Foundations of Social Integration

The structural scaffolding of social systems surrounds norms, values and institutional culture; as a system, norms, values and institutional culture are critical pillars in cooperative organisations, where collective action, mutual accountability and shared tasks are essential. These factors can be termed the invisible glue that holds individuals together and defines member behaviour by providing an internalised system of reference on what is acceptable, desirable and legitimate (North 1990). Informal behaviour is steered by norms, deeply held norms are given voice through values and institutional culture embodies all practices, traditions and expectations of the organisation. In cooperatives, cultural elements serve as the primary sources of social integration, forming a coherent identity and coordinating individual initiatives with general goals. Activities that create social capital occur when norms and values are made clear and enforced, promoting an ambiance of trust, reciprocity and cooperation.

Cooperative social norms are combined anticipations shared by members that shape their group behaviour. Norms can be structured formally, as rules found in bylaws or they can be implicit, such as expectations of attendance, participation or resource utilisation. Pro-social behaviours, defined as positive norms are expected to promote indulgence in voluntary activities, support and fair voting patterns. When norms are internalised, costly monitoring systems are not required, as the internal regulation of members makes it unnecessary (Elster, 1989). Socially enforced norms are also governed by informal penalties; if individuals break the expectations of a group, they may suffer penalties such as the destruction of reputation or ostracism. This normative orthodoxy determines the behaviour of institutions as well as the maintenance of group cohesion, especially in multicultural or resource-scarce situations, where the formal controls of governance are fewer.

Unlike norms, values offer a moral direction for cooperative organisations. They express more fundamental beliefs behind collective action, including fairness, solidarity, respect for other human beings and sustainability. Once cooperatives have such values, they gain legitimacy and ethical form in the perception of both members and other stakeholders (Etzioni, 2000). This is because values are used in strategic decision-making, such as giving priority to social inclusion over making short-term

profits or even ploughing back surplus funds to build the community. In addition, identification with the cooperative is even stronger when members are convinced that the organisation's values share common ground with their own beliefs. This value congruence reinforces psychological ownership and encourages greater input in leadership, training and volunteering services. By ritualising core values, storytelling, member orientation programmes and other symbolic actions pass ideals among past and present generations and between member cohorts. By doing so, values help stimulate and institutionalise a spirit of collaboration and honesty.

Norms and values in an organisation is not only a product but also a precondition of social integration. This is reflected in the patterns of leadership, communication, conflict-breaking systems and quality of relationships with one another. When institutional culture is strong, it helps develop openness, inclusivity and learning, which, in turn, helps achieve transparency, inclusivity and learning in the institution. However, when the institutional culture is weak or even fragmented, instead of promoting inclusivity and learning, it is likely to breed mistrust, disengagement and stagnation (Schein 2010). Culture influences decision-making, treatment of members and the definition of success in collaborative situations. Egalitarian cum participatory cultures increase a sense of belonging and curb alienation among members, especially those with historically marginalised backgrounds. On the other hand, a cooperative culture that is hierarchical, closed, elitist or otherwise may cost the cooperative the loyalty of the members and literally defeat the mission and/or purpose of the social capital in terms of the cooperative itself. Thus, constant reflection, cultural audit and inclusive and continuous leadership development are inseparable means of developing a culture that will keep society integrated.

The norms, values and institutional culture that interact are the backbone of social integration, which is essential for the sustainability of cooperation. Social integration refers to the general level of inclusion, relatedness and congruence between members and the cooperative mission, as well as between each other. When norm-reaffirming inclusivity is in place, values reaffirm dignity and the institutional culture promotes open dialogue, there are better chances that the members have learned to trust, collaborate and become committed in the long term. Teamwork not only increases member satisfaction but also improves resilience, innovation and collective efficacy

(Durkheim, 1964). In practice, cooperatives are compelled to create organizational frameworks and procedures to strengthen good norms and values, including participatory governance, intergenerational mentoring and cross-sector partnerships. Such purposeful design is the only way cooperatives can realise their dual mandate of economic development and social cohesion. After all, the social integration that results when cultural alignment occurs is no incidental side effect: social integration is as much a strategic requirement of cooperative systems that wish to be more than short-lived and inconsequential.

4.16 A Member-Centric Framework for Understanding Cooperative Performance

The analytic perspective of the current study is to clarify the performance of cooperatives by defining it using the member-centred approach, as opposed to focusing on traditional measures of financial performance and structural design of the organisation. While most traditional appraisals tend to focus on quantifiable production, such as turnover growth, membership levels or efficiency, these salient measures can distort the complexity of active member involvement, inclusive membership and eventual value creation, which are the core elements of the cooperative spirit (Birchall & Simmons, 2004). The member-based approach restructures cooperative performance and members are not regarded as passive beneficiaries or consumers but as collaborators in joint enrichment. In this paradigm, some key dimensions become defining variables of organizational sustainability and societal impact, namely trust, empowerment, satisfaction and social capital. The evaluation of membership perception and interaction with the cooperative through scrutiny, as presented in the framework, allows for a critical, holistic and democratic-based evaluation of performance.

Member satisfaction is one of the cornerstones of this framework, as it is conceived as a byproduct and fuel for cooperative success. Satisfied members would become more willing to participate in their governance, participate in resources, promote cooperation and be long-term loyal (Nilsson, 2001). However, satisfaction is multidimensional and includes governance procedures, service delivery, quality of relationships and opportunities for personal and career growth. Moreover, this is because material aspirations are fulfilled and psychological needs, dignity, respect and

freedom are met. Therefore, it is imperative that cooperatives keep abreast of changing member expectations and preferences. Organizational performance ratings incorporate member satisfaction, feedback mechanisms, participatory assessment and planning as necessary tools.

The second pillar is empowerment, which refers to the ability of members to participate in decision-making, deliver resources and achieve individual and group objectives. Empowered members tend to innovate, oversee leadership and engage in acts that enhance the cooperative's social fabric (Ibrahim & Alkire, 2007). Empowerment is not a unilateral process; it depends on factors such as internal confidence, collective capacity and an enabling environment offered by cooperatives. Leadership responsiveness, leadership openness, training conditions and a balanced governance system influence the way empowerment is perceived. Decisions not to empower members, especially those described as marginalised, pose a threat to the possibility of making the cooperative obsolete or extractive, despite sound financial indicators. Therefore, the evaluation of empowerment remains a significant factor in making growth inclusive, participatory and sustainable.

In addition to satisfaction and empowerment, member participation and commitment are significant indicators of cooperative vitality. Engagement is an active partaking in the voting process, meetings, committees and classes, whereas ownership is a psychological investment and identification towards the goal of the cooperative and who we are as a cooperative (Chaddad and Cook, 2004). Policies, cultures and structures that promote or prohibit effective interaction require close attention. Participation can be hindered by language barriers, literacy gaps, hierarchies, or bureaucracy; therefore, inclusive processes should be dynamic. Cooperatives are also encouraged to focus on investments in relationship-building activities that promote solidarity and collective identity, which subsequently strengthens members' feelings of belonging and commitment. High rankings of engagement and ownership not only enhance the quality of decisions but also enhance resilience in the organizational capacity to withstand external shocks or other market volatilities.

This paradigm notes a symbiotic connection between institutional performance and individual well-being. By nurturing the social, economic and personal growth of their members, cooperatives strengthen themselves in terms of their operational capacity.

The higher the tangible and intangible benefits accrued by members, the more they will be inclined to reinvest in the cooperative in terms of labour, loyalty and leadership. The moral imperative excerpted in this virtuous cycle highlights the strategic relevance of a member-centric attitude in the sense that it is the morally upright perspective and practical gateway to excellence in the institution (Spear, 2000). Cooperatives that aim to build social capital through member development rather than profit maximisation are likely to build their social capital, reinforce their legitimacy and sustain their performance in the long run. One way cooperatives can ensure that their organizational goals match the realities on the ground, as experienced by the members, is by integrating metrics such as empowerment, satisfaction and engagement into their evaluation systems, thereby capturing the democratic and developmental possibilities of cooperatives.

4.17 Conclusion

This is a conceptual framework that attaches strong emphasis on the role of social capital in evolving the performance and sustainability of cooperatives and conceptualising this viewpoint is expounded from a member-centric standpoint. All convergent constructs, such as trust, social networks, shared norms and values, communication and leadership, form a platform on which social capital is built. Such dimensions develop unity, cooperation and responsibility among members and simultaneously provide an institutional environment that is empowering and responsive at the same time. As cooperatives advance into vibrant socioeconomic platforms, social capital supports the flow of information, strengthens inclusive governance and creates a basis for fair opportunities and benefit distribution. A strict focus on these elements clarifies the processes by which cooperatives can strengthen member relationships, increase group action and intensify internal integrity.

In addition, member empowerment is a mediating source that transforms social capital into member satisfaction. Economic, psychological, social, personal, political, legal and informational empowerment allows members to actively participate in cooperative businesses, present their views and determine the results. When members feel powerful, they develop advanced feelings of ownership and engagement, thus increasing their satisfaction and commitment to the group. The resulting model is a complete reflection of the concept of cooperative performance, with a focus on

structural effectiveness, as well as on the fact that relational and cultural capital is being developed. The framework acts as a strategic tool to design inclusive, participatory and resilient cooperative development initiatives, as it is anchored in the lived experiences of the members and how they interact with institutional processes.

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Chapter V

Data Analysis and Interpretations

5.1 Introduction

Cooperative institutions in Kerala have been viewed as critical in fostering the collective welfare of their members, financial inclusion and democratic participation. However, the difference between the successes of some cooperatives and the failures of others does not always lie in monetary resources or organizational effectiveness. The presence of social capital may be a reason for such differences. Social capital can be described as the ties, associations, trust and common values that hold people together and enable them to achieve things communally. Social capital plays a role in cooperation, especially when dealing with cooperatives, in the sense that it facilitates cooperation, helps build trust between members and leaders, promotes the sharing of knowledge and strengthens devotion to shared ideals. Studies by scholars such as Putnam (1993) and Fukuyama (1995) have highlighted how social capital contributes significantly to institutional performance and to civic engagement. From these research findings, it is evident that social capital is important for cooperative development and long-term sustainability, along with other capitals. The cultural and political history of Kerala has been recognised by several studies as fertile ground for cooperative movements. Studies have also recognised that social capital within an organisation contributes to the empowerment of its members, thus enhancing their level of satisfaction among the members.

In this chapter, an attempt is made to identify the level of social capital among cooperative members in Kerala in general and the role of key dimensions, such as trust (TRT), norms and values (NAV), social networks (SNT), communication and information sharing (CIS) and leadership and governance (LNG). This study also attempts to determine how demographic variables, such as age, gender, income and educational background, play a role in determining the extent of social capital. An attempt to analyse the importance of key dimensions i.e., trust, norms and values, social networks, communication and information sharing and leadership and governance in the formation of social capital among the cooperative members was also made in the research at hand. In addition, the relationship between social capital, member empowerment and member satisfaction in Kerala's cooperatives is

investigated in the present research. Lastly, the study also found the transformation in empowerment gained by the cooperative members upon becoming members of the cooperative societies.

To examine these objectives, the study adopted a multi-layered analytical approach. Descriptive statistics were used to assess the overall levels of social capital and related constructs. For analysing group differences across demographic variables such as age, gender, income, and education, non-parametric statistical tests were employed. The use of non-parametric procedures was considered appropriate due to the ordinal nature of Likert-scale data and the distributional characteristics observed across demographic subgroups. Since these tests do not rely on strict normality assumptions, they provide robust inference for subgroup comparisons. Subsequently, covariance-based Structural Equation Modelling (CB-SEM) using Maximum Likelihood Estimation was applied to test the structural relationships among latent constructs. This dual analytical strategy ensured methodological appropriateness for both group-based comparisons and structural model estimation.

The present study considered diary, miscellaneous non-credit, credit and thrift, educational and training, primary agricultural credit, miscellaneous credit and consumer cooperatives as proxies for the cooperative sector in Kerala. These societies are spread over three districts (Wayanad, Thrissur and Kottayam) in Kerala. The details are given in table 5.1

Table 5.1 Number of Cooperative Societies

Sector	Number of members from selected districts			
	Thrissur	Kottayam	Wayanad	Total
Diary Cooperatives	39	39	9	87
Miscellaneous Non Credit Cooperative Societies	33	17	1	51
Credit and Thrift Societies	34	28	9	71
Educational and Training Cooperatives	26	34	11	71

Primary Agricultural Credit Cooperatives	24	21	5	50
Miscellaneous Credit Cooperative Societies	12	14	4	30
Consumer Cooperatives	10	6	2	18
Total	178	159	41	378

Source: Compiled by the author

After selecting the number of cooperative societies to the sample, the study selected the required number of cooperative members from the districts. The sample consists of 756 cooperative members. Table 5.2 depicts the details of the same.

Table 5.2 Number of Cooperative Members

Sector	Number of members from selected districts			
	Thrissur	Kottayam	Wayanad	Total
Diary Cooperatives	78	78	18	174
Miscellaneous Non Credit Cooperative Societies	66	34	2	102
Credit and Thrift Societies	68	56	18	142
Educational and Training Cooperatives	52	68	22	142
Primary Agricultural Credit Cooperatives	50	40	10	100
Miscellaneous Credit Cooperative Societies	24	28	8	60
Consumer Cooperatives	20	12	4	36
Total	356	318	82	756

Source: Compiled by the author

5.2 Period of Membership

The period of membership within a cooperative group is an important factor which determines the strength of social ties and level of trust among cooperative members. The length of membership helps in building social capital among cooperatives. Table 5.3 shows the details of period of membership of respondents.

Table 5.3 Period of Membership

Period of Membership	No. of Members	Percent
Less than 5 years	90	11.9
5-10 years	116	15.3
10-15 years	237	31.3
15-20 years	174	23
More than 20 years	139	18.4
Total	756	100

Source: Primary Survey

This study ascertained the duration of membership of the respondents in various cooperative societies, which reveals that 31.3 percent of respondents have a membership length of 10 to 15 years, 23 percent have a membership length of between 15 and 20 years and 18.4 percent of members have a membership length of more than 20 years. In addition, 15.3 percent of the members have belonged to the cooperative societies between 5 and 10 years. Only 11.9 percent of members are regarded as beginners with a membership period of less than five years.

5.3 Demographic Profile of Respondents

The present research collected demographic data related to age, gender, marital status, religion, locality, caste, category, educational qualification and monthly income from the selected members from seven different sectors of cooperatives in three districts in Kerala. An elaborate demographic breakdown of the respondents are provided in table 5.4.

Table 5.4 Demographic Profile of Respondents

Age	No. of Members	Percent
Less than 20 years	42	5.6
20-30 years	122	16.1
30-40 years	225	29.8
40-50 years	218	28.8
More than 50 years	149	19.7
Total	756	100.0
Gender	No. of Members	Percent
Male	379	50.1
Female	377	49.9

Total	756	100.0
Marital Status	No. of Members	Percent
Married	621	82.1
Unmarried	135	17.9
Total	756	100.0
Religion	No. of Members	Percent
Hindu	413	54.6
Muslim	162	21.4
Christian	181	23.9
Total	756	100.0
Locality	No. of Members	Percent
Rural	232	30.7
Urban	344	45.5
Semi-urban	180	23.8
Total	756	100.0
Caste	No. of Members	Percent
General	300	39.7
SC	106	14.0
ST	81	10.7
OBC	269	35.6
Total	756	100.0
Category	No. of Members	Percent
APL	453	59.9
BPL	303	40.1
Total	756	100.0
Educational Qualification	No. of Members	Percent
Up to Matriculation	135	17.9
Plus Two	277	36.6
Under Graduation	161	21.3
Post-Graduation	183	24.2
Total	756	100.0
Monthly Income	No. of Members	Percent
Less than 10000	111	14.7
10000-20000	112	14.8
20000-30000	222	29.4
30000-40000	178	23.5
Above 40000	133	17.6
Total	756	100.0

Source: Primary Survey

An analysis of demographic profile of the respondents provide a comprehensive idea of the background and other characteristics of the sample. Age-wise discussion of the respondents shows that most of the respondents are in the middle-age brackets. The percentages of the 30 to 40 years and 40 to 50 years age groups were approximately 29.8 percent and 28.8%, respectively. The next major group is those above 50 years (19.7 percent), while younger respondents aged 20-30 years make up 16.1 percent and

those below 20 years comprise 5.6 percent. This means that the cooperatives have a mainly mature membership. The sample of respondents was almost balanced in terms of gender, with males constituting 50.1percent and females 49.9 percent. This portrays a balanced gender reflection of the sample. The marital status of members reveals that a large proportion of respondents (82.1percent) are married, while unmarried individuals constitute 17.9 percent. The Religious composition shows that Hindus form the majority at 54.6 percent, followed by Christians (23.9 percent) and Muslims (21.4 percent). This shows the religious diversity that is generally eye-catching in Kerala. The study further shows that most respondents are from urban areas (45.5 percent), followed by rural (30.7 percent) and semi-urban (23.8 percent) regions. Caste-wise distribution reveals that the general category accounts for the highest proportion (39.7%), followed by Other Backward Classes (OBC) (35.6 percent), Scheduled Caste (SC) (14.0 percent) and Scheduled Tribe (ST) (10.7 percent). This combination implies a moderate level of representation of marginalised groups in the cooperative network. In terms of economic classification, a majority of the respondents belong to the Above Poverty Line (APL) category (59.9 percent), while 40.1 percent fall under the Below Poverty Line (BPL) category. This aspect demonstrates that cooperation benefits a broad socio-economic bracket. The educational qualification-wise distribution of respondents reveals that the largest group in the sample has completed education up to the Plus Two level (36.6 percent), followed by post-graduates (24.2 percent), undergraduates (21.3 percent) and those with education up to matriculation (17.9 percent). This implies that the majority of the cooperative members have at least moderate educational levels. Lastly, classification of members regarding their income reveals that majority of the respondents falls within the middle-income category. The highest proportion (29.4 percent) earns between Rs. 20,000 and Rs. 30,000 per month, followed by those earning Rs. 30,000 to Rs. 40,000 (23.5 percent) and more than Rs. 40,000 (17.6 percent). Simultaneously, 14.8 percent of respondents had a salary of 10000-20000 rupees and 14.7 percent of respondents get below 10000 rupee salary. This refers to the monetary diversification of membership. Based on this discussion, it can be concluded that the demographic and socio-economic characteristics of the members of cooperatives portray an inclusive and balanced representation, which accordingly enhances the reliability of

the findings. Against this backdrop, the study proceeds to a more in-depth discussion of the extent of the development of social capital among cooperatives in Kerala.

5.4 The Level of Social Capital Formation among Cooperatives in Kerala (Objective 1)

Social capital is constituted by various components, such as trust, social networks, common values, social relations, leadership and communication among individuals. A visit to these premises assists researchers in appreciating the way that members of a cooperative relate with each other, how the decision-making process occurs and how they share information as well as collaborate with an aim of attaining the available objectives. Well-known researchers such as Putnam (2000), Woolcock and Narayan (2000) and Uphoff (1999) have shown how important social capital is for institutional development. It is in this context, the amount of social capital present among the members of the sample cooperatives in Kerala is to be considered. To attain the same, the study first conducted a descriptive analysis of key factors, that is, trust, social networks, norms and values, communication and information sharing and leadership and governance and summarised the features of the dataset, followed by a mean comparison of each variable to identify the significant differences in the distributions of these variables across different demographic elements. Once the differences in means were found, the study tested the hypothesis. Finally, a social capital index is developed based on the studies of Grossman (1976) to measure the level of generation of social capital among cooperatives. The details are given in table 5.5.

Table 5.5 Descriptive Statistics of Key Dimensions of Social Capital

Trust	Mean	Std. Deviation
Feeling comfortable in discussing personal sensitive topics or concerns(TRT1)	4.05	1.155
Trust on the leaders and management (TRT2)	4.02	1.175
Level of commitment (TRT3)	4.04	1.154
Reliability in fulfilling their cooperative responsibilities (TRT4)	4.03	1.165
Social Networks	**Mean**	**Std. Deviation**
Frequency of interaction with each other and with external parties (SNT1)	4.04	1.174

Personal relationships with fellow members(SNT2)	4.05	1.166
Social network formed among members (SNT3)	4.03	1.168
Participation in informal and formal gatherings (SNT4)	4.07	1.166
Norms and Values	Mean	Std. Deviation
Following all recognized cooperative principles (NAV1)	4.04	1.147
Formed and communicated necessary ethical guidelines and code of conduct (NAV2)	4.03	1.163
Willing to help each other (NAV3)	4.04	1.172
Mutual respect and considerations among members (NAV4)	4.06	1.159
Communication and Information Sharing	Mean	Std. Deviation
Frequency of informal and formal communication (CIS1)	4.02	1.169
Easy access to relevant information (CIS2)	4.06	1.150
Culture of free sharing information and knowledge (CIS3)	3.99	1.201
Relevant and crucial information are quickly shared (CIS4)	4.03	1.168
Leadership and Governance	Mean	Std. Deviation
Opportunity to participate in governance and decision making process (LNG1)	4.02	1.188
Transparency in the decision making process (LNG2)	4.06	1.166
Representation and opportunity to marginalized members (LNG3)	4.06	1.168
Leadership development programmes (LNG4)	4.05	1.167

Source: Authors' computation

Table 5.5 presents the mean scores and standard deviations for various indicators used to measure different dimensions of social capital among members of cooperative societies. Each measure was on a Likert Scale of 5 which extends to more positive perceptions on every dimension. The reported trust is quite high among cooperative members. All trust-related items produced means that varied closely between 4.02 and 4.05. The highest mean (4.05) was for members feeling comfortable discussing sensitive personal topics (TRT1), showing a generally strong interpersonal trust. The

lowest, though still quite high, was for trust in leaders and management (TRT2) at 4.02. All the standard deviations were marginally above 1.15 which allows us to assume that fairly consistent variation levels exist in the responses. Their social connectivity and interaction with members is also good, with means between 4.03-4.07. The highest mean (4.07) was for participation in informal and formal gatherings (SNT4), suggesting a healthy culture of community engagement. Close personal relationships (SNT2) also scored well (4.05), reinforcing the cooperative's role in building social ties. The standard deviations are all stable at approximately 1.17, indicating medium-level exposure variety. The dimensions, norms and values also augur well with cooperatives and all the indicators are above 4.0 with a slight margin. The strongest area is mutual respect and consideration among members (NAV4) with a mean of 4.06, while adherence to recognised cooperative principles (NAV2) is slightly lower, at 4.03. This shows that moral principles and support towards others are common practice, whereas minor improvements are possible in terms of always adhering to formal cooperative tenets. As far as the factors of communication and information sharing are concerned, the responses are quite positive, but they are a bit more dispersed. The average scores were 3.99-4.06. Easy access to information (CIS 2) scored the highest, suggesting that members find it relatively easy to obtain the information they need. However, the culture of freely sharing information and knowledge (CIS3) is slightly lower at 3.99, indicating a potential area for strengthening internal communication practices. The standard deviations were approximately 1.15 and 1.20 which shows a broader scope of experiences and perhaps different levels of access by members. Relatively high scores were also demonstrated regarding leadership and governance in the cooperative sector, with means between 4.02 and 4.06. Representation of marginalised members (LNG3 and LNG4) received the highest mean (4.06), reflecting a positive perception of inclusivity. Participation in governance (LNG1) scored the lowest at 4.02, suggesting that some members may feel less involved in decision-making processes. The standard deviations across the indicators in this category are slightly higher (approximately 1.16 to 1.19), showing that perceptions of leadership practices vary more significantly among members. In conclusion, the findings indicate that the cooperatives in Kerala have a strong social capital base. Nonetheless, the intermediate standard deviations of the majority of items indicate the existence of variability in perceptions which is likely to reflect

factors such as age, sex, income and education. Therefore, a close comparison of the means of scores is needed to establish such differences in demographics.

5.4.1 Variations in Trust across Age, Gender, Religion, Educational Qualification and Income

The trust that individuals have in one another and in institutions which promotes cooperation, mutual norms and group action. Trust cement interpersonal relations and networks that creates social capital in a community or organisation. With such high trust individuals tend to communicate, assist each other and willingly become directly involved in decision-making. Another assumption is that there is a difference in the degree of trust among members of the population concerning different age groups, gender categories, educational qualifications and income levels. The process of identification of the variations in the levels of trust among various demographic categories, will help the cooperatives to formulate appropriate strategies and develop a productive cooperative environment which facilitate the growth of the organization and empower the members. This section examines such variations and attempts to determine whether such deviations are substantial.

Table 5.6 Variations in Trust across Different Age Groups

Age		TRT1	TRT2	TRT3	TRT4
Less than 20 years	Mean	4.714	4.333	4.048	4.286
	N	42	42	42	42
	Std. Deviation	0.554	0.928	1.268	0.636
20-30 years	Mean	4.033	4.303	4.115	3.803
	N	122	122	122	122
	Std. Deviation	1.135	0.926	1.137	1.394
30-40 years	Mean	3.764	4.004	4.196	4.000
	N	225	225	225	225
	Std. Deviation	1.290	1.155	1.025	1.191
40-50 years	Mean	4.147	3.734	3.986	4.156
	N	218	218	218	218
	Std. Deviation	1.093	1.376	1.150	1.096
More than 50 years	Mean	4.174	4.181	3.852	4.013
	N	149	149	149	149
	Std. Deviation	1.057	1.034	1.296	1.109
Total	Mean	4.052	4.028	4.046	4.032
	N	756	756	756	756
	Std. Deviation	1.155	1.175	1.154	1.165

Source: Authors' computation

Table 5.6 presents a detailed comparison of trust-related perceptions across different age groups among cooperatives based on four indicators. Altogether, all four indicators of trust have their average scores very close to each other, between 4.028 and 4.052 and it can be concluded that the overall perception of trust is positive among all age groups. The "Less than 20 years" group consistently reports high trust levels, especially in TRT1 (4.714), suggesting that younger members feel most comfortable discussing sensitive issues within their society and have relatively high trust in leadership and reliability. They have low standard deviations, especially in TRT1 and TRT4 which shows that there is high agreement among themselves. The 20 to 30 years group, while generally positive, shows slightly lower trust in member reliability (TRT4 mean = 3.803) compared to their trust in leadership (TRT2 mean = 4.303) and their higher standard deviations indicate a more diverse range of opinions within the group. The 30 to 40 years group exhibited the highest commitment to goals and values (TRT3 mean = 4.196), suggesting a strong alignment with the society's mission, though trust in leadership and personal sharing (TRT1 and TRT2) was somewhat lower. Meanwhile, individuals aged 40 to 50 years show a unique trend: they trust their leaders and management the least among all age groups (TRT2 mean = 3.734), yet rate reliability (TRT4 mean = 4.156) and personal comfort (TRT 1 mean = 4.147) as quite high, indicating a nuanced trust dynamic within this group. Finally, the "More than 50 years" group maintained relatively balanced trust across all dimensions, with the highest trust in leadership (TRT2 mean = 4.181) and the lowest in commitment to society's goals (TRT3 mean = 3.852). There was also little variance in this group, indicating that stable and steady perceptions developed over time. In conclusion, the general level of trust among all age groups is high; however, every age category has a unique pattern of trust. Juniors are more open and trusting, middle-aged members exhibit a controlled commitment but medium scepticism of the leaders and older persons display a well-balanced and constant trust, particularly that of the leaders and cooperative trust.

Table 5.7 Variations in Trust across Different Categories of Gender

Gender		TRT1	TRT2	TRT3	TRT4
Male	Mean	4.272	4.232	4.272	4.240
	N	379	379	379	379
	Std. Deviation	0.895	0.905	0.898	0.969

Gender		TRT1	TRT2	TRT3	TRT4
Female	Mean	3.830	3.822	3.820	3.822
	N	377	377	377	377
	Std. Deviation	1.332	1.366	1.327	1.302
Total	Mean	4.052	4.028	4.046	4.032
	N	756	756	756	756
	Std. Deviation	1.155	1.175	1.154	1.165

Source: Authors' computation

Table 5.7 presents gender-wise differences in perceptions of trust within cooperatives, measured across four dimensions. The overall mean scores across all dimensions (ranging from 4.028 to 4.052) indicate a generally positive level of trust among all respondents, significant gender-based variations were evident. The mean score of the four dimensions of trust showed similar uniformity in that male respondents had higher scores in all of them than female respondents. The highest male score was observed in TRT1 and TRT3 (both at 4.272), suggesting that men feel more comfortable discussing sensitive issues and perceive a stronger commitment to society's goals and values. The mean scores for TRT2 (4.232) and TRT4 (4.240) also reflect a high level of confidence in leadership and member reliability. Additionally, the lower standard deviations (ranging from 0.895 to 0.969) indicate greater consistency and agreement among male respondents in their trust assessment. The mean scores of female respondents were lower than those of males because all the indicators of trust that were reported were centred on 3.82 and 3.83, implying that the level of perceived trust was moderate and low among themselves as compared to males. This implies that women are less confident when it comes to addressing personal issues in society and exhibit lower degrees of belief in leadership, personal dedication and trustworthiness. Moreover, the higher standard deviations (ranging from 1.302 to 1.366) imply a wider variation in responses, reflecting more diverse and possibly fragmented perceptions of trust among female respondents. In conclusion, the evidence revealed that men feel that the cooperative atmosphere as more reliable, supportive and trustworthy than women respondents. These variations in the perceptions of women is to be taken care of the managements seriously.

Table 5.8 provides a detailed comparison of trust-related perceptions based on respondents' educational qualifications across four dimensions. The average scores of

all respondents were closer to 4.032 and 4.052 stars, each on the higher side of the positive aspects of trust perception applied uniformly in the cooperative society. However, the impact of education on the perception of the level of trust is clear and consistent. Respondents with lower educational qualifications (Up to Matriculation) show the lowest trust scores across all dimensions (mean scores of approximately 3.30 to 3.33), indicating a relatively weaker sense of connection, confidence and trust in both their peers and the leadership of the cooperative. Moreover, their standard deviations were the highest (approximately 1.53 to 1.54), suggesting considerable variability in responses, possibly reflecting uncertainty or inconsistency in trust-related experiences. Respondents who completed their Plus Two education demonstrated a notable improvement in trust scores (means around 3.92 to 3.94), indicating a more positive and stable perception of society.

Table 5.8 Variations in Trust across Different Levels of Educational Qualification

Educational Qualification		TRT1	TRT2	TRT3	TRT4
Up to Matriculation	Mean	3.333	3.304	3.326	3.333
	N	135	135	135	135
	Std. Deviation	1.536	1.542	1.530	1.536
Plus Two	Mean	3.931	3.939	3.935	3.921
	N	277	277	277	277
	Std. Deviation	1.254	1.254	1.252	1.263
Under Graduation	Mean	4.410	4.404	4.404	4.404
	N	161	161	161	161
	Std. Deviation	0.693	0.702	0.702	0.702
Post-Graduation	Mean	4.448	4.366	4.432	4.388
	N	183	183	183	183
	Std. Deviation	0.561	0.720	0.569	0.644
Total	Mean	4.052	4.028	4.046	4.032
	N	756	756	756	756
	Std. Deviation	1.155	1.175	1.154	1.165

Source: Authors' computation

However, the standard deviations remain moderately high (approximately 1.25), suggesting that while trust is generally stronger, there is still some divergence of

opinion within this group. A significant shift is observed among respondents with undergraduate qualifications, who show a sharp increase in trust levels across all dimensions (means consistently at 4.404 to 4.410), indicating a strong and uniform sense of trust. Their standard deviations were much lower (approximately 0.69 to 0.70), suggesting a high degree of internal agreement and confidence in leadership, values, communication and reliability within the cooperative. The postgraduate group reported the highest trust scores (means between 4.366 and 4.448), particularly in the areas of personal comfort (TRT1 = 4.448) and commitment to goals (TRT3 = 4.432). This shows a strong feeling of alignment, openness and trust in the structure of society, as well as the value systems. The standard deviations for this group were the lowest overall (approximately 0.56 to 0.72), reflecting a strong consensus and stable trust perception. Conclusively, the data provide a clear conclusion that educational attainment is positively correlated with trust in cooperative societies. The level of education increases the feeling of comfort, belief in leadership options, adherence to values and perceived reliability. Higher education seems to contribute to a better understanding, communication level and civic participation of people and cause more homogenous and assertive opinions of trust.

Table 5.9 Variations in Trust across Different Levels of Income

Monthly Income		TRT1	TRT2	TRT3	TRT4
Less than 10000	Mean	4.117	4.198	4.000	4.036
	N	111	111	111	111
	Std. Deviation	1.068	0.923	1.228	1.078
10000-20000	Mean	3.813	4.071	4.286	4.054
	N	112	112	112	112
	Std. Deviation	1.326	1.183	0.764	1.258
20000-30000	Mean	4.059	3.896	4.059	4.081
	N	222	222	222	222
	Std. Deviation	1.233	1.245	1.192	1.082
30000-40000	Mean	4.174	4.000	3.888	4.084
	N	178	178	178	178
	Std. Deviation	0.938	1.306	1.216	1.159
Above 40000	Mean	4.023	4.105	4.075	3.857
	N	133	133	133	133
	Std. Deviation	1.184	1.032	1.191	1.292

Monthly Income		TRT1	TRT2	TRT3	TRT4
Total	Mean	4.052	4.028	4.046	4.032
	N	756	756	756	756
	Std. Deviation	1.155	1.175	1.154	1.165

Source: Authors' computation

Table 5.9 presents a comparative analysis of trust perceptions across various monthly income groups within a cooperative society based on four trust dimensions. The overall mean scores for the entire population fall within a relatively tight range (4.028 to 4.052), indicating a generally positive trust environment, a closer examination by income levels reveals interesting patterns and divergences. Respondents earning less than Rs. 10,000 per month reported high levels of trust across all four dimensions, particularly in leadership (TRT2 = 4.198) and comfort in sharing concerns (TRT1 = 4.117). This group displayed relatively low variability (standard deviations of approximately 1.0), suggesting stable and cohesive trust perceptions, possibly reflecting close-knit, community-based relationships among lower-income members. The Rs. 10,000 to Rs. 20,000 income group shows the highest commitment to societal goals (TRT3 = 4.286), indicating a strong alignment with cooperative values, although their comfort in sharing sensitive topics (TRT1 = 3.813) is comparatively lower. Interestingly, this group exhibited the lowest standard deviation in TRT3 (0.764), highlighting a strong consensus in commitment to goals, despite more varied views in other dimensions. The scores are quite balanced and members whose wages are neither low nor high, that is, earning between Rs. 20,000 to Rs. 30,000 report a balanced trust level on all the dimensions with a mean of 4.059. However, slightly lower trust in leadership (TRT2 = 3.896) and relatively higher variability suggest a more critical or evaluative stance toward institutional figures, possibly influenced by their educational or professional experiences. In the Rs. 30,000 to Rs. 40,000 income group, trust levels remain relatively high, especially for TRT1 (4.174) and TRT4 (4.084). However, TRT3 dips slightly (3.888), implying that this group may be slightly less motivated by collective goals, potentially due to growing individualistic attitudes at higher income levels. The standard deviations were moderate, indicating a combination of views. The highest income group (above Rs. 40,000) shows a mixed-trust profile. While they maintain good levels of trust in leadership (TRT2 = 4.105) and commitment (TRT3 = 4.075), they record the lowest reliability score (TRT4 =

3.857) and relatively lower comfort in personal sharing (TRT 1 = 4.023). This could imply a more transactional style of interaction with society, whereby individual interaction and trust in our common responsibility are not emphasised. The larger standard deviations also indicate a larger variation in perceptions, which may be caused by various expectations or some degree of involvement. The results indicate that monthly income plays a considerable role in shaping aspects of trust in cooperatives. Low income members have higher individual trust and confidence in leadership, probably due to their role coordination in smaller communities and their ability to rely on the collective system. Middle-income groups (Rs. 10,000 to Rs. 30,000) show strong commitment to cooperative goals, while higher-income members (especially above Rs. 40,000) express more cautious and individualistic trust behaviours, particularly in terms of reliability and interpersonal openness. The given patterns indicate the necessity of inclusive and income sensitive engagement concepts so that every member, irrespective of their financial background, can feel equally appreciated, listened to and integrated into the cooperative system.

The process of identifying variations in trust indicators among cooperatives across age, gender, educational qualification and income clearly reveals that the level of trust among cooperative members varies across these demographic variables. In this way, the researcher intends to determine whether these deviations are significantly different or not; additional statistical tests will follow. Therefore, the study first attempted to identify the nature of the distribution using the Kolmogorov-Smirnov (K-S) test. The K-S test determines whether the distribution of a sample of data follows a specific theoretical distribution, most commonly the normal distribution. The results are presented in Table 5.10.

Table 5.10 Assessment of Normality: One-Sample Kolmogorov Smirnov Test

Null Hypothesis	Sig.	Decision
TRT1 is normal with mean 4.05 and standard deviation 1.155	.000	Reject H0
TRT2 is normal with mean 4.03 and standard deviation 1.175	.000	Reject H0
TRT3 is normal with mean 4.05 and standard deviation 1.154	.000	Reject H0
TRT4 is normal with mean 4.03 and standard deviation 1.165	.000	Reject H0

Note: The significance level was set at.050

The results shows that for all four variables, that is, feeling comfortable discussing personal or sensitive topics with others (TRT1), trust in leaders and management (TRT2), level of commitment (TRT3) and reliability in fulfilling cooperative responsibilities (TRT4), the p-values were .000. Given that, the p-values are less than the standard significance level of 0.05, the null hypothesis which states that these variables will follow a normal distribution given their respective reported means and standard deviations, is rejected in all cases. Hence this study applied non-parametric tests when conducting subsequent statistical tests such as Kruskal-Wallis test (for age, educational qualification and monthly income) and the Mann-Whitney U test for gender to test the hypotheses.

The hypotheses are theoretically derived and presented in null form to align with conventional inferential statistical testing procedures

Hypothesis 1: There is no statistically significant differences in the distributions of trust across different age groups

Table 5.11 Age wise Differences in Trust: Kruskal Wallis Test Results

Null Hypothesis	Sig.	Decision
TRT1 is same across different Age groups	0.000	Reject H0
TRT2 is same across different Age groups	0.000	Reject H0
TRT3 is same across different Age groups	0.050	Retain H0
TRT4 is same across different Age groups	0.164	Retain H0

Note: The significance level was set at .050

Table 5.11 shows that for the variables, feeling comfortable discussing personal or sensitive topics (TRT1) and trust in the leaders and management (TRT2), the p-values of both are 0.000. Both null hypotheses of these two variables are rejected because the values are below the standard significance level of 0.05. This implies that there are significant differences between the distributions of TRT1 and TRT2 for the various age groups. For the remaining two variables, that is, level of commitment (TRT3) and reliability in fulfilling cooperative responsibilities (TRT4), the p-values are 0.050 and 0.164, respectively. In such cases, p-values are not low and thus fail to reject the null

hypothesis at the 5 percent significance level. Thus, it is evident that the distribution of TRT 3 and TRT 4 in various age groups is not statistically significant.

Hypothesis 2: There is no statistically significant differences in the distributions of trust across different categories of gender

Table 5.12 Gender-wise Differences in Trust: Mann Whitney U Test Results

Null Hypothesis	Sig.	Decision
TRT1 is same across different categories of gender	0.000	Reject H0
TRT2 is same across different categories of gender	0.003	Reject H0
TRT3 is same across different categories of gender	0.000	Reject H0
TRT4 is same across different categories of gender	0.000	Reject H0

Note: The significance level was set at .050

The Mann-Whitney U Test as per Table 5.12 was used to determine whether there were statistically significant differences in trust-related variables across different gender categories. The results show that for the variables, feeling comfortable discussing personal or sensitive topics (TRT1), trust in the leaders and management (TRT2), level of commitment (TRT3) and reliability in fulfilling cooperative responsibilities (TRT4), the p-values are 0.000, 0.003, 0.000 and 0.000, respectively. These values are less than the conventional significance of 0.05; therefore, the null hypothesis of both variables is rejected. This implies that the distributions of TRT1, TRT2, TRT3 and TRT4 with respect to the different categories of gender are significantly different.

Hypothesis 3: There is no statistically significant differences in the distributions of trust across different categories of educational qualification

Table 5.13 Educational Qualification-wise Differences in Trust: K-W Test Results

Null Hypothesis	Sig.	Decision
TRT1 is same across different educational qualifications	0.000	Reject H0
TRT2 is same across different educational qualifications	0.000	Reject H0
TRT3 is same across different educational qualifications	0.000	Reject H0
TRT4 is same across different educational qualifications	0.000	Reject H0

Note: The significance level was set at.050.

With the help of the Kruskal Wallis Test, it is able to calculate the difference between various categories of educational qualifications and determine whether the differences were statistically significant in terms of trust-related variables. Table 5.13 reveals that, for the variables feeling comfortable discussing personal or sensitive topics (TRT1), trust in the leaders and management (TRT2), level of commitment (TRT3) and reliability in fulfilling cooperative responsibilities (TRT4), the p-values are 0.000. Because the values are lower than the standard value of the significance level of 0.05, the null hypotheses of these variables are rejected. This implies that there are considerable variances among the distributions of four related variables of trust: TRT1, TRT2, TRT3 and TRT4 on various categories of educational qualifications. Thus, these variations are to be addressed.

Hypothesis 4: There is no statistically significant differences in the distribution of trust across different income categories

Table 5.14 Income-wise Differences in Trust: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
TRT1 is same across different levels of monthly incomes	0.257	Retain H0
TRT2 is same across different levels of monthly incomes	0.283	Retain H0
TRT3 is same across different levels of monthly incomes	0.136	Retain H0
TRT 4 is same across different levels of monthly incomes	0.321	Retain H0

Note: The significance level was set at .050

Table 5.14 shows that for the variables, feeling comfortable discussing personal or sensitive topics (TRT 1), trust in the leaders and management (TRT 2), level of commitment (TRT 3) and reliability in fulfilling cooperative responsibilities (TRT 4), the p-values are 0.257, 0.283, 0.136 and 0.321, respectively. In such instances, the p-values are not small enough to deny the null hypothesis at the 5 per level. Thus, it remains evident that there are no significant differences between the distributions of TRT 1, TRT 2, TRT 3 and TRT 4 for different categories of income.

5.4.2 Variations in Social Networks across Age, Gender, Educational Qualification and Income

Social networks are described as the relationships and associations people have with others in a society or group. In cooperatives when the members interact often with each other, build individual relationships and actively engage in group actions and a high density of social connections emerges. These associations generate faith in one another, collaboration and resource and information sharing, which are defined as the key aspects of social capital. The higher the social network among people, the better their ability to work together to attain collective goals and the stronger the social capital in the group. Further, social networks existing in group or among members of an organization would act as a base for the development of trust, promote free and transparent exchange of information between members and the same will also help in effective governance. Another assumption here is that the extent of social networking is not the same in different age groups, gender categories, educational qualifications and income levels. These variations are to be specifically identified and tested whether these variations are significant or not. The insights in this regard will help the management of cooperatives and other policy makers in taking appropriate decisions and formulating necessary strategies to bridge those variations which will in turn contribute to the betterment of various stakeholders.

Table 5.15 Variations in Social Networks across Different Age Groups

Age		SNT1	SNT2	SNT3	SNT4
	Mean	4.095	4.143	4.190	3.833
Less than 20 years	N	42	42	42	42
	Std. Deviation	1.185	1.181	0.773	1.208
	Mean	4.279	3.934	4.057	4.123
20-30 years	N	122	122	122	122
	Std. Deviation	1.145	1.365	1.294	0.932
	Mean	4.160	4.178	3.978	4.133
30-40 years	N	225	225	225	225
	Std. Deviation	0.824	1.132	1.318	1.236
	Mean	3.881	4.106	3.963	4.009
40-50 years	N	218	218	218	218
	Std. Deviation	1.389	0.952	1.199	1.218
More than 50 years	Mean	3.926	3.872	4.168	4.114

Age		SNT1	SNT2	SNT3	SNT4
	N	149	149	149	149
	Std. Deviation	1.263	1.296	0.809	1.142
	Mean	4.049	4.056	4.036	4.075
Total	N	756	756	756	756
	Std. Deviation	1.174	1.166	1.168	1.166

Source: Authors' computation

Table 5.15 indicates age differences in social networking in cooperative societies. Altogether, there are significantly high ratios of social networking in all the age groups, with the average scores of the four dimensions lying between 4.049 and 4.075 which is an indicator of being very active. Members under 20 years of age strongly develop close relationships and engage in colluding actions, but not so much in events which could be due to age limits or limited access. The 20 to 30 years group recorded the highest interaction frequency (4.279) and strong event participation, suggesting high enthusiasm for social engagement, although their score for personal bonding (3.934) was slightly lower. All the indicators show high scores among the 30 to 40 years group, most notably in developing close relationships and attending events, which implies that they are the core of maintaining the social fabric of society. The 40 to 50 years age bracket has relatively lower scores in interaction frequency and collective action, which can probably be attributed to greater individual or work demands; however, their levels of activity engagement are not low at all. Interestingly, members above 50 years reported the highest mean in collective action (4.168) and strong participation in events, reflecting their deep-rooted commitment and experience, despite scoring slightly lower in regular interactions and personal bonding. Thus, it is evident from the results that there are variations in social networking among members of with regard to the different categories of age.

Table 5.16 Variations in Social Networks across Different Categories of Gender

Gender		SNT 1	SNT 2	SNT 3	SNT 4
	Mean	4.185	4.179	4.216	4.356
Male	N	379	379	379	379
	Std. Deviation	0.993	1.028	0.946	0.895
Female	Mean	3.912	3.931	3.854	3.793

Gender		SNT 1	SNT 2	SNT 3	SNT 4
	N	377	377	377	377
	Std. Deviation	1.319	1.278	1.332	1.329
	Mean	4.049	4.056	4.036	4.075
Total	N	756	756	756	756
	Std. Deviation	1.174	1.166	1.168	1.166

Source: Authors' computation

Table 5.16 shows the high gender gap that exists in building and contributing to social networks in the cooperative societies. In general, the mean of all social networking dimensions shows that the environment is generally positive, yet males continue to record higher scores on all indicators of engagement compared to females. Male respondents show particularly strong scores in SNT4 (4.356), reflecting active participation in both formal and informal events and SNT3 (4.216), indicating that social networks among men more often lead to joint projects and collective action. Additionally, their scores for interaction (4.185) and personal relationship development (4.179) demonstrate a well-integrated social presence. In contrast, female respondents reported lower mean scores across all dimensions, especially in collective action (3.854) and event participation (3.793), which may suggest limited opportunities, lesser involvement, or possible barriers to accessing social platforms within the cooperative. Moreover, the higher standard deviations among females (ranging from 1.278 to 1.332) reflect greater variability in their experiences and perceptions, indicating inconsistencies in social engagement. This is in line with the answers of the male participants, who were more standardised and consistent in all their responses, with the different standard deviations being small.

Table 5.17 Variations in Social Networks across Different Levels of Educational Qualification

Educational Qualifications		SNT1	SNT2	SNT3	SNT4
	Mean	3.326	3.326	3.356	3.363
	N	135	135	135	135
Up to Matriculation	Std. Deviation	1.549	1.549	1.543	1.548

Educational Qualifications		SNT1	SNT2	SNT3	SNT4
	Mean	3.942	3.953	3.942	3.946
	N	277	277	277	277
Plus Two	Std. Deviation	1.235	1.231	1.244	1.243
	Mean	4.435	4.416	4.410	4.404
	N	161	161	161	161
Under Graduation	Std. Deviation	0.659	0.685	0.684	0.693
	Mean	4.404	4.432	4.350	4.508
	N	183	183	183	183
Post-Graduation	Std. Deviation	0.771	0.699	0.755	0.654
	Mean	4.049	4.056	4.036	4.075
	N	756	756	756	756
Total	Std. Deviation	1.174	1.166	1.168	1.166

Source: Authors' computation

Table 5.17 presents a detailed comparison of how educational qualifications influence participation in social networks within a cooperative society, measured across four key dimensions. The findings indicate a positive correlation between the level of education and the strength of social networking. Members with only up to matriculation education reported the lowest mean scores across all dimensions (ranging from 3.326 to 3.363), indicating limited interaction, weaker social bonding and reduced participation in cooperative activities. Additionally, this group exhibited the highest standard deviations (approximately 1.54), suggesting greater inconsistency in their responses and possibly reflecting social exclusion or lack of empowerment within the cooperative structure. Educational qualifications also raise the score on social networks. Individuals with a Plus Two level of education reveal a slight increase and the average scores of all variables are nearly 3.94. This suggests moderate engagement, although variability remains somewhat high (standard deviation = 1.23), indicating diverse experiences within this group. A major change is experienced at the undergraduate and graduate levels. Undergraduates reported very high mean scores across all dimensions (ranging from 4.404 to 4.435) with very low standard deviations (around 0.66 to 0.69), indicating strong, consistent engagement in

cooperative interactions, personal bonding, collective actions and events. This cohort seems to be very incorporated and socially active, thus playing a major role in society. Postgraduates also reported similarly high scores, with particularly strong participation in events and gatherings (SNT4 = 4.508). Their responses were highly consistent (standard deviations below 0.77), indicating well-established and uniform social networking behaviour. Finally, the evidence shows an educational difference in social participation in social networking with cooperatives. Higher-educated members are much more active and socially integrated and are always involved in cooperative lives. This explains the importance of cooperatives in introducing inclusive strategies, including awareness programs, peer mentoring and participatory activities, to help less-educated members integrate better, be empowered and have equal opportunities in social interaction and working together regardless of education levels.

Table 5.18 shows a detailed assessment of how monthly income levels influence social networking behaviours within the cooperative society across four key dimensions: frequency of interaction (SNT1), development of close personal relationships (SNT2), collective actions resulting from social ties (SNT3) and participation in events and social activities (SNT4). While the overall mean scores for the total sample remain consistently high (approximately 4.036 to 4.075), indicating an active social culture, a closer look at income-based variations reveals insightful differences in participation and engagement patterns.

Table 5.18 Variations in Social Networks across Different Levels of Income

Monthly income		SNT1	SNT2	SNT3	SNT4
Less than 10000	Mean	3.991	4.207	4.288	4.144
	N	111	111	111	111
	Std. Deviation	1.254	1.054	0.878	1.220
10000-20000	Mean	3.991	4.009	3.973	4.321
	N	112	112	112	112
	Std. Deviation	1.263	1.204	1.339	0.808
20000-30000	Mean	4.113	4.000	3.932	4.032
	N	222	222	222	222

Monthly income		SNT1	SNT2	SNT3	SNT4
	Std. Deviation	1.064	1.229	1.196	1.220
	Mean	3.989	4.157	4.017	3.961
30000-40000	N	178	178	178	178
	Std. Deviation	1.249	0.973	1.219	1.204
	Mean	4.120	3.925	4.075	4.038
Above 40000	N	133	133	133	133
	Std. Deviation	1.108	1.329	1.091	1.215
	Mean	4.049	4.056	4.036	4.075
Total	N	756	756	756	756
	Std. Deviation	1.174	1.166	1.168	1.166

Source: Authors' computation

Members earning less than Rs. 10,000 per month exhibit strong social bonds and active collective engagement, scoring the highest in SNT2 (4.207) and SNT3 (4.288). This implies that members with lower incomes are inclined to use cooperative networks as a source of support and collaboration, perhaps because of their increased dependence on community structures. With the lower standard deviations that they have, compared to those of the other groups, they indicate more consistent experiences among them. In the Rs. 10,000 to Rs. 20,000 range, members show high participation in events (4.321) and healthy bonding scores, indicating that this group finds value in structured and informal social activities, despite slightly lower scores in collective actions (3.973). Interestingly, their low standard deviation in event participation (0.808) suggests uniform involvement in society and organised gatherings, indicating the role of events as key engagement tools for this income group. There is a balanced participation profile of the respondents earning Rs. 20,000 to Rs. 30,000, with moderate height of the means in all the dimensions. However, their slightly lower score in collective action (3.932) may reflect a shift toward more individualistic or less interdependent forms of involvement, possibly due to increased self-reliance. The Rs. 30,000 to Rs. 40,000 group reports strong relationship-building (SNT2 = 4.157) but shows relatively lower engagement in gatherings (3.961) and interaction

frequency (3.989). This implies that they can have good peer contacts, but they are less active in other broader social or community affairs, which might arise due to work commitments, time, or other factors. Finally, members earning above Rs. 40,000 show high interaction frequency (4.120) and good engagement across all areas but comparatively lower bonding (SNT2 = 3.925). This could mean that when they are present, their relationship might be more formal or instrumental and not intimate. They have a balanced variability describing different tastes and social inclusion stages of this income group. The findings demonstrate a specific correlation between income and social network participation. Low-income groups are more bonded and dependent on collective action, whereas middle-income groups are event-oriented and more balanced in their participation. Conversely, the higher-income group has presence and interaction and is less inclined to create intimate or collaborative relationships.

An attempt to identify variations in social network indicators among cooperatives across demographic variables (i.e. age, gender, educational qualification and income) clearly reveals that the level of social networking among cooperative members varies across these demographic variables. Therefore, the researcher intends to determine whether these variations show significant differences and to this end, additional statistical tests will be carried out. Therefore, the study first attempted to identify the nature of the distribution using the Kolmogorov-Smirnov (K-S) test. The results are presented in table 5.19.

Table 5.19 Assessment of Normality: One-Sample Kolmogorov-Smirnov Test

Null Hypothesis	Sig.	Decision
SNT1 is normal with mean 4.05 and standard deviation 1.174	.000	Reject H0
SNT2 is normal with mean 4.06 and standard deviation 1.165	.000	Reject H0
SNT3 is normal with mean 4.04 and standard deviation 1.168	.000	Reject H0
SNT4 is normal with mean 4.08 and standard deviation 1.166	.000	Reject H0

Note: The significance level was set at .050

Table 5.19 presents the results of the Kolmogorov-Smirnov Test, which was conducted to observe the possibility of the collected data belonging to the four aspects of social networks being normally distributed. These aspects included how often members interacted (SNT1), the quality of their personal relationships (SNT2), the

overall network formed among members (SNT3) and their participation in both formal and informal gatherings (SNT4). The results revealed that none of these variables followed a normal pattern, as all had very low p-values (less than 0.05). This means that the data do not fit the typical bell-shaped curve expected in a normal distribution. Consequently, non-parametric tests are preferable for testing these variables. In this context, the present study formulated the following hypotheses and applied the Kruskal-Wallis test (for age, educational qualification and monthly income) and the Mann-Whitney U test for gender to test the hypotheses. The hypotheses and test results are given in the following tables.

Hypothesis 6: There is no statistically significant differences in the distributions of social networks across different categories of age

Table 5.20 Age-wise Differences in Social Networks: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
SNT1 is same across different age groups	0.008	Reject H0
SNT2 is same across different age groups	0.043	Reject H0
SNT3 is same across different age groups	0.124	Retain H0
SNT4 is same across different age groups	0.089	Retain H0

Note: The significance level was set at .050

Table 5.20 shows that for the variables frequent interaction between members (SNT1) and personal relationships with fellow members (SNT2), the p-values are 0.008 and 0.043, respectively. The null hypotheses of these three variables were rejected because the values were lower than the standard significance level of 0.05. This implies that the distributions of SNT1 and SNT 2 among the age categories differ considerably. For the remaining variables, the p-values for social networks formed among members (SNT3) and participation in informal and formal gatherings (SNT4) are 0.124 and 0.089, respectively. In that sense, the p-values do not reject the null hypothesis at the 5 percent significance level. Thus, the fact that the distribution of SNT3 and SNT4 in various age categories lacks statistically significant differences.

Hypothesis 7: There is no statistically significant differences in the distributions of social networks across different categories of gender

Table 5.21 Gender-wise Differences in Social Networks: Mann-Whitney U Test

Null Hypothesis	Sig.	Decision
SNT1 is same across different categories of gender	0.103	Retain H0
SNT2 is same across different categories of gender	0.038	Reject H0
SNT3 is same across different categories of gender	0.003	Reject H0
SNT4 is same across different categories of gender	0.000	Reject H0

Note: The significance level was set at .050

Table 5.21 shows that for the variables, personal relationships with fellow members (SNT2), social network formed among members (SNT3) and participation in informal and formal gatherings (SNT4), the p-values are 0.038 and 0.003 and0.000 respectively. The null hypothesis is rejected because the values are smaller than the standard level of significance of 0.05 in all three variables. This implies that the distributions of SNT2, SNT3 and SNT4 differ significantly between the categories of gender. For the remaining variable, frequent interaction between members (SNT1), the p-value is 0.103. The p-value in the case being discussed does not provide a sufficient level to reject the null hypothesis at the 5% significance level. Thus, there are no statistically significant differences in the distribution of SNT1 among the various gender categories.

Hypothesis 9: There is no statistically significant differences in the distribution of social networks across different categories of educational qualifications

Table 5.22 Educational Qualification-wise Differences in Social Networks: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
SNT1 is same across different educational qualification	0.000	Reject H0
SNT2 is same across different educational qualification	0.000	Reject H0
SNT 3 is same across different educational qualification	0.000	Reject H0
SNT 4 is same across different educational qualification	0.000	Reject H0

Note: The significance level was set at .050

Table 5.22 shows that for the variables frequent interaction between members (SNT1), personal relationships with fellow members (SNT2), social network formed among members (SNT3) and participation in informal and formal gatherings (SNT4), the p-values are 0.000. These values are lower than the standard level of significance, which is 0.05; therefore, the null hypothesis of these variables are rejected. This implies that there are major variations in the distributions of SNT1, SNT2, SNT3 and SNT4 across categories of education level.

Hypothesis 10: There is no statistically significant differences in the distributions of social networks across different categories of income

Table 5.23 Income-wise Differences in Social Networks: K-W Test Results

Null Hypothesis	Sig.	Decision
SNT1 is same across different categories of monthly income	0.177	Retain H0
SNT2 is same across different categories of monthly income	0.184	Retain H0
SNT3 is same across different categories of monthly income	0.178	Retain H0
SNT4 is same across different categories of monthly income	0.145	Retain H0

Note: The significance level was set at .050

Table 5.23 shows that for the variables frequent interaction between members (SNT1), personal relationships with fellow members (SNT2), social network formed among members (SNT3) and participation in informal and formal gatherings (SNT4), the p-values are 0.177, 0.184, 0.178 and 0.145, respectively. In such cases, the p-values are not small enough to reject the null hypothesis at the 5% significance level. Thus, it is concluded that the differences in the distribution of SNT1, SNT2, SNT3 and SNT4 are not significant.

5.4.3 Variations in Norms and Values across Age, Gender, Educational Qualification and Income

The development of social capital thrives on its norms and values, as they are determinants of how people will conduct and relate among themselves within a group or community. A commonality of their norms, including honesty, respect for each other and accountability, as well as commonly held beliefs such as fairness and communal good, will foster unity and trust among members in a cooperative

environment. As long as the same principles and ethical standards are observed by all, collaboration is facilitated, fewer misunderstandings will occur and everyone will be more ready to assist one another. This enhanced sense of morality increases social capital. It is also clear that the intensity of norms and values differs among individuals based on their age group, sex classification, level of education and income group. Accordingly, this section of the research explores these differences and attempts to determine whether they are meaningful.

Table 5.24 provides an argumentative overview of norms and value aspects, including conformance to cooperative ideals, practical ethics, helping each other and respect towards other people in the various age groups in a cooperative society. The general level of mean scores of each dimension was somewhat above 4.0, which would mean that members of the organisation feel the presence of cooperative norms and ethical culture in a strong manner. Nevertheless, different age variations bring out characteristic behaviours and perception patterns. The under 20 age group showed some of the highest mean scores, particularly in ethical guidelines (4.595) and willingness to contribute to goals (4.310). This suggests that younger members are highly idealistic, receptive to communicated values and actively committed to cooperative goals. Their relatively high score in adherence to principles (4.238) also reflects strong alignment with cooperative norms, although the higher standard deviation in mutual respect (1.268) may suggest variability in how they perceive or experience interpersonal interactions. The 20–30 age group maintained strong commitment scores, especially in terms of willingness to contribute (4.287) and mutual respect (4.131).

Table 5.24 Variations in Norms and Values across Different Age Groups

Age		NAV1	NAV2	NAV3	NAV4
Less than 20 years	Mean	4.238	4.595	4.310	4.048
	N	42	42	42	42
	Std. Deviation	0.850	0.767	0.924	1.268
20-30 years	Mean	3.836	4.041	4.287	4.131
	N	122	122	122	122
	Std. Deviation	1.188	1.138	0.922	1.150

Age		NAV1	NAV2	NAV3	NAV4
30-40 years	Mean	4.116	3.742	4.013	4.196
	N	225	225	225	225
	Std. Deviation	0.998	1.280	1.178	1.034
40-50 years	Mean	4.147	4.142	3.761	4.005
	N	218	218	218	218
	Std. Deviation	1.106	1.117	1.371	1.162
More than 50 years	Mean	3.879	4.174	4.235	3.906
	N	149	149	149	149
	Std. Deviation	1.399	1.057	0.996	1.291
Total	Mean	4.040	4.038	4.045	4.065
	N	756	756	756	756
	Std. Deviation	1.147	1.163	1.172	1.159

Source: Authors' Computation

However, their slightly lower mean adherence to principles (3.836) may reflect either limited exposure or critical reflection on structural or procedural consistency in the cooperative. Their replies are based on moderate positivity and increased conscientiousness and the perceptions remain relatively average in every aspect. For members aged 30–40, adherence to principles remains high (4.116), but the scores for ethical guidelines (3.742) are notably lower. This could indicate gaps in communication or enforcement of formal codes of conduct for this cohort, despite their continued commitment to respect (4.196) and cooperation. Their role is probably that of a stabilising centre of the cooperative, with an admixture of caustic criticism and active participation. The 40–50 age group reflected high confidence in both the principles (4.147) and ethical structure (4.142) of society. However, their score for willingness to contribute (3.761) was among the lowest, suggesting a possible decline in personal involvement, perhaps due to competing responsibilities or fatigue from long-term engagement. Esteem towards each other stands at a comparatively elevated level, which proves that interpersonal relations are not disregarded. The above-50 group exhibited the highest scores for willingness to help (4.235) and ethical

awareness (4.174), underlining a deep-rooted sense of responsibility and moral commitment to the cooperative's mission. However, their score for mutual respect (3.906) is lower, possibly reflecting generational disconnects or changing group dynamics. Their score for adherence to principles (3.879) was also moderate, suggesting that while they uphold values, they may perceive deviations in practice over time. Based on this, it can be seen that the commonly observed positive perception of norms and values across age groups is based on generational experience, activity and participation levels and perception of consistency in ethical governance. Younger members are very enthusiastic and idealistic; middle-aged members are more involved, albeit with some criticism; and older members are ethically involved but less active. Based on these reflections, different strategies should be applied in communication and engagement with people of different ages to strengthen the sense of cooperation, encourage relationships and open people up to collaboration across generations to support the ethical health of a cooperative society in the long term.

Table 5.25 provides a clear understanding of the role of gender in attaining perceptions of norms and values in a cooperative society, as indicated by the four qualitative dimensions: adherence to cooperative principles, ethical standards communications, readiness to assist and contribute and respect for fellow members. The total average scores of all respondents were slightly larger than 4.0 which is a good indicator of ethical and cooperative culture perception. Nonetheless, a major gender difference was observed. Their mean scores in all dimensions are always higher among male respondents, implying that men perceive the cooperative environment as more principled, ethical, cooperative and respectful. Their highest score was in mutual respect and consideration (4.282), followed closely by adherence to cooperative principles (4.311), which reflects a strong sense of institutional integrity and interpersonal harmony.

Table 5.25 Variations in Norms and Values across Different Categories of Gender

Gender		NAV1	NAV2	NAV3	NAV4
Male	Mean	4.311	4.237	4.230	4.282
	N	379	379	379	379
	Std. Deviation	0.856	0.941	0.939	0.915

Gender		NAV1	NAV2	NAV3	NAV4
Female	Mean	3.767	3.838	3.859	3.846
	N	377	377	377	377
	Std. Deviation	1.324	1.322	1.342	1.326
Total	Mean	4.040	4.038	4.045	4.065
	N	756	756	756	756
	Std. Deviation	1.147	1.163	1.172	1.159

Source: Authors' Computation

Moreover, males exhibited lower standard deviations (0.85 to 0.94), indicating that their responses were more consistent and uniform, pointing to a shared and confident experience of the cooperative's norms and values. In contrast, female respondents showed lower mean scores in all areas, particularly in cooperative principles (3.767) and ethical communication (3.838). Their perceptions of willingness to help (3.859) and mutual respect (3.846) were also less positive than those of their male counterparts. Such disparities would indicate that women might not be as well treated, empowered, or represented in the cooperatively sought-after nature as well as the ways that the cooperative decides.

Additionally, the higher standard deviations (1.32-1.34) among females reflect greater variability in their experiences, possibly due to differing levels of participation, exposure, or perceived fairness within the organisation. In conclusion, there is a gender disparity in the perception of norms and values to be embraced in a cooperative society. Although men tend to perceive cooperation as ethical, involving and respectful, women record more moderate and less consistent stances, which may be caused by structural or cultural impediments to complete accessibility. This indicates that cooperatives should improve gender inclusiveness, effectively transmit ethical standards to every member and create an atmosphere in which men and women feel equally respected, valued and empowered to contribute to the mission and values of the society.

Table 5.26 Variations in Norms and Value across Different Levels of Educational Qualifications

Educational Qualifications		NAV1	NAV2	NAV3	NAV4
Up to Matriculation	Mean	3.356	3.378	3.385	3.385
	N	135	135	135	135
	Std. Deviation	1.543	1.530	1.536	1.540
Plus Two	Mean	3.946	3.931	3.939	3.935
	N	277	277	277	277
	Std. Deviation	1.243	1.254	1.254	1.252
Under Graduation	Mean	4.404	4.410	4.404	4.404
	N	161	161	161	161
	Std. Deviation	0.693	0.693	0.702	0.702
Post-Graduation	Mean	4.366	4.361	4.377	4.464
	N	183	183	183	183
	Std. Deviation	0.595	0.719	0.759	0.618
Total	Mean	4.040	4.038	4.045	4.065
	N	756	756	756	756
	Std. Deviation	1.147	1.163	1.172	1.159

Source: Authors' Computation

Table 5.26 provides an overview of the finer gradation of the individual impact of educational qualifications of norms and value perception in cooperative societies, under four scales: observance of cooperative principle, communication of ethical conduct, readiness to contribute towards the objectives and respect towards each other. The overall mean scores indicate a generally positive perception of the cooperative environment. Nevertheless, the differences between education levels provide important information regarding the process of education, influencing the experiences of the members. Respondents with lower educational qualifications reported the lowest mean scores across all four dimensions (ranging from 3.356 to 3.385), with high standard deviations (around 1.53 to 1.54). This implies fewer positive and more diverse experiences regarding norms, ethical communication and mutual respect. Such members will be less informed or engaged in both the ethical culture and the process of cooperation among members and may not be exposed to formal governance

mechanisms. Members with a Plus Two education show improved perceptions, though still below the overall average. Although their means were slightly lower than those of the Matriculation group, their data indicate that their familiarity and comprehension of the values of cooperation are in progress. This group can be positively affected by more specific information/relationship training on cooperative ethics and involvement. Members with Undergraduate and Postgraduate qualifications have the most favourable perceptions. Undergraduate members reported very high and consistent mean scores (4.404 in all categories) with low standard deviations (0.693 to 0.702), indicating a strong, shared sense of ethical culture, cooperation and mutual respect. Postgraduate members also reflected very positive perceptions, with slightly higher scores in mutual respect (4.464) and slightly more variation in some areas. The general tendency of theirs implies profound knowledge and a keen interest in working in cooperative norms and obligations. In conclusion, it is possible to state that there is a positive relationship between the level of education and positive perception of cooperative norms and values. higher education seems to facilitate members' understanding, appreciation and experience of ethical behaviour, respect and contribution. On the other hand, less educated members might be found to have difficulties in the accessibility or uptake of such values equally. The results of the study underline the significance of outreach education, inclusive communication approaches and participative training that can be offered to reduce the gap in perception and experience levels between the educational groups, contributing to building a more unified and participatory culture of cooperation. Since the level of education is a significant aspect, this findings helps the policymakers in developing policies and the cooperative managements shall use these findings for the process of strategy formulation with regard to the development and maintenance of various norms.

Table 5.27 Variations in Norms and Values across Different Categories of Income

Monthly Income		NAV 1	NAV 2	NAV 3	NAV 4
Less than 10000	Mean	3.721	4.072	4.207	4.027
	N	111	111	111	111
	Std. Deviation	1.322	1.059	0.925	1.239
10000-20000	Mean	4.178	3.830	4.107	4.321
	N	112	112	112	112

Monthly Income		NAV 1	NAV 2	NAV 3	NAV 4
	Std. Deviation	1.224	1.224	1.150	0.774
	Mean	4.162	4.068	3.919	4.054
20000-30000	N	222	222	222	222
	Std. Deviation	0.952	1.233	1.249	1.198
	Mean	3.955	4.146	4.028	3.904
30000-40000	N	178	178	178	178
	Std. Deviation	1.239	0.975	1.291	1.234
	Mean	4.098	3.992	4.090	4.113
Above 40000	N	133	133	133	133
	Std. Deviation	1.043	1.209	1.062	1.166
	Mean	4.040	4.038	4.045	4.065
Total	N	756	756	756	756
	Std. Deviation	1.147	1.163	1.172	1.159

Source: Authors' Computation

As Table 5.27 shows, there is a correlation between income levels and the perceived sense of being in cooperative societies, depending on four important areas; adherence to cooperative principles, communication of ethical rules, preparedness to assist and share and interpersonal respect among the members. The average scores are slightly above 4.0 on each dimension, generally spelling a positive base, but there are some significant variations according to income levels. Respondents earning less than Rs. 10,000 per month reported the lowest mean score for adherence to cooperative principles (3.721), though they rated willingness to help (4.207) relatively high. This might indicate a high interpersonal feeling of support with less structural enlightenment or affiliation to formal principles. However, their high standard deviations, especially for norms and mutual respect (approximately 1.32 and 1.24, respectively), reveal variability and inconsistency in their cooperative experience. The Rs. 10,000 to Rs. 20,000 group shows a mixed pattern: they perceive high mutual respect and strong willingness to contribute, yet their perception of ethical communication is relatively low, possibly indicating disconnects in top-down communication. Notably, this group had one of the lowest standard deviations in mutual respect (0.774), suggesting a more consistent and shared experience in that aspect. Members in the Rs. 20,000 to Rs. 30,000 and Rs. 30,000 to Rs. 40,000 ranges show moderate and relatively balanced mean values (between 3.919 and 4.162), with

slightly higher variation in their responses. This group seems to be relatively stable yet less extraordinary in seeing norms and values, which may depend on both anticipation and institutional reality. Respondents earning above Rs. 40,000 reported consistently high mean scores across all variables, particularly in mutual respect and adherence to cooperative principles, with relatively lower standard deviations. This implies a steady and favourable view of cooperative morals and interpersonal reverence, which is probably ascribed to their higher access to information, participation and decision-making in society. The research results conclude that there is a positive correlation between the level of income and positive perception of norms and values of cooperation. It is likely that higher-income members feel that there is more ethical visibility, respect and cooperation because of enhanced access and engagement. Members of lower income groups exhibit high levels of interpersonal trust but have higher inconsistency and low levels of understanding or involvement in formal arrangements of cooperation. This also points to the need for cooperatives to enhance inclusivity, targeted communication and engagement processes, where the economically disadvantaged members are the target of the improved inclusivity process to provide equitable participation and a cohesive cooperative culture by income grouping.

The identification of variations in norms and value indicators among cooperatives across demographic variables clearly reveals that norms and values among cooperative members vary across these demographic variables. In this way, the related study intends to determine whether these variations differ significantly; in this regard, additional statistical tests will be provided. Therefore, the study first attempted to identify the nature of the distribution using the Kolmogorov-Smirnov test.

Table 5.28 Assessment of Normality: One-Sample Kolmogorov-Smirnov Test

Null Hypothesis	Sig.	Decision
NAV1 is normal with mean 4.04 and standard deviation 1.146	.000	Reject H0
NAV2 is normal with mean 4.04 and standard deviation 1.163	.000	Reject H0
NAV3 is normal with mean 4.04 and standard deviation 1.171	.000	Reject H0
NAV4 is normal with mean 4.06 and standard deviation 1.158	.000	Reject H0

Note: The significance level was set at .050

The results shows that for all four variables, that is, following all recognised cooperative principles over time (NAV1), ethical guidelines and code of conduct (NAV2), willing to help each other (NAV3) and mutual respect and consideration (NAV4), the p-values were .000. The null hypothesis that these variables have a normal distribution with the reported means and standard deviation is rejected in all cases since each of the p values lies below the standard level of significance of 0.05. This means that the distributions of these variables differ significantly from normality. Hence, it can be seen in the findings that non-parametric techniques possibly suit the subsequent analysis of statistics. In this context, the present study formulated the following hypotheses and applied the Kruskal-Wallis test (for age, educational qualification and monthly income) and the Mann-Whitney U test for gender to test the hypotheses. The findings were as follows.

Hypothesis 11: There is no statistically significant differences in the distributions of norms and values across different categories of age

Table 5.29 Age-wise Differences in the Norms and Values: K-W Test Results

Null Hypothesis	Sig.	Decision
NAV1 is same across categories of Age.	0.077	Retain H0
NAV2 is same across categories of Age.	0.000	Reject H0
NAV3 is same across categories of Age.	0.002	Reject H0
NAV4 is same across categories of Age.	0.146	Retain H0

Note: The significance level was set at .050

The Kruskal-Wallis Test was chosen to determine whether norms and value-related variables had statistically significant differences across age categories. The results reveals that for the variables ethical guidelines and code of conduct (NAV2) and willingness to help each other (NAV3), the p-values are 0.000 and 0.002, respectively. The null hypothesis of this variable is rejected since the p-value obtained is less than the standard significance level of 0.05. This implies that the distributions of both categories of NAV2 and NAV3 are enormous concerning the various age categories. For the remaining variables, the p-values are 0.077 and 0.146, respectively. The p-values in the given case are not too small to abandon the null hypothesis at the 5

percent level of significance. Thus, it is clear that distributions of NAV1 and NAV4 have no significant variations across age.

Hypothesis 12: There is no statistically significant differences in the distributions of norms and values across different gender groups.

Table 5.30 Gender-wise Differences in the Norms and Values: Mann-Whitney U Test Results

Null Hypothesis	Sig.	Decision
NAV1 is same across different categories of Gender	0.000	Reject H0
NAV2 is same across different categories of Gender	0.000	Reject H0
NAV3 is same across different categories of Gender	0.006	Reject H0
NAV4 is same across different categories of Gender	0.000	Reject H0

Note: The significance level was set at .050

Table 5.30 shows that for the variables, Following all recognised cooperative principles over time (NAV1), Ethical guidelines and code of conduct (NAV2), Willing to help each other (NAV3) and Mutual respect and considerations (NAV4), the p-values are 0.000, 0.000, 0.006 and 0.000, respectively. Since the p-values are smaller than the normal cut-off of 0.05, the null hypotheses of these variables are rejected and alternate hypotheses was accepted. This implies that NAV1, NAV2, NAV3 and NAV4 have substantial variations in their distributions in the various categories of gender.

Hypothesis 14: There is no statistically significant differences in the distributions of norms and values across different categories of educational qualification.

Table 5.31 Educational Qualification-wise Differences in Norms and Values: K-W Test Results

Null Hypothesis	Sig.	Decision
NAV1 is same across different Educational qualifications	0.000	Reject H0
NAV2 is same across different Educational qualifications	0.000	Reject H0
NAV3 is same across different Educational qualifications	0.000	Reject H0
NAV4 is same across different Educational qualifications	0.000	Reject H0

Note: The significance level is set at .050

Table 5.31 shows that, for the variables, NAV1, NAV2, NAV3 and NAV4, the p-values are 0.000. The null hypothesis of the following variables was rejected as the p-values were less than the standard significance of 0.05. This implies that there are large disparities in the distributions of NAV 1, NAV2, NAV3 and NAV4 in terms of different categories of educational qualifications.

Hypothesis 15: There is no statistically significant differences in the distributions of norms and values across different categories of income

Table 5.32 Income-wise Differences in the Norms and Values: Kruskal-Wallis Test

Null Hypothesis	Sig.	Decision
NAV1 is same across different levels of monthly income	0.004	Reject H0
NAV2 is same across different levels of monthly income	0.291	Retain H0
NAV3 is same across different levels of monthly income	0.320	Retain H0
NAV4 is same across different levels of monthly income	0.143	Retain H0

Note: The significance level is fixed at .050

This analysis was done to examine the differences in the norms and values related variables as statistically significant across the categories of income using the Kruskal-Wallis Test. The results show that, for the variable, Following all recognised cooperative principles over time, the p-value is 0.004. The null hypotheses pertaining to this variable is rejected because the p-value is less than the standard significance level of 0.05. This implies a high variance in the distribution of NAV1 in various income categories. For the remaining variables, Ethical guidelines and code of conduct, Willing to help each other and Mutual respect and considerations, the p-values are 0.291, 0.320 and 0.143, respectively. Thus, p-values are insignificant in order to reject the null hypothesis at the 5 percent level. So, the distributions of NAV2, NAV3 and NAV4 do not differ significantly for various types of income.

5.4.4 Variations in Communication and Information Sharing across Age, Gender, Educational Qualification and Income

Communication and information sharing are significant in building social capital. Information, ideas and updates regularly exchanged between members of a group or community build trust, relationships and collaboration. Good and open

communication makes people feel secure and enlightened; therefore, this breeds a feeling of belonging and support with others. This perpetuated interaction becomes the basis of networks, common values and norms. In other words, the greater the communication and information sharing between people, the stronger their social bonds, resulting in elevated social capital. Therefore, the degree of the same will need to be gauged and must delineate any changes with regard to various demographic variables. This portion of the research attempted to do the same. The outcomes are presented in the coming tables.

Table 5.33 presents the relationship between age groups and their perceptions of Communication and Information Sharing within cooperative societies, assessed across four dimensions: frequency of formal and informal communication, access to relevant information, culture of knowledge sharing and efficiency of information dissemination, including remote members. The total mean scores of all indicators were close to 4.0, meaning the overall satisfaction rate was high concerning the communication environment; however, perceptual differences in various age groups could be seen. The "Less than 20 years" age group consistently reports high mean scores across most indicators, particularly in terms of access to information (4.357) and communication frequency (4.262). Their perception of knowledge sharing (3.929) was slightly lower, perhaps reflecting limited engagement in deeper cooperative knowledge exchanges due to age or experience. Nevertheless, their standard deviations are quite low, indicating that they have an identical, uniform experience in communication. A mixed picture is shown by the 2030 age group. They showed strong agreement on information accessibility and knowledge sharing, but slightly lower satisfaction with communication frequency and speed of dissemination.

Table 5.33 Variations in Communication and Information Sharing across Different Age Groups

Age		CIS1	CIS2	CIS3	CIS4
Less than 20 years	Mean	4.262	4.357	3.929	4.262
	N	42	42	42	42
	Std. Deviation	0.798	0.879	1.237	0.964
20-30 years	Mean	3.820	4.197	4.148	3.951
	N	122	122	122	122

Age		CIS1	CIS2	CIS3	CIS4
30-40 years	Std. Deviation	1.373	0.746	1.176	1.265
	Mean	3.987	3.947	4.089	4.191
	N	225	225	225	225
40-50 years	Std. Deviation	1.208	1.308	0.945	1.095
	Mean	4.161	3.899	4.005	4.028
	N	218	218	218	218
More than 50 years	Std. Deviation	1.093	1.284	1.318	1.038
	Mean	4.007	4.275	3.738	3.832
	N	149	149	149	149
Total	Std. Deviation	1.106	0.965	1.343	1.377
	Mean	4.029	4.061	3.996	4.038
	N	756	756	756	756
	Std. Deviation	1.170	1.150	1.201	1.168

Source: Authors' computation

Their relatively large standard deviations on dimensions imply divergent experiences, which could be a case where they had differences in their positions or participation in society. For the 30-40 years group, perceptions were mostly balanced and positive, especially regarding information dissemination (4.191) and knowledge sharing (4.089). The moderate values of the standard deviations of the sample imply that there should be moderate consistency in their communication experiences and their scores suggest that, generally, this group must contribute significantly to the process of receiving and relaying information in the cooperative organisation. The 40-50 years group demonstrated generally favourable perceptions, with particularly high scores for communication frequency (4.161). However, they rated access to information and knowledge sharing slightly lower, which may point to possible information bottlenecks or less proactive engagement in these aspects. They have a moderate standard deviation, which indicates how members perceive each other. Interestingly, the "Above 50 years" group rates information access (4.275) quite high, showing that senior members feel adequately informed. However, they expressed the lowest rating for knowledge sharing (3.738), which may reflect a generational communication gap or a lesser emphasis on collaborative learning. The higher standard deviations, especially for information sharing (1.343) and dissemination (1.377), underscore the

lack of uniformity in their experiences. The analysis determined that age is an important factor that shapes members' perception of communication and information exchange in cooperatives. Younger members value frequency and accessibility, whereas middle-aged groups (30-40 and 40-50) exhibit active engagement and balanced views. The flow and openness of knowledge sharing is less satisfactory to older members, except that they also perceive ease of accessibility. Such insights stress the necessity of age-sensitive communication opportunities that provide multicultural and transparent information flow and meet the scope of all age groups to ensure the need and goal of knowledge transfer between different generations.

Table 5.34 Variations in Communication and Information Sharing across Different Categories of Gender

Gender		CIS1	CIS2	CIS3	CIS4
Male	Mean	4.224	4.240	4.156	4.145
	N	379	379	379	379
	Std. Deviation	0.997	1.004	1.010	1.027
Female	Mean	3.833	3.881	3.836	3.931
	N	377	377	377	377
	Std. Deviation	1.293	1.257	1.349	1.286
Total	Mean	4.029	4.061	3.996	4.038
	N	756	756	756	756
	Std. Deviation	1.170	1.150	1.201	1.168

Source: Authors' computation

Table 5.34 throws light on gender related differences or discrepancies in the perception of communication and information sharing in cooperative societies based on four dimensions: frequency of formal and informal communication, convenient access to relevant information, revealing the nature of information sharing and time sensitivity of critical information dissemination across the board, including remote regions. Male respondents reported consistently higher mean scores across all four indicators, with the highest being access to relevant information, followed by communication frequency, knowledge sharing and timely dissemination. These figures imply that male members generally have a good and informative network of communication in the cooperatives they are members of. Additionally, the relatively

low standard deviations (ranging from 0.997 to 1.027) indicate a fairly consistent experience among the male respondents. Instead, the means that correspond to female respondents are inferior in every respect in terms of communication and information sharing. The lowest was in knowledge sharing, while the highest was in the dissemination of relevant information. Even though their results are higher than average, the difference between male and female perceptions suggests that women might tend to feel less engaged or informed in the sphere of communication of the cooperative compared to men. Furthermore, the higher standard deviations among female respondents (ranging from 1.257 to 1.349) suggest greater variability in their experiences, reflecting possible disparities in access, participation or inclusion. In general, the average values of all indicators fluctuated within 4.0 on average, suggesting a positive communication environment. Nevertheless, the variations between male and female experiences reveal that cooperatives should implement more accommodative and gender-sensitive communication techniques. By bridging the identified gaps, it is possible to ensure that every society member, regardless of gender, will be able to enjoy equal access to information flows that are timely, transparent and participatory in society.

Table 5.35 shows the level of perception regarding communication and sharing of information in cooperative societies amid the various educational categories of qualification. It addresses four dimensions: frequency of formal and informal communication, availability of relevant information, culture of knowledge sharing and timely dissemination of essential knowledge. Certain trends can be observed in terms of educational attainment, as shown by the data. The mean scores obtained were lowest among respondents with up to matriculation education, expounding the four indicators with the range being 3.333 to 3.400.

Table 5.35 Variations in Communication and Information Sharing across Different Levels of Educational Qualifications

Educational Qualifications		CIS1	CIS2	CIS3	CIS4
Up to Matriculation	Mean	3.385	3.400	3.333	3.385
	N	135	135	135	135
	Std. Deviation	1.536	1.517	1.536	1.506

Educational Qualifications		CIS1	CIS2	CIS3	CIS4
	Mean	3.921	3.924	3.928	3.939
Plus Two	N	277	277	277	277
	Std. Deviation	1.263	1.265	1.266	1.263
	Mean	4.404	4.398	4.391	4.379
Under Graduation	N	161	161	161	161
	Std. Deviation	0.702	0.701	0.700	0.724
	Mean	4.339	4.459	4.240	4.372
Post-Graduation	N	183	183	183	183
	Std. Deviation	0.738	0.571	0.924	0.751
	Mean	4.029	4.061	3.996	4.038
Total	N	756	756	756	756
	Std. Deviation	1.170	1.150	1.201	1.168

Source: Authors' computation

These lower scores, coupled with higher standard deviations, suggest both a comparatively limited experience with effective communication systems in their cooperatives and a wide variation in perceptions within this group. There is a moderate mean score of nearly 3.9 for those with a Plus Two qualification on all the indicators. Their answers indicate a decent degree of satisfaction with communication patterns; however, there is still space to improve the situation. Their standard deviations, which are less than those of people with matriculation education, still reflect significant differences in their experiences. In contrast, the base of undergraduate and postgraduate degrees presented the highest average scores for each level of communication and information sharing. Undergraduate respondents had particularly high and consistent scores with very low variability, indicating a strong and uniform perception of effective communication within their cooperatives. Postgraduates also report high satisfaction, especially in access to relevant information (4.459) and timely dissemination (4.372), although slightly lower in the culture of knowledge sharing (4.240), with moderate variation. Generally, the mean scores of all four indicators of the total sample comprise a number around 4.0, indicating a positive communication climate in the cooperatives in general. However, statistics indicate a close correlation between the level of education and a positive outlook on communication and information systems. This means that highly educated

members are better placed to utilise and appreciate the benefits of cooperative modes of communication and at the same time, they are more exposed to accessing the communication channels because of their digital literacy, confidence in using the channels and engagement in the process. As such, cooperative societies might be forced to use more accommodating communication patterns to bridge the divide and ensure that equity and comprehensibility are met by members with lower education levels. The management of cooperatives and the policy makers would thus formulate appropriate and inclusive communication methods to cater the needs of all members and also advised to impart training and developmental activities to equip the low educated members with modern digital communication channels.

Table 5.36 shows the perceptions towards communication and sharing of information in the cooperative societies in the four dimensions: frequency of both formal and informal communication, support of access to information, the culture of knowledge sharing and speed of circulation of information, including getting into areas that are far apart, are captured in relation to the levels of monthly income. Members in the lowest income report generally favourable perceptions, with means ranging from 3.919 to 4.072. However, despite their low income, their answers demonstrate that they are somewhat strong as cooperative interlocutors, even though knowledge distribution participants could use a bit of enhancement as far as the relatively lower score is concerned. The higher standard deviations (1.2 to1.3) reflect considerable variation in experiences within this group. All the dimensions show an average score of slightly above 4.0 by respondents in the Rs. 10,000 to 20,000 and Rs. 20,000 to 30,000 income ranges and the mean scores are consistent across both these ranges which means that the communication environment within their cooperatives is sound and stable.

Table 5.36 Variations in Communication and Information Sharing across Different Levels of Income

Monthly Income		CIS1	CIS2	CIS3	CIS4
Less than 10000	Mean	4.072	4.063	3.919	3.973
	N	111	111	111	111
	Std. Deviation	1.042	1.201	1.287	1.268
10000-20000	Mean	4.116	3.955	3.991	4.071

	N	112	112	112	112
	Std. Deviation	1.228	1.142	1.174	1.088
	Mean	4.068	4.122	3.977	3.986
20000-30000	N	222	222	222	222
	Std. Deviation	1.109	1.165	1.163	1.235
	Mean	4.045	4.079	4.011	4.090
30000-40000	N	178	178	178	178
	Std. Deviation	1.173	1.097	1.276	1.059
	Mean	3.835	4.023	4.075	4.083
Above 40000	N	133	133	133	133
	Std. Deviation	1.304	1.171	1.119	1.181
	Mean	4.029	4.061	3.996	4.038
Total	N	756	756	756	756
	Std. Deviation	1.170	1.150	1.201	1.168

Source: Authors' computation

They have more modest standard deviations, which are indicative of their experiences being more uniform than in the case of the lowest income group. Others between Rs. 30 000 and Rs. 40 000 also have positive perceptions of above 4.0 and about 4.09 points. Their lowest mean (4.011) relates to knowledge sharing, but overall, their responses reflect a well-functioning communication system in their societies, with relatively less variability among individuals. Interestingly, individuals in the highest income group (above Rs. 40,000) displayed a slightly different pattern. While they report the highest mean (4.075) for the knowledge sharing dimension, their score for frequent communication (3.835) is the lowest among all income brackets. This might indicate that the degree of active involvement in communicating may be slightly lower, even though they have the means to obtain the necessary information of quality and efficient systems is within their reach. This may be due to the lack of reliance on the cooperative networks or it may be due to the selective participation. In conclusion, the perception of communication and the sharing of information has an optimistic overview at all income levels and the values are concentrated at approximately 4.0 on average. However, the slight variations suggest that middle-income members tend to experience a more consistent and effective communication environment than those earning less. Cooperative societies can explore options to broaden the width of both

lower- and higher-income members by being more inclusive and making them more participatory in communicating practices to provide a fair and participatory culture in communications.

The above investigation shows that communication and information sharing among cooperative members differ according to various demographic variables such as age, gender, education level and income. Therefore, the study intends to determine whether these differences are considerably different or not and additional statistical testing will be performed. Therefore, the study first attempted to identify the nature of the distribution using the Kolmogorov-Smirnov test. The results are tabulated below.

Table 5.37 Assessment of Normality: One-Sample Kolmogorov-Smirnov Test

Null Hypothesis	Sig.	Decision
CIS 1 is normal with mean 4.03 and standard deviation 1.169	.000	Reject H0
CIS 2 is normal with mean 4.06 and standard deviation 1.150	.000	Reject H0
CIS 3 is normal with mean 4.00 and standard deviation 1.201	.000	Reject H0
CIS 4 is normal with mean 4.04 and standard deviation 1.167	.000	Reject H0

Note: The significance level was set at.050

The Kolmogorov-Smirnov test was conducted to check the normality of the distributions of four 'Communication and Information Sharing'-related variables within the dataset. The results show that for all four variables, that is, informal and formal communication (CIS1), easy access to relevant information (CIS2), freely sharing information and knowledge (CIS3) and relevant and crucial information (CIS4), the p-values were .000. We can now reject the null hypotheses in all these cases since each p-value is less than the standard significance level of 0.05 which assumes that we cannot reject the null hypothesis that the data points in these variables are distributed normally with the reported means and standard deviations. This shows that there is a high degree of non-normality in the distribution of these variables. The findings indicate that non-parametric methods may be better suited for additional statistical testing. In this context, the present study formulated the following hypotheses and applied the Kruskal-Wallis test (for age, educational qualification and monthly income) and the Mann-Whitney U test for gender to test the hypotheses. The findings are discussed below.

Hypothesis 16: There is no statistically significant differences in the distributions of communication and information sharing across different age groups

Table 5.38 Age-wise Differences in Communication and Information Sharing: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
CIS1 is the same across different categories of Age	0.130	Retain H0
CIS2 is the same across different categories of Age	0.034	Reject H0
CIS3 is the same across different categories of Age	0.021	Reject H0
CIS4 is the same across different categories of Age	0.017	Reject H0

Note: The significance level was set at .050

The Kruskal-Wallis Test in table 5.38 was used to determine whether there are statistically significant differences in communication and information sharing-related variables across different age categories. The results show that for the variables of easy access to relevant information (CIS2), freely sharing information and knowledge (CIS3) and relevant and crucial information (CIS4), the p-values are 0.034 and 0.021 and0.017 respectively. These values, as compared to the standard significance level of 0.05, are less than it; hence, the null hypotheses of the three variables will be rejected. This implies that there are very high variations between the distributions of CIS2, CIS3 and CIS4 among the various age levels. For the remaining variable, frequent informal and formal communication (CIS1), the p-value is 0.130. In this instance, the p produced is not that small as to reject the null hypothesis at the level of significance of 5 percent. Thus, it is clear that there is no statistically significant variations in the distribution of CIS1 across various categories of age.

Hypothesis 17: There is no statistically significant differences in the distributions of communication and information sharing across different gender groups

Table 5.39 Gender-wise Differences in Communication and Information Sharing: Mann-Whitney U Test Results

Null Hypothesis	Sig.	Decision
CIS1 is the same across various categories of gender	0.000	Reject H0
CIS2 is the same across various categories of gender	0.000	Reject H0

CIS3 is the same across various categories of gender	0.023	Reject H0
CIS4 is the same across various categories of gender	0.139	Retain H0

Note: The significance level was set at .050

The Kruskal-Wallis test results in table 5.39 was used to determine whether there are statistically significant differences in communication and information sharing-related variables across different gender categories. The results show that for the variables of frequent informal and formal communication (CIS1), easy access to relevant information (CIS2) and freely sharing information and knowledge (CIS3) and the p-values are 0.000 and 0.000 and0.023 respectively. These values, as compared to the standard significance level of 0.05, are less than it; hence, the null hypotheses of the three variables will be rejected. This implies that there are very high variations between the distributions of CIS1, CIS2 and CIS3 among different genders. For the remaining variable, relevant and crucial information (CIS4), the p-value is 0.139. In this instance, the p value produced is not that small as to reject the null hypothesis at the level of significance of 5 percent. Thus, it remains apparent that no statistically significant variations in the distribution of CIS4 throughout different gender categories.

Hypothesis 19: There are no statistically significant differences in the distribution of communication and information sharing across different categories of educational qualifications.

Table 5.40 Educational Qualification-wise Differences in Communication and Information Sharing: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
CIS1 is same across different educational qualifications.	0.000	Reject H0
CIS2 is same across different educational qualifications.	0.000	Reject H0
CIS3 is same across different educational qualifications.	0.000	Reject H0
CIS4 is same across different educational qualifications.	0.000	Reject H0

Note: The significance level was set at.050

To establish whether there are statistically significant variations in communication and information sharing related variables between the various categories of

educational qualifications, the Kruskal-Wallis test was applied. Table 5.40 reveals that for the variables frequent informal and formal communication (CIS1), easy access to relevant information (CIS2), freely sharing information and knowledge (CIS3) and relevant and crucial information (CIS4), the p-values are 0.000. The null hypotheses of such variables were rejected as these values were lower than the standard significance level of 0.05. This implies that the distributions of CIS1, CIS2, CIS3 and CIS4 among the various groupings of educational qualifications are different.

Hypothesis 20: There is no statistically significant differences in the distributions of communication and information sharing across different categories of income.

Table 5.41 Income-wise Differences in Communication and Information Sharing: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
CIS1 is same across various levels of monthly income	0.183	Retain H0
CIS1 is same across various levels of monthly income	0.277	Retain H0
CIS1 is same across various levels of monthly income	0.713	Retain H0
CIS1 is same across various levels of monthly income	0.948	Retain H0

Note: The significance level was set at .050

Table 5.41 shows that for the variables frequent informal and formal communication (CIS1), easy access to relevant information (CIS2), freely sharing information and knowledge (CIS3) and relevant and crucial information (CIS4), the p-values are 0.183, 0.277, 0.713 and 0.948, respectively. At such points, the p-values are not significant enough to disprove the null hypothesis at the 5 per cent level of significance. Hence, it becomes clear that CIS1, CIS2, CIS3 and CIS4 have no statistically significant variation in the distributions between the various income groups.

5.4.5 Variations in Leadership and Governance across Age, Gender, Educational Qualification and Income

Governance and leadership are important in the formation and enhancement of social capital in cooperative societies or institutions. Good leadership brings about trust, active involvement and defined values and good governance that fulfils transparency, accountability and equity in decision-making. The combination produces a setting in

which members find it comfortable to belong, feel good and are motivated to engage in group work, thus improving the overall social capital. Simply put, robust leadership and good governance are prerequisites for creating and maintaining respectful relationships, trust and group participation among people. As leadership and governance are essential aspects of social capital, the degree of the same is to be gauged and must determine its changes across various demographic parameters. This segment of the research made an effort in the same. The findings are as follows.

Table 5.42 provides a closer look into the understanding held by the members in the various age groups towards leadership and practices of governance in their cooperative societies. Generally, based on these responses, the age category of those polled portrays a generally positive perception of all four variables i.e., (1) participation in governance (LNG1), transparency and accountability (LNG2), representation of members of the marginalised cohort (LNG3) and programme for the development of leaders (LNG4), with the mean scores of the four variables ranging between or above 4.0 on a 5-points scale. Members below 20 years of age reported the highest satisfaction across almost all aspects of leadership and governance, especially with leadership development opportunities (mean=4.643) and representation of marginalised members (mean=4.381). Such high scores and fairly low standard deviations indicate that younger members believe that they are treated with a great sense of inclusion and empowerment in their societies.

Table 5.42 Variations in Leadership and Governance across Different Age Group

Age		LNG1	LNG2	LNG3	LNG4
Less than 20 years	Mean	4.286	4.167	4.381	4.643
	N	42	42	42	42
	Std. Deviation	0.742	1.034	0.795	0.618
20-30 years	Mean	4.107	4.057	3.590	3.975
	N	122	122	122	122
	Std. Deviation	1.304	0.982	1.377	1.153
30-40 years	Mean	3.933	4.138	4.133	3.787
	N	225	225	225	225

Age		LNG1	LNG2	LNG3	LNG4
40-50 years	Std. Deviation	1.316	1.237	0.973	1.278
	Mean	3.908	3.927	4.239	4.234
	N	218	218	218	218
More than 50 years	Std. Deviation	1.192	1.271	1.119	1.063
	Mean	4.174	4.121	4.027	4.087
	N	149	149	149	149
Total	Std. Deviation	0.935	1.059	1.305	1.168
	Mean	4.021	4.062	4.069	4.053
	N	756	756	756	756
	Std. Deviation	1.188	1.166	1.168	1.167

Source: Authors' computation

The 20 to 30 age group, while still positive, showed a slight drop in scores, particularly regarding the representation of marginalised members (mean=3.590). This may signify that there is awareness that young adults may feel excluded and that there is a feeling that space to hear decisions is limited. Their scores for transparency (mean=4.057) and participation (mean = 4.107) remained relatively strong, but with higher standard deviations, indicating variability in their experiences. Respondents between the ages of 30 and 40 had a balanced, though moderate, perception of governance practices. While they view transparency (mean=4.138) and representation (mean=4.133) positively, they rate leadership development slightly lower (mean=3.787), suggesting a possible need for more targeted initiatives in leadership training for this group. The 40–50 age group showed a swaying opinion. While the representation of marginalised members is rated highly (mean=4.239), participation (mean=3.908) and transparency (mean=3.927) receive lower scores. However, their perception of leadership development (mean=4.234) was notably high, indicating an appreciation for training efforts, even if broader governance processes need to be more inclusive or transparent. Respondents above 50 years old reported generally strong perceptions across all indicators, especially for participation (mean=4.174) and transparency (mean=4.121). They have more consistent responses with standard deviations which are less than those of the middle-age brackets. This can be a solid

and confident association with agreeable management developed over time. Lastly, there is a relatively strong support for leadership and governance perceptions across all generations, with the old and young generations giving the best reactions.

Table 5.43 Variations in Leadership and Governance across Different Genders

Gender		LNG1	LNG2	LNG3	LNG4
	Mean	4.190	4.298	4.322	4.208
Male	N	379	379	379	379
	Std. Deviation	0.946	0.936	0.912	1.006
	Mean	3.851	3.825	3.814	3.897
Female	N	377	377	377	377
	Std. Deviation	1.370	1.317	1.332	1.291
	Mean	4.021	4.062	4.069	4.053
Total	N	756	756	756	756
	Std. Deviation	1.188	1.166	1.168	1.167

Source: Authors' computation

Table 5.43 reveals the perception of leadership and governance practice in cooperative societies by different genders. In all four dimensions, including participation in governance, transparency and accountability, representation of marginalised groups and leadership development, the male group members reported better mean scores in all areas compared to their female group members. The average score of male respondents on participation in governance and that of transparency and accountability are 4.190 and 4.298, respectively, meaning that they strongly feel involved and confident with the leadership arrangements. Similarly, their ratings for inclusiveness (4.322) and leadership development (4.208) reflected positive experiences and perceptions. In contrast, the mean scores for all indicators for female respondents were lower and ranged between 3.814 and 3.897. This implies a relatively worse view of the governance atmosphere of their cooperatives. The wider standard deviations among females (approximately 1.3) compared to males (approximately 0.9 to 1.0) indicate more varied experiences and possibly less consistency in governance-related engagement and benefits among women. In general, the total sample had an

average positive opinion and all means were slightly more than 4.0. Nevertheless, the existence of an evident gender disparity identifies the necessity to explore more inclusive practices in the area of governance that would promote and facilitate the inclusion of women as individuals involved in the leadership of cooperatives at the represented level. With effective interventions, including gender-sensitive leadership training and the inclusion of all members in policymaking, such disparities may be addressed to promote fair interaction among all members.

A definite trend can be discerned in table 5.44 concerning the effects of educational qualifications on leadership and governance practices in cooperative societies in terms of the four main dimensions that represent participatory governance and decision-making, transparency and accountability of the government, representation of the marginalised and leadership development programs. Members with lower educational qualifications, particularly those educated up to matriculation, reported the lowest mean scores across all indicators (ranging from 3.333 to 3.452). These relatively low scores, combined with high standard deviations, suggest not only less favourable perceptions of leadership and governance but also a greater variation in responses within this group, indicating inconsistency in experiences or awareness. In contrast, higher mean values are registered for members with an upper educational background, particularly at the undergraduate and postgraduate degree levels. Undergraduates reported consistently high ratings (means of 4.373 to 4.385) with relatively low standard deviations, reflecting both satisfaction and consistency in governance-related experiences.

Table 5.44 Variations in Leadership and Governance across Different Categories of Educational Qualifications

Educational Qualifications		LNG1	LNG2	LNG3	LNG4
Up to Matriculation	Mean	3.333	3.452	3.437	3.422
	N	135	135	135	135
	Std. Deviation	1.531	1.525	1.519	1.513
Plus Two	Mean	3.924	3.928	3.931	3.931
	N	277	277	277	277

	Std. Deviation	1.273	1.272	1.274	1.274
	Mean	4.385	4.379	4.373	4.373
Under Graduation	N	161	161	161	161
	Std. Deviation	0.725	0.733	0.732	0.732
	Mean	4.355	4.437	4.475	4.421
Post-Graduation	N	183	183	183	183
	Std. Deviation	0.784	0.684	0.678	0.698
	Mean	4.021	4.062	4.069	4.053
Total	N	756	756	756	756
	Std. Deviation	1.188	1.166	1.168	1.167

Source: Authors' computation

Postgraduates also reported high satisfaction levels (means ranging from 4.355 to 4.475), particularly in the representation of marginalised groups (4.475) and exhibited the lowest variability in responses, especially regarding transparency (standard deviation of 0.684). The group with a Plus Two education level fell between the two extremes, with mean scores just below the overall average (approximately 3.924 to 3.931) and moderate variability. On a general note, however, the evidence points quite effectively towards a positive correlation between educational attainment and leadership and the perception of the quality of governance. Higher educational levels seem to increase awareness, access and sense of participatory governance mechanisms and leadership projects in cooperatives. This highlights the necessity of specific campaigns to enhance inclusiveness and communication, as well as activity among members with lower educational levels, to have equal participation and chances of leading the organisation regardless of the level of education.

Table 5.45 Variations in Leadership and Governance across Different Incomes

Monthly Income		LNG1	LNG2	LNG3	LNG4
Less than 10000	Mean	4.225	4.054	3.856	4.207
	N	111	111	111	111
	Std. Deviation	0.911	1.271	1.278	0.992

	Mean	3.848	4.304	4.161	3.821
10000-20000	N	112	112	112	112
	Std. Deviation	1.383	0.745	1.197	1.357
	Mean	3.950	4.014	4.171	4.041
20000-30000	N	222	222	222	222
	Std. Deviation	1.200	1.220	1.006	1.227
	Mean	4.051	3.949	4.056	4.253
30000-40000	N	178	178	178	178
	Std. Deviation	1.232	1.241	1.197	0.882
	Mean	4.075	4.098	4.015	3.872
Above 40000	N	133	133	133	133
	Std. Deviation	1.119	1.154	1.249	1.305
	Mean	4.021	4.062	4.069	4.053
Total	N	756	756	756	756
	Std. Deviation	1.188	1.166	1.168	1.167

Source: Authors' computation

Table 5.45 demonstrates the effect of monthly income on their opinion of leadership and governance practice in cooperative societies along four lines of thought: participatory governance, transparency and accountability, representation of marginalised groups and leadership development initiatives. Members in the lowest income bracket report relatively high mean scores for participation (4.225) and leadership development programmes (4.207), with moderate satisfaction in transparency (4.054) and slightly lower perceptions of the representation of marginalised groups (3.856). This category is characterised by moderate variability, implying a rather consistent but reserved attitude toward the mechanisms of governance. Interestingly, there is a mixed pattern among the members within the Rs. 10,000 to 20,000 bracket. While they perceive high transparency (4.304) and fair representation (4.161), their sense of participation (3.848) and access to leadership development programs (3.821) are lower. This can be a sign of a group that is presently conscious of formal arrangements but is much less empowered under them.

The high standard deviations, especially in leadership programs (1.357), reflect the diverse experiences within this income range. The Rs. 20,000 to 30 000 category has a middle ground picture, with means of 3.950 and 4.171 and a standard deviation showing moderate variation. This can be seen in their responses, which seem consistent and well balanced across all governance aspects. For those earning between Rs. 30,000 and Rs. 40,000, the highest mean (4.253) appears in leadership development opportunities, indicating strong recognition of capacity-building efforts. Other indicators of governance are also coloured above average, corroborating an overall positive image by middle-income members. In the highest income group (above Rs. 40,000), perceptions are generally positive across all dimensions (means range from 4.015 to 4.098), though the lowest score appears in leadership development (3.872), which might suggest that higher-income members feel less targeted or benefited by such programs. Overall, the statistics demonstrate that cooperation, leadership and governance are viewed authoritatively in both columns regardless of income level, but with subtle diversities. The members of low-income groups like group participatory possibility and training programs, whereas the average ratings regarding total governance are high in middle-income groups. Nevertheless, the differences in inclusion and development support perceptions are a matter of concern as it can be seen that a more differentiated strategy is necessary in terms of governance engagement as per the income levels so that the members of the organization may be satisfied and involved equally.

The results show that the dimensions of leadership and governance can be found at different levels among the cooperative members based on demographic variables such as age, gender, educational qualifications and income level. Therefore, this study intends to determine whether these variations differ significantly. Therefore, the study first attempted to identify the nature of the distribution using the Kolmogorov-Smirnov test. It determines whether the distribution of a sample of data follows a specific theoretical distribution, most commonly the normal distribution. The results are summarised as follows.

Table 5.46 Assessment of Normality: One Sample K-S Test

Null Hypothesis	Sig.	Decision
LNG1 is normal with mean 4.02 and standard deviation 1.188	.000	Reject H0
LNG2 is normal with mean 4.06 and standard deviation 1.165	.000	Reject H0
LNG3 is normal with mean 4.07 and standard deviation 1.168	.000	Reject H0
LNG4 is normal with mean 4.05 and standard deviation 1.166	.000	Reject H0

Note: The significance level was set at .050

Kolmogorov-Smirnov test in table 5.46 was conducted to check the normality of the distributions of four 'Leadership and Governance' related variables within the dataset. The results show that for all four variables, that is, opportunity to participate in decision making and governance (LNG1), transparency in decision making (LNG2), representation and opportunity to marginalised members in governance structures (LNG3) and leadership development programmes (LNG4), the p-values were .000. Because every p-value is lower than the common level of significance of 0.05, the null hypothesis concerning the normal distribution of these variables with reported means and standard deviations is rejected in all situations. This shows that the distributions of these variables are far from normal. Hence, the findings indicate that the results might be subjected to non-parametric methods in further statistical testing. In this context, the present study formulated the following hypotheses and employed the Kruskal-Wallis Test (for age, educational qualification and monthly income) and the Mann-Whitney U Test for gender to test the hypotheses. The discussion of the results is presented below.

Hypothesis 21: There is no statistically significant differences in the distributions of leadership and governance across different categories of age

Table 5.47 Age-wise Differences in Leadership and Governance: K-W Test Results

Null Hypothesis	Sig.	Decision
LNG1 is the same across different Age categories	0.092	Retain H0
LNG2 is the same across different Age categories	0.069	Retain H0
LNG3 is the same across different Age categories	0.000	Reject H0
LNG4 is the same across different Age categories	0.000	Reject H0

Note: The significance level is fixed at .050

The Kruskal-Wallis Test was used to determine whether there were statistically significant differences in leadership and governance-related variables across different age categories. The results show that for the variables, Representation and opportunity to marginalised members in governance structures (LNG3) and Leadership development programmes (LNG4), the p-values are 0.000. The null hypotheses of these two variables are rejected, given that these values are below 0.05 or the standard significance level. This implies that the distributions of LNG3 and LNG4 differ significantly across various age categories. For the remaining variables, the opportunity to participate in decision-making and governance (LNG1) and transparency in decision-making (LNG2), the p-values are 0.092 and 0.069, respectively. Thus, the p-values are not small enough to reject the null hypothesis at the 5 percent level of significance. In this regard, it would remain apparent that there are no statistically significant variations in the overall distribution of LNG1 and LNG2 within various age categories.

Hypothesis 22: There is no statistically significant differences in the distributions of leadership and governance across different categories of gender

Table 5.48 Gender-wise Differences in Leadership and Governance: Mann-Whitney U Test Results

Null Hypothesis	Sig.	Decision
LNG1 is same across various categories of gender	0.029	Reject H0
LNG2 is same across various categories of gender	0.000	Reject H0
LNG3 is same across various categories of gender	0.000	Reject H0
LNG4 is same across various categories of gender	0.005	Reject H0

Note: The significance level is fixed at .050

Table 5.48 shows that, for the variables, opportunity to participate in decision making and governance (LNG1), Transparency in the decision making (LNG2), Representation and opportunity to marginalised members in governance structures (LNG3) and Leadership development programmes (LNG4), the p-values are 0.029, 0.000, 0.000 and 0.005 respectively. The null hypotheses of these variables will be rejected because the values are less than the threshold standard significance of 0.05. This implies that there are remarkable variations in the dispersions of LNG1, LNG2, LNG3 and LNG4 with regard to various categories of gender.

Hypothesis 24: There is no statistically significant differences in the distributions of leadership and governance across different categories of educational qualification

Table 5.49 Educational Qualification-wise Differences in Leadership and Governance: Kruskal-Wallis Test Results

Null Hypothesis	Sig.	Decision
LNG1 is same across different educational qualifications	0.000	Reject H0
LNG2 is same across different educational qualifications	0.000	Reject H0
LNG3 is same across different educational qualifications	0.000	Reject H0
LNG4 is same across different educational qualifications	0.000	Reject H0

Note: The significance level is set at .050

The Kruskal-Wallis Test in table 5.49 was applied to determine whether there are statistically significant differences in leadership- and governance-related variables across different categories of educational qualifications. The results show that for the variables, Opportunity to participate in decision making and governance (LNG1), Transparency in the decision making (LNG2), Representation and opportunity to marginalised members in governance structures (LNG3) and Leadership development programmes (LNG4), the p-values are 0.000. The null hypotheses concerning these variables are rejected because the p-values are below the conventional levels of significance, 0.05. This implies that the distributions of LNG1, LNG2, LNG3 and LNG4 are substantially diverse across various strata of educational degrees.

Hypothesis 25: There is no statistically significant differences in the distributions of leadership and governance across different categories of income.

Table 5.50 Income-wise Differences in Leadership and Governance: K-W Test

Null Hypothesis	Sig.	Decision
LNG1 is same across various categories of monthly income	0.387	Retain H0
LNG2 is same across various categories of monthly income	0.449	Retain H0
LNG3 is same across various categories of monthly income	0.145	Retain H0
LNG4 is same across various categories of monthly income	0.091	Retain H0

Note: The significance level is set at .050

The Kruskal-Wallis Test was conducted to answer the question of whether any statistically significant differences exist in leadership and governance-related

variables across income categories. The results in table 5.50 show that for the variables, Opportunity to participate in decision making and governance (LNG1), Transparency in decision making (LNG2), Representation and opportunity to marginalised members in governance structures (LNG3) and Leadership development programmes (LNG4), the p-values are 0.387, 0.449, 0.145 and 0.091, respectively. When this happens, the p-values are not small enough to reject the H0 at the 5% significance level. Consequently, it is evident that the distributions of LNG , LNG2, LNG3 and LNG4 among the different income categories are not significantly different.

5.4.6 Social Capital Index

An aggregate social capital index was identified by the study to measure the level of social capital generation among cooperatives in Kerala. Grossman, 1976 model was employed to for the same. The value of aggregate index varies between 0 (no social capital) and 100 (perfect social capital). To consider the intangible nature of social capital, Plus or minus 10 percent level of tolerance was applied. The details are given in table 5.51.

Table 5.51 Social Capital Index

Social Capital Variables	Index
Trust	80.69
Social networks	80.94
Norms and values	80.84
Communication and information sharing	80.49
Leadership and governance	80.95
Aggregate Social Capital Index	**80.78**
Level of tolerance	72.70 - 88.86

Source: Authors' computation

Results reveals that the influencing variables TRT, SNT, NAV, CIS and LNG scores the individual index values 80.69, 80.94, 80.84, 80.49 and 80.95 respectively and the aggregate social capital index derived from those values are 80.78. This clearly shows that there is a high level of social capital generation among cooperative members.

5.5 The Role of Key Influencing Factors in the Formation of Social Capital among Cooperative Members (Objective 2)

Within the pluralistic field of social research, social capital has become one of the key dimensions of a framework used to comprehend the value of social associations and social association networks. Social capital is a concept which is usually described as the resources and advantages gained from being socially connected, which helps define personal and communal behaviours in a group or society. This study aims to delve into the multifaceted nature of social capital formation by examining the influence of key factors such as trust, social networks, norms and values, communication and information sharing and leadership and governance. These elements are critical in unravelling the process of formation and maintenance of social capital, especially in the context of how they interact with each other.

In the context of the objective to determine the role of influencing factors like TRT, SNT, NAV, CIS and LNG in the formation of social capital, Structural Equation Modeling (SEM) can be employed to analyze the inter-dependencies among these variables. The SEM offers a powerful statistical model through which to test the complicated associations among the influencing forces that the researcher identified in the development of social capital. This enable the researcher to quantify the direct and indirect influences of such aspects on social capital in the outlined model. To perform SEM, the multivariate normality of the distribution is essential. So the study first identified the univariate and multivariate normality of the distribution of variables.

Table 5.52 Univariate and Multivariate Normality of Distribution Variables

Variable	skew	c.r.	kurtosis	c.r.
LNG 1	-1.003	-11.256	0.586	3.289
LNG2	-0.940	-10.550	0.639	3.586
LNG 3	-0.764	-8.580	-0.537	-3.012
LNG 4	-0.478	-5.367	-1.077	-6.043
TRT 1	-1.215	-13.634	0.935	5.246
TRT 2	-1.392	-15.624	2.828	15.870
TRT 3	-1.310	-14.708	1.301	7.301
TRT 4	-1.674	-18.796	4.512	25.325

Variable	skew	c.r.	kurtosis	c.r.
SCL 1	-1.191	-13.374	0.948	5.322
SCL 2	-0.268	-3.007	-1.515	-8.501
SCL 3	-0.376	-4.219	-1.362	-7.646
SCL 4	-0.642	-7.201	-0.978	-5.489
SCL 5	-0.337	-3.784	-1.324	-7.430
SCL 6	-0.428	-4.803	-1.061	-5.956
CIS 1	-1.502	-16.864	2.802	15.724
CIS 2	-0.788	-8.842	-0.566	-3.179
CIS 3	-1.217	-13.663	1.044	5.859
CIS 4	-1.045	-11.733	0.650	3.649
NAV 1	-0.806	-9.043	-0.590	-3.309
NAV2	-1.049	-11.775	-0.158	-0.888
NAV 3	-1.357	-15.234	1.405	7.887
NAV 4	-1.266	-14.213	1.759	9.871
SNT 1	-1.951	-21.898	4.660	26.154
SNT 2	-1.279	-14.360	1.743	9.783
SNT 3	-1.000	-11.225	0.028	0.159
SNT 4	-1.708	-19.168	2.509	14.083
	Multivariate		196.153	70.672

Source: Authors' computation

As shown in table 5.52, the distribution of variables in the dataset is characterised by univariate and multivariate normalities. The table indicates various variables that are characterised by certain acronyms, such as LNG, TRT, SCL, CIS, NAV and SNT. Each variable has multiple indicators represented by numbers (e.g. LNG1 and LNG2). To quantify the degree of normality of the data distribution, the researcher applied the coefficient and an associated critical value. When the corresponding critical values of skewness and kurtosis of the variables between positive 1.96 to negative 1.96 and multivariate critical ratio between positive 1.96 to negative 1.96, the researcher can conclude that the variables are normally distributed. According to the table, the assumptions are not fulfilled. This shows that the distribution variables are not normal. Thus, the researcher employed the bootstrapping method to attain the model fit.

5.5.1 Bootstrapping the Model

Bootstrapping is a resampling procedure that is especially valuable when the assumption of normality must be abandoned. Bootstrapping is a non-parametric method that does not rely on assumptions about the underlying distribution of the data. It does not assume that the data are normally distributed. Rather, it typologically estimates the distribution of a statistic of interest empirically through the observation of data. In the context of structural equation modelling (SEM), bootstrapping is often used for model validation, including assessing model fit and estimating confidence intervals for the parameters. This enables researchers to make fewer distributional assumptions, providing a robust assessment of the models.

Therefore, the researcher employed the Bollen-Stine Bootstrap, also known as the Bollen-Stine bootstrap correction, which is a resampling technique used in structural equation modelling (SEM) to address the potential bias in the chi-square test of model fit. It is especially used when the distribution assumptions required to obtain the chi-square are not fulfilled. The chi-square test assumes multivariate normality and failing to hold this assumption will cause a lack of accurate conclusions regarding model fit. This shortcoming is overcome by utilising the Bollen-Stine Bootstrap, where a less distribution-sensitive correction of the chi-square test is used. The Bollen-Stine bootstrap involves generating multiple resamples (bootstrap samples) from the observed data. The SEM model is then estimated and a chi-square is calculated for each resample. When this process is repeated several times, a set of chi-square values is obtained, enabling a better determination of the variability and possible bias that the chi-square test can be subjected to.

5.5.2 Model Fit through Bollen-Stine Bootstrap

The assessment of model validity in structural equation modeling (SEM) is a critical step in ensuring that the hypothesised relationships between variables accurately reflect the underlying structure of the data. The less traditional means, namely the chi-square test of model fit, can be subject to problems of small sample size or failure to assume normality. The Bollen-Stine bootstrap offers a powerful resampling method to deal with the severity of these problems, enabling a better measure of the fit within a model. In this model, the researcher would use the Bollen-Stine Bootstrap to question the validity of the SEM model. The bootstrap process entails resampling

using the observed data and achieving a distribution of the chi-square statistic, in which the null hypothesis is that the model is an adequate fit. As such, the model researcher checks the validity based on 5000 bootstrap samples.

The chi-square validation of Bollen-Stine bootstrap based on 5000 bootstrap samples are given in table 5.53.

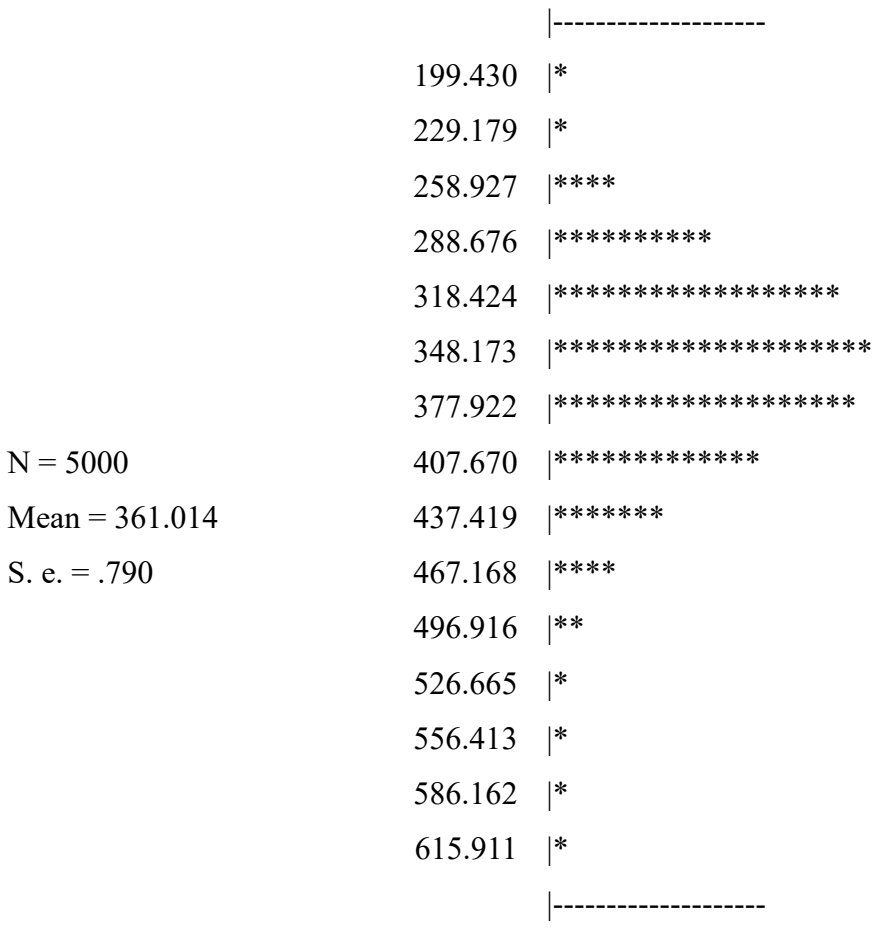
Table 5.53 Chi-Square Validation of Bollen-Stine Bootstrap

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	67	**468.548**	284	0.114	1.649
Saturated model	351	0	0		
Independence model	26	12250.644	325	0.137	37.694

Source: Authors' computation

The results of the chi-square validation using the Bollen-Stine Bootstrap method, which is commonly employed in structural equation modelling (SEM) to assess the overall goodness-of-fit of the model, particularly when data may not meet normality assumptions. The "Default model" refers to the hypothesised structural model being tested, which has 67 parameters (NPAR) and yields a Chi-square value (CMIN) of 468.548 with 284 degrees of freedom (DF), resulting in a p-value of 0.114. As the p-value is greater than the conventional threshold of 0.05, it indicates that the model's fit is acceptable and does not significantly differ from the observed data. Additionally, the CMIN/DF value of 1.649 fell within the acceptable range (typically < 3), further supporting the model fit. The 351 parameters and zero degrees of freedom of the parameterised form of the Saturated model point to an ideal fit since it perfectly recreates the same information; this model is used as a baseline for comparison. On the other hand, the independence model, with the assumption that there are no relationships between variables, does not fit adequately: it has a large chi-square of 12,250.644, 325 degrees of freedom, a large p-value of 0.137 and the ratio of CMIN/DF is not acceptable, 37.694. The respective comparisons effectively affirm that the default model is highly fit compared to one that assumes that there is no dependence of variables, having proved its structural completeness. This study also identified the chi-square statistics range of CMIN which is shown in figure 5.1.

Figure 5.1 Chi-square Statistics Range of Bollen-Stine Bootstrap



Source: Authors' computation

Figure 5.1 appears to be a histogram or distribution plot that presents the dimension of the chi-square statistics and the number of times or frequency that the data are distributed in a given range. The range of chi-square values is illustrated by the horizontal line. Every spot on the x-axis is identified with a narrow scale of chi-square values. The vertical axis represents the frequency or number of observations that occur in each interval of the x-axis. It can be determined how many times a particular range obtains a chi-square statistic. The total number of observations (N) was 5000, which likely represents the total number of bootstrap samples or resamples used in the Bollen-Stine bootstrap procedure. The mean value of the chi-square statistic was computed to be 361.014. This amount is defined as the average chi-square value. The standard error (.790) provides a measure of the variability or precision associated with the mean of the chi-square statistic. The figure depicts the distribution of chi-square statistics (468.548) obtained through the Bollen-Stine Bootstrap procedure within the

specified range (minimum 199.430 and maximum 615.911). Thus, the researcher will be in a position to observe the distribution of chi-square statistics to evaluate the stability and reliability of the model fit. When the observed chi-square values are between the acceptable level of values within the chi-square distribution, it implies that the model fits well.

Table 5.54 Model Fit of Bollen-Stine Bootstrap Sample

Bollen-Stine Bootstrap
The model fit better in 4780 bootstrap samples.
It fit about equally well in 0 bootstrap samples.
It fit worse or failed to fit in 312 bootstrap samples.
Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap p = .172

Source: Authors' computation

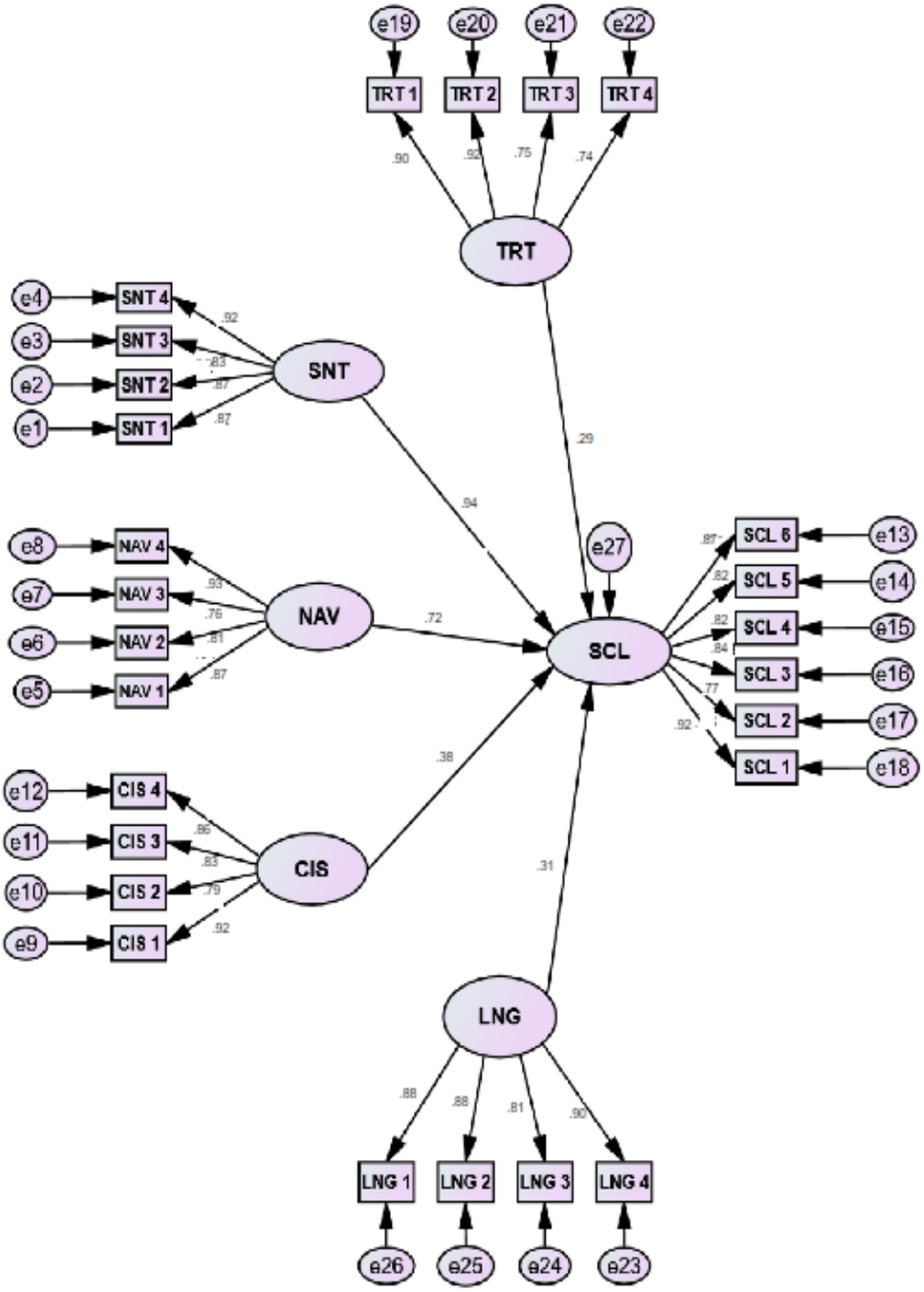
Table 5.54 summarises the findings of the Bollen-Stine bootstrap procedure, which provides an idea of how the fit of the model fares on multiple bootstrap samples. The data are tabulated by the level of fitting the model in each resample and a p-value is added to the testing of the null hypothesis. The model fit in 4780 of the 5000 bootstrap samples. This implies that in most of the resamples, the structural equation model exhibited a good fit or better fit than the actual model. It also fitted approximately the same in the 0 bootstrap samples. This indicates that there did not occur a situation where it happened with the model fit being the same during the resampling process. It fit less or did not fit 312 of the 1000 bootstrap replicates. In this study, the researcher implemented a bootstrap of 5000 samples. Finally, the Bollen-Stine bootstrap p-value is reported as 0.172 (accepting the null hypothesis). Such a p-value is linked to the null hypothesis concerned with whether it is the right model or can properly fit the data.

5.5.3 Hypothetical Model: Exploring the Impact of Influencing Factors in the Formation of Social Capital

In this highly networked world, social capital has emerged as a key tool in the study of the functioning of communities, organisations and societies as a whole. Social capital embodies networks, norms, trust, common values communication, leadership and governance that promotes coordination and cooperation. The more complex and interdependent societies become, the more other socio-psychological, organizational and communicative factors, the creation of social capital becomes dependent on. This study creates an ideal framework to explain the underlying reasons why social capital development is largely dependent on specific factors. It examines the roles of trust (TRT), norms and values (NAV), social networks (SNT), communication and information sharing (CIS) and leadership and governance (LNG) in shaping social cohesion, mutual understanding and collective action. These dimensions are crucial constructs on which individuals and groups develop functional, constructive and stable social relations.

To validate this conceptual model, the researchers employed structural equation modeling to identify and quantify the strength of the relationships between these influencing factors and social capital (SCL). Through a variety of hypotheses tested, the model attempts to determine the extent to which each aspect either promotes or discourages the development of social capital at the community or organizational level. Examples are that trust increases reliability within the membership, norms and values blossom a collective identity, networks connect people and institutions, communication enables openness and clarity and leadership provides direction and openness. The results, as provided in figure 5.2 , highlight the empirical weight of these variables by providing the distance into the actions that can be taken by policymakers, development agencies and leaders to develop resilient, participative and socially enriched communities. The issue eventually sheds light on the sophistication of its maturing relationship, which is at the core of interpersonal relatedness and social justice.

Figure 5.2 Hypothetical Model for Exploring the Impact of Influencing Factors on Formation of Social Capital



After generating the hypothetical model, the study tested the relationship between the influencing factors and social capital. The results are shown in table 5.55.

Table 5.55 Relationship between Influencing Factors and Social Capital

Hypotheses						
Dependent Variable	<---	Independent Variables	Estimate	S.E.	Critical Ratio	P-value
SCL	<---	TRT	0.294	0.167	1.757	0.000
SCL	<---	NAV	0.847	0.306	2.767	0.000
SCL	<---	SNT	1.093	0.312	3.506	0.000
SCL	<---	CIS	0.415	0.190	2.188	0.000
SCL	<---	LNG	0.320	0.039	8.205	0.000

Source: Authors' computation

Hypothesis 26: Trust has no significant impact on the formation of social capital

There is a significant positive relationship between Trust and Social Capital. The coefficient of 0.294 should be understood as follows: with an increase of one unit in the value of TRT, there should be an increase of 0.294 units in the value of SCL. The critical ratio (C.R.) of 1.757, along with the p-value being less than .05, indicates that this relationship is statistically significant. Therefore, the essential influence of trust on building social capital is realised.

Hypothesis 27: Norms and values has no significant impact on the formation of the social capital

There is a significant positive relationship between Norms and Values and Social Capital. The estimate of 0.847 means that every unit rise in NAV would be estimated to bring in 0.847 units of increment to SCL. The critical ratio (C.R.) of 2.767, along with the p-value being less than .05, indicates that this relationship is statistically significant. Therefore, the influence of norms and values on the formation of social capital is impressive.

Hypothesis 28: Social networks has no significant impact on the formation of the social capital

There is a significant positive relationship between Social Networks and Social Capital. The figure of 1.093 shows that SCL is supposed to be 1.093 units higher when SNT is increased by 1 unit. The critical ratio (C.R.) of 3.506, along with the p-value being less than .05, indicates that this relationship is statistically significant. Therefore, social networks significantly affect the formation of social capital.

Hypothesis 29: Communication and information sharing has no significant impact on the formation of the social capital

There is a significant positive relationship between communication and information sharing and social capital. The estimate of 0.415 means that as we provide one unit change in CIS, SCL is supposed to change by 0.415 unit. The critical ratio (C.R.) of 2.188, along with the p-value is less than .05; indicate that this relationship is statistically significant. Thus, the influence of the communication and information sharing upon the creation of the social capital is great.

Hypothesis 30: Leadership and governance has no significant impact on the formation of the Social Capital

There is a significant positive relationship between Leadership and governance and social capital. An estimate of 0.320 implies that as LNG increases by a unit, SCL is expected to increase by 0.320 units. The critical ratio (C.R.) of 8.205, along with the p-value less than .05, indicates that this relationship is statistically significant. Thus, leadership and governance have a major influence on the formation of social capital.

Table 5.56 presents both the standardised and unstandardized regression weights derived from the SEM analysis, which illustrate the strength and significance of the relationships between the latent variables (constructs) and their respective indicator variables (observed items). The unstandardized regression weights show the raw estimated effects of each latent variable on its observed indicators, while the standardised weights (ranging from 0 to 1) provide a scale-free measure for comparing the relative contributions of indicators within and between constructs. For instance, within the social networks construct, all indicator variables (SNT1 to SNT4) exhibit strong standardised loadings, especially SNT4, with the highest loading of 0.922, suggesting that it most strongly represents the construct. Similarly, for Norms and Values , NAV4 had the highest standardised weight (0.932), indicating its critical role in defining the construct.

Table 5.56 Standardized and Unstandardized Regression Weights of the Model

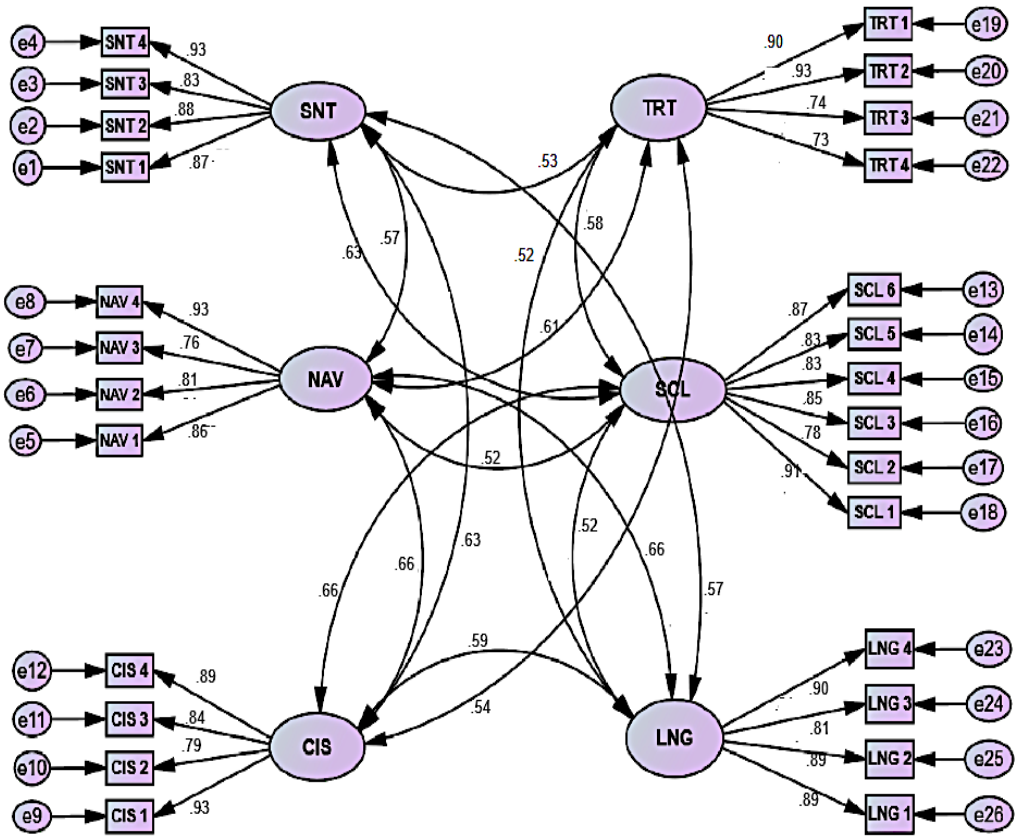
Unstandardized Regression Weights							Standardized Regression Weights
Indicator Variable	<---	Latent Variables	Estimate	S.E.	Critical Ratio	P-value	
SNT 1	<---	SNT	1				0.869
SNT 2	<---	SNT	1.171	0.099	11.883	0.000	0.874
SNT 3	<---	SNT	1.377	0.09	15.291	0.000	0.831
SNT 4	<---	SNT	0.985	0.073	13.584	0.000	0.922
NAV 1	<---	NAV	1				0.865
NAV2	<---	NAV	1.184	0.052	22.868	0.000	0.812
NAV 3	<---	NAV	1.369	0.064	21.38	0.000	0.765
NAV 4	<---	NAV	1.276	0.066	19.205	0.000	0.932
CIS 1	<---	CIS	1			0.000	0.921
CIS2	<---	CIS	1.144	0.062	18.319	0.000	0.787
CIS 3	<---	CIS	1.119	0.073	15.275	0.000	0.829
CIS 4	<---	CIS	0.425	0.049	8.738	0.000	0.859
SCL1	<---	SCL	1			0.000	0.918
SCL 2	<---	SCL	1.7	0.109	15.548	0.000	0.769
SCL3	<---	SCL	1.639	0.105	15.556	0.000	0.836
SCL4	<---	SCL	1.717	0.109	15.712	0.000	0.819
SCL5	<---	SCL	1.59	0.105	15.089	0.000	0.822
SCL6	<---	SCL	0.767	0.068	11.314	0.000	0.868
TRT 1	<---	TRT	1			0.000	0.903
TRT2	<---	TRT	1.123	0.079	14.261	0.000	0.922
TRT 3	<---	TRT	1.139	0.063	18.076	0.000	0.746
TRT 4	<---	TRT	1.477	0.083	17.892	0.000	0.735
LNG 1	<---	LNG	1			0.000	0.879
LNG 2	<---	LNG	0.832	0.033	24.925	0.000	0.877
LNG 3	<---	LNG	0.459	0.029	16.076	0.000	0.806
LNG 4	<---	LNG	0.202	0.032	6.23	0.000	0.903

Source: Authors' computation

Communication and Information Sharing indicators also show high loadings, with CIS1 (0.921) and CIS4 (0.859) being especially influential. In the case of Social Capital, SCL1 (0.918) and SCL6 (0.868) stand out as the most reliable indicators. The trust and Leadership and Governance constructs also demonstrated high indicator

reliability, with TRT2 (0.922) and LNG4 (0.903) showing the strongest standardised weights in their respective constructs. All critical ratios exceed the threshold of 1.96 and the p-values are marked as highly significant (0.000), confirming the statistical reliability of each of the relationships. In sum, the table supports the measurement model and affirms that all latent variables have strong indicators and proves the structural integrity of the hypothetical model. The confirmatory model developed by the study is given in figure 5.3

Figure 5.3 Confirmatory Model: The Impact of Influencing Factors on the Formation of Social Capital



5.5.4 Model Fit Measures Related to Influencing Factors and Social Capital

In Structural Equation Modeling (SEM), model fit refers to how well the proposed theoretical model represents the actual data collected. In other words, it is about how closely the covariance structure implied by the model matches the observed covariance structure in the collected data. Thus, the evaluation of model fit is paramount to ascertain the effectiveness of the proposed theoretical framework in

explaining observed data. To check the model fit and to lay the groundwork for examining the model reliability and validity, the present study identified the normed chi-square, Comparative fit index (CFI), Goodness of fit index (GFI), Incremental fit index (IFI), Normed fit index (NFI), Root mean square error of approximation (RMSEA) and Standardized root mean square residual (SRMR). The study further used a widely accepted set of standard threshold limits for ensuring the model fit. To validate the measurement properties of the latent constructs, Confirmatory Factor Analysis (CFA) was conducted using AMOS prior to structural model estimation. The purpose of CFA was to assess the adequacy of the measurement model and to examine whether the observed indicators reliably represented their respective latent constructs. Model fit was evaluated using multiple goodness-of-fit indices including Chi-square (χ^2), Normed Chi-square (CMIN/DF), Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), Incremental Fit Index (IFI), Normed Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR).The results and concerned threshold limits are given in table 5.57.

Table 5.57 Model Fit Measures Related to Influencing Factors and Social Capital

Model Fit Indices	Citation	Threshold Limit	Estimated Value	Interpretation
Normed Chi-Square	Jackson, J A. (1998)	< 3	468.584/ 284- CMIN/DF = 1.649	Excellent
CFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	> 0.90	0.943	Acceptable
GFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	>0.90	0.928	Good
IFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	>0.90	0.919	Good
NFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	>0.90	0.922	Good

Model Fit Indices	Citation	Threshold Limit	Estimated Value	Interpretation
RMSEA	Hooper, D., Coughlan, J. & Mullen, R M. (2008),	< 0.08	0.054	Acceptable
SRMR	Pavlov, G., Maydeu-Olivares, A. & Shi, D. (2020).	< 0.06	0.043	Excellent

Source: Compiled and computed by the author

Notes: CFI-Comparative fit index, GFI-Goodness of fit index, IFI-Incremental fit index, NFI-Normed fit index, RMSEA-Root mean square error of approximation, SRMR-Standardized root mean square residual

The indices of the appropriate model are listed in the above table. According to the model fit requirements, the GFI, IFI, NFI and CFI values should be greater than 0.9, the goodness of fit to degrees of freedom ratio (normed chi-square) should not be greater than 3 and the RMSEA and SRMR should be less than 0.08 and 0.06 respectively. From the results in table 5.57, it is evident that the model met all the set standards, thus, the model is fit for further analysis.

5.5.5 Model Reliability and Validity

The validity and reliability of the structural equation model are important because they enable the constructs to depict the theory underlying the framework. In this study, multiple statistical tests were employed to confirm the robustness of the measurement model. The composite reliability (CR) was calculated for each latent variable to assess internal consistency, with values exceeding the recommended threshold of 0.70, indicating that the indicator items consistently measured their respective constructs. This adequacy is also supported by the high standardised factor loadings reported in (table 5.56) most of which exceed 0.80, confirming that the individual observed variables are indeed significant contributors to their latent constructs. Convergent validity was established through the Average Variance Extracted (AVE), where all constructs demonstrated AVE values greater than 0.50, signifying that the indicators share more variance with their associated latent variable than with error terms. Cumulatively, these findings consolidate the fact that the constructs are characterized by good internal consistency, as well as, valid convergence of items.

Discriminant validity was also assessed to ensure that all constructs were empirically different. The Fornell-Larcker criterion was met, as the square root of each construct's AVE was greater than its correlations with other constructs, supporting the uniqueness of each factor. Additionally, the Heterotrait-Monotrait (HTMT) ratio was used to further validate discriminant validity. It can be said that none of the HTMT values exceeded the very conservative value of 0.85, as it was confirmed that the constructs were not only theoretically but also statistically different. This is especially significant in a model that focuses specifically on complex social interactions related to trust, communication, networks, leadership and values that are commonly conceptually intertwined. The evidence of CR, AVE, Fornell-Larcker and HTMT provides overall support for the reliability and discriminant power of the measurement model, thus providing a good basis for interpreting the structural relationships among key factors in influencing the formation of social capital. The composite reliability, convergent validity, discriminant validity and HTMT criterion are shown in the tables below.

Table 5.58 Composite Reliability of the Model

	CR	AVE	MSV	MaxR(H)
LNG	0.927	0.760	0.271	0.932
SNT	0.931	0.774	0.648	0.894
TRT	0.898	0.690	0.456	0.928
NAV	0.908	0.713	0.448	0.929
CIS	0.922	0.749	0.531	0.935
SCL	0.937	0.713	0.456	0.942

Source: Authors' computation

Table 5.58 provides information on the various measures used to assess the quality and reliability of latent constructs within a Structural Equation Model. Composite Reliability depicts the reliability of the model's latent constructs. A value greater than 0.70 is generally acceptable. All constructs (LNG, SNT, TRT, NAV, CIS and SCL) exceeded this threshold, indicating good reliability. The Average Variance Extracted quantifies the variance, which is taken by the construct in comparison to the variance introduced by the measurement error. Those with scores higher than 0.50 were assumed to be acceptable. In the current case, all the constructs satisfied this criterion

or even exceeded it, indicating good convergent validity. The Maximum Shared Variance is used to measure the level of common variance a construct has with other constructs in a model compared to its own measures. The lower, the better and all constructs in this case have good discriminant validity, as indicated by the values. Maximum Redundancy establishes the degree of variance between the latent variables and the indicator explainer. Higher values indicate good reliability and convergent validity. All constructs demonstrated high MaxR(H) values, indicating strong relationships between the latent variables and their indicators. Finally, the values of Composite Reliability, Average Variance Extracted, Maximum Shared Variance and Maximum Redundancy collectively suggest that the latent constructs (LNG, SNT, TRT, NAV, CIS and SCL) in the SEM are reliable. After identifying the composite reliability, the research verified the construct validity using convergent validity, discriminant validity and HTMT criterion.

Table 5.59 Convergent Validity of the Model

Indicator Variable	<---	Latent Variable	Standardized Loading	Square of Standardized Loading	Sum of Square of Standardized Loading	Number of Indicators	AVE
SNT 1	<---	SNT	0.873	0.762	3.087	4	0.772
SNT 2	<---	SNT	0.881	0.776			
SNT 3	<---	SNT	0.829	0.687			
SNT 4	<---	SNT	0.928	0.861			
NAV 1	<---	NAV	0.863	0.745	2.854	4	0.713
NAV2	<---	NAV	0.809	0.654			
NAV 3	<---	NAV	0.763	0.582			
NAV 4	<---	NAV	0.934	0.872			
CIS 1	<---	CIS	0.931	0.867	2.996	4	0.749
CIS2	<---	CIS	0.797	0.635			
CIS 3	<---	CIS	0.839	0.704			
CIS 4	<---	CIS	0.889	0.79			
SCL1	<---	SCL	0.908	0.824	4.278	6	0.713
SCL 2	<---	SCL	0.779	0.607			
SCL3	<---	SCL	0.849	0.721			
SCL4	<---	SCL	0.829	0.687			
SCL5	<---	SCL	0.827	0.684			
SCL6	<---	SCL	0.869	0.755			

Indicator Variable	<---	Latent Variable	Standardized Loading	Square of Standardized Loading	Sum of Square of Standardized Loading	Number of Indicators	AVE
TRT 1	<---	TRT	0.901	0.812	2.761	4	0.69
TRT2	<---	TRT	0.928	0.861			
TRT 3	<---	TRT	0.742	0.551			
TRT 4	<---	TRT	0.733	0.537			
LNG 1	<---	LNG	0.889	0.79	3.042	4	0.76
LNG2	<---	LNG	0.888	0.789			
LNG 3	<---	LNG	0.807	0.651			
LNG 4	<---	LNG	0.901	0.812			

Source: Authors' computation

Table 5.59 shows the convergent validity of the model. To achieve convergent validity, the Average Variance Extracted (AVE) must be 0.5 or more than 0.5 and standard factor loadings must be greater than 0.50. According to this model, the values of AVE for SNT, NAV, CIS, SCL, TRT and LNG are 0.772, 0.713, 0.749, 0.713, 0.690 and 0.760, respectively. All latent variables determined by indicator variables had factor loadings greater than 0.5. Therefore, the results provide evidence of convergent validity, indicating that the latent variables (SNT, NAV, CIS, SCL, TRT and LNG) in the model are effectively measured by their respective indicator variables. The squared standardised loadings will be added positively to the convergence validity and AVE values are reasonable, which will support the notion that the variance explained in the latent variables by its indicators is significant. These results strengthen the level of faith in the measurement model and the association between latent and observed variables.

Table 5.60 Discriminant Validity of the Model

	LNG	SNT	TRT	NAV	CIS	SCL
LNG	**0.872**					
SNT	0.571	**0.879**				
TRT	0.516	0.527	**0.831**			
NAV	0.656	0.565	0.611	**0.844**		
CIS	0.594	0.629	0.540	0.655	**0.865**	
SCL	0.521	0.628	0.575	0.521	0.658	**0.844**

Source: Authors' computation

Table 5.60 shows the discriminant validity of the model. The diagonal values in the table represent the square roots of the Average Variance Extracted (AVE) for each construct: Leadership and Governance (LNG: 0.872), Social Networks (SNT: 0.879), Trust (TRT: 0.831), Norms and Values (NAV: 0.844), Communication and Information Sharing (CIS: 0.865) and Social Capital (SCL: 0.844). These values are contrasted with the off-diagonal values which indicate inter-construct correlations. The Fornell-Larcker criterion states that discriminant validity is attained when the square root of the AVE of any particular construct is higher than its correlation with the others. In this table, all constructs meet the prerequisite criteria, that is, to show that the constructs are empirically distinct and not highly reliant on others. For instance, the square root of the AVE for LNG is 0.872, which is higher than its correlations with SNT (0.571), TRT (0.516), NAV (0.656), CIS (0.594) and SCL (0.521). The same trend is observed for all other constructs, with SNT having a diagonal value of 0.879 which is above its correlations with all the other constructs. This means that the two constructs represent different conceptual dimensions of measuring distinct yet related aspects of social capital formation, which reinforces the validity of the model used. Thus, all the outcomes in Table 9 show that there is a solid basis that proves the discriminant validity, which validates the reliability and specificity of the measurement model.

Table 5.61 Heterotrait-Monotrait (HTMT) Criterion Related to the Model

	LNG	SNT	TRT	NAV	CIS	SCL
LNG						
SNT	0.742					
TRT	0.732	0.687				
NAV	0.712	0.664	0.718			
CIS	0.687	0.718	0.699	0.726		
SCL	0.785	0.772	0.705	0.673	0.644	

Source: Authors' computation

Table 5.61 presents the Heterotrait-Monotrait (HTMT) ratio of correlations, a modern and more stringent method for assessing discriminant validity in structural equation modelling (SEM). The HTMT criterion compares the average correlations across

constructs (Heterotrait-Heteromethod) with the average correlations within constructs (Monotrait-Heteromethod). Generally, an HTMT value below the threshold of 0.85 (or, in some cases, 0.90) indicates adequate discriminant validity, meaning that constructs are empirically distinct from one another. The values of all HTMTs in this table are less than the conservative cut-off of 0.85 (Clark and Watson, 1995; Kline, 2011) which confirms the discriminant validity of the model constructs used. For example, the HTMT value between leadership and governance and social networks is 0.742, well within the acceptable range and the highest HTMT value observed is 0.785 between LNG and social capital, which is still below the threshold value. These values confirm that constructs such as trust, norms and values, communication and information sharing and others are sufficiently distinct in the perceptions of respondents. Therefore, the conclusion on each latent variable in the analysis being unique based on the HTMT analysis supports the conclusion that there is a distinctive aspect of the conceptual framework on how social capital forms and consequently the overall integrity of the measurement model is valid.

5.6 The Role of Social Capital in Empowering and Satisfying Cooperative Members and the Mediating Effect of Member Empowerment between Social Capital and Member Satisfaction (Objective 3)

The social capital created among cooperative members can effectively serve as a resourceful energy since it can offer much through benefits and avenues to the respective members towards self-empowerment. Social capital plays a critical role in constructing trust among members, connecting them in solid formations, expanding communication and sharing of information among members and consequently allowing better cooperation, effective collective action and effective decision-making among members. Social capital enhances the chances of its members to access resources and information. This assists in empowering members economically, socially, politically, legally and personally.

Structural Equation Modelling is a powerful statistical technique that allows researchers to test and validate complex relationships between observed and latent variables. This study aimed to determine the role of social capital in empowering cooperative members (EMP) and the mediating effect of EMP on member satisfaction (MSA). The interdependencies of these variables can be identified using SEM. This

allows us to also determine the influence of SCL and EMP (direct and indirect) on MSA in terms of statistics within our specific model. To perform SEM, the multivariate normality of the distribution is necessary criterion. So, the study first identified the nature of distribution.

Table 5.62 Univariate and Multivariate Normality of Distribution Variables

Variable	skew	c.r.	kurtosis	c.r.
MSA4	-0.237	-2.659	-1.779	-9.983
MSA3	-1.213	-13.614	-0.529	-2.969
MSA2	-0.793	-8.9	-0.508	-2.853
MSA1	1.169	13.126	1.314	7.377
EMP1	-1.632	-18.316	2.262	12.695
EMP2	-1.306	-14.661	2.561	14.374
EMP3	-1.912	-21.464	5.053	28.361
EMP4	-0.53	-5.945	-0.721	-4.049
EMP5	-0.634	-7.117	-0.515	-2.89
EMP6	-0.605	-6.795	-0.822	-4.612
EMP7	-1.465	-16.442	1.6	8.982
EMP8	-0.311	-3.486	-1.904	-10.684
SCL1	-1.191	-13.374	0.948	5.322
SCL2	-0.268	-3.007	-1.515	-8.501
SCL3	-0.376	-4.219	-1.362	-7.646
SCL4	-0.642	-7.201	-0.978	-5.489
SCL5	-0.337	-3.784	-1.324	-7.43
SCL6	-0.428	-4.803	-1.061	-5.956
Multivariate			27.496	14.088

Source: Authors' computation

Table 5.62 presents the univariate and multivariate normality of the variable distribution in the data. Several variables are enlisted in the table represented by particular acronyms, for example, SCL, EMP and MSA. Each variable has multiple

indicators represented by numbers (for example, SCL1, SCL2, etc.). The researcher can use the coefficient and a critical value to determine the normality of the data distribution. The critical value of skewness and kurtosis of the variables is between the values +1.96 of -1.96 and in case the multivariate critical ratio value is between +1.96 and -1.96, the researcher can conclude that the variables are normally distributed. Hence, the researcher employed the bootstrapping technique to ensure the normality of distributions in the model.

5.6.1 Bootstrapping the Model

The Bollen-Stine bootstrap involves generating multiple resamples (bootstrap samples) from the observed data. The chi-square statistic and SEM model were estimated for each resample. Repeating this process several times, one will achieve a distribution of chi-square values, which will enable a more sensible evaluation of the variability as well as the possible bias towards the chi-square test.

5.6.2 Model Fit through Bollen-Stine Bootstrap

The assessment of model validity in structural equation modeling is a critical step in ensuring that the hypothesised relationships between variables accurately reflect the underlying structure of the data. Conventional methods (including the chi-square test of model fit) can sometimes fail to handle small sample sizes or departures of the data from normality. To solve these problems, the Bollen-Stine Bootstrap offers a resampling method of a higher quality and thus the assessment of model fit can be performed more accurately. Here, the researcher adopted the Bollen-Stine bootstrap to question the validity of the SEM model. Bootstrap procedure uses resampling of the dataset that is observed to create a distribution of the chi-square statistic under the null hypothesis that the model is an excellent match. Hence, the researcher verifies the model validity using 5000 bootstrap samples.

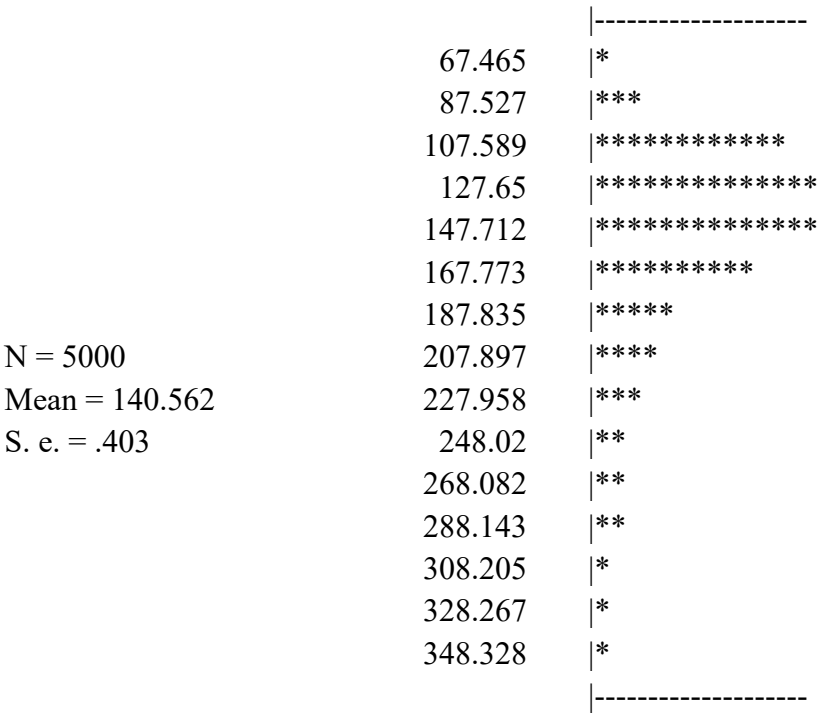
Table 5.63 Chi-Square Validation of Bollen-Stine Bootstrap

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	38	**207.776**	133	0.315	1.562
Saturated model	171	0	0		
Independence model	18	7665.477	153	0.221	50.101

Source: Authors' computation

Table 5.63 gives the Chi-Square validation of Bollen-Stine Bootstrap of the important indicators. The "Default model" shows a Chi-square (CMIN) value of 207.776 with 133 degrees of freedom (DF), yielding a p-value of 0.315, which is greater than the conventional threshold of 0.05. Such an unimportant p-value is associated with the fact that the model fits the data, worrying that it gives no statistically significant indication of a difference between the observed and model-implied covariance matrix. The CMIN/DF ratio was 1.562, which was less than the recommended level of 3, further showing a good fit. The "Saturated model" has zero degrees of freedom and a CMIN of 0, as it perfectly reproduces the observed data, serving as a benchmark for perfect fit. In contrast, the " independence model" assumed no relationships among variables and resulted in a very high CMIN of 7665.477 with 153 degrees of freedom and a p-value of 0.221. Despite the p-value being non-significant, the extremely high CMIN and CMIN/DF ratio (50.101) confirm a poor model fit. Overall, the results, especially for the default model, demonstrate that the proposed model exhibits a strong and acceptable level of fit according to the Bollen-Stine bootstrap method, supporting the model's validity for further analysis. This study also identified the chi-square statistics range of CMIN which is shown in figure 5.4.

Figure 5.4 Chi-square Statistics Range of Bollen-Stine Bootstrap



Source: Authors' computation

Figure 5.4 providing the spectrum of the chi-square statistic and frequencies or counts of the observations belonging to certain intervals. The horizontal axis of the graph indicates the span of the chi-square statistics. All intervals on the x-axis depict a certain range of the chi-square value. The vertical axis represents the frequency or count of observations within each interval of the x-axis. It provides the level at which a given statistic chi-square is expected to fall within the range. The total number of observations (N) was 5000, which likely represents the total number of bootstrap samples or resamples used in the Bollen-Stine bootstrap procedure. The chi-square statistic was averaged to 140.562. This value is the mean chi-square value of each observation. The standard error (.403) provides a measure of the variability or precision associated with the mean of the chi-square statistic. The figure depicts the distribution of chi-square statistics (207.776) obtained through the Bollen-Stine Bootstrap procedure within the specified range of 67.465 and 348.328. Hence, one may analyse the dispersion of chi-square statistics to evaluate the stability and reliability of the model fit by the researcher. When the calculated chi-square lies within the normal range of distribution values, it implies that the model is good.

Table 5.64 Model Fit of Bollen-Stine Bootstrap Sample

Bollen-Stine Bootstrap
The model fit better in 4785 bootstrap samples.
It fit about equally well in 0 bootstrap samples.
It fit worse or failed to fit in 352 bootstrap samples.
Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap p = 0.213

Source: Authors' computation

The results of the Bollen-Stine bootstrap procedure are summarised in table 5.64, which provides a clue as to how the model fitted the different bootstrap samples. This is presented in the form of categories of how well the model fits in each resample with an added value of a p-value linked to the null hypothesis test. Using bootstrap, the model fit well in 4785 of the 5000 samples. This implies that in most resamples, the structural equation model produced a good fit or improvement compared to the model used initially. It was also fit about equally well in 0 bootstrap samples. This means

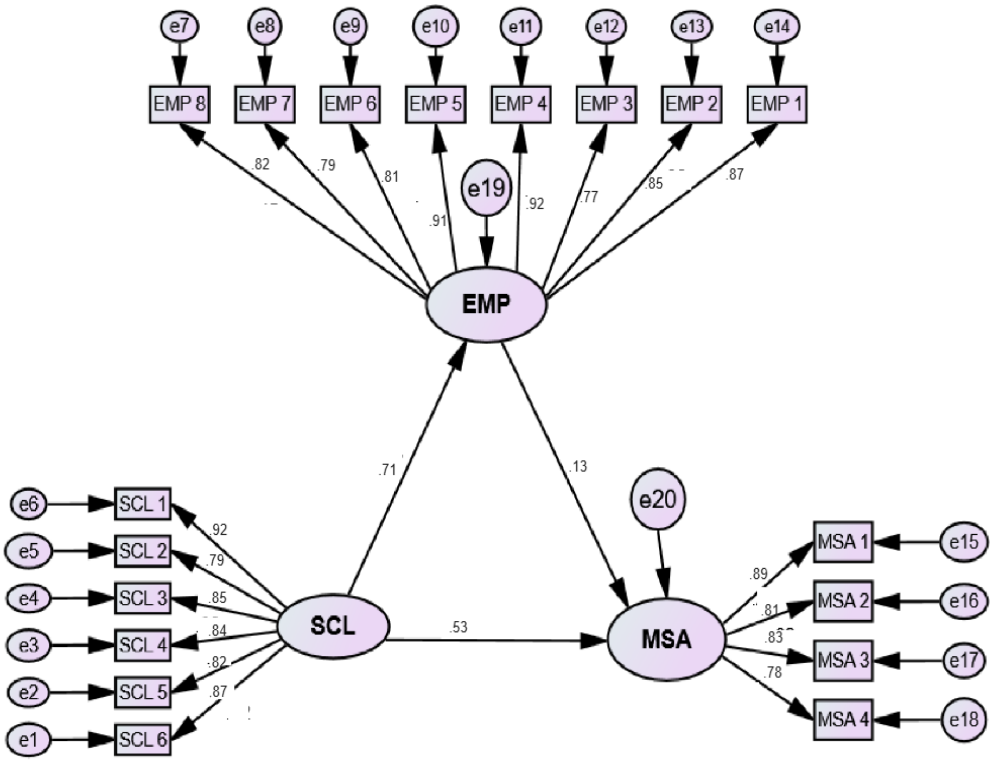
that in resampling, there was no case of model fitness that was left unaffected. Further, It failed or did not fit the 352 bootstrap samples. Thus, In this study, the researcher applied a bootstrap of 5000 samples. Finally, the Bollen-Stine bootstrap p-value is reported as .213 (accepting the null hypothesis). The p-value is associated with the null hypothesis which checks whether the model is good or correct.

5.6.3 Hypothetical Model: The Role of Social Capital in Empowering and Satisfying Members and the Mediating Role of Member Empowerment between Social Capital and Member Satisfaction

The central premise of this model is that SCL serves as a foundational mechanism that influences the degree to which individuals feel empowered (EMP) within a group or an organisation. In this context, empowerment encompasses a perceived sense of autonomy, participation in decision-making and access to resources, which can significantly enhance members' sense of purpose and agency. The model posits that when members perceive high levels of social capital, they are more likely to experience increased empowerment, which, in turn, influences their satisfaction (MSA) within the organisation or community. This framework attempts to unravel the means through which intangible relational assets are converted into tangible psychological outcomes and, finally, their influence on overall member satisfaction.

By applying regression analysis or structural equation modelling (SEM), this study aims to empirically test the hypothesised relationships between SCL and EMP and the mediating role of EMP in predicting MSA. Knowledge of these pathways will provide major insights to stakeholders interested in utilising social capital to establish inclusive and participatory settings. Such findings can inform practices in organisations, particularly at the leadership level, human resource policies and participatory forms of governance in organisations that focus on member empowerment as a means of satisfaction and involvement. Within community development and public policy, social capital and empowerment should be encouraged to achieve sustainable social harmony and create a better quality of life. Finally, by addressing this question, the study aims to add to the expansion of the literature on the synergetic effects of networks of relations and mechanisms of empowerment on individual and group performance and bring practical and theoretical outcomes to reinforce member-based institutions.

Figure 5.5 Hypothetical Model: The Role of Social Capital in Empowering and Satisfying Members and the Mediating Role of Member Empowerment between Social Capital and Member Satisfaction



After the creation of the hypothetical model, the study tested the direct and indirect relationship between social capital, member empowerment and member satisfaction. The findings are shown in table 5.65.

Table 5.65 The Relationship between Social capital, Member Empowerment and Member Satisfaction

Hypothesis						
Dependent Variables	←	Independent Variables	Estimate	S.E.	Critical Ratio	P-value
EMP	←	SCL	0.814	0.113	7.203	0.000
MSA	←	SCL	0.634	0.201	3.154	0.000
MSA	←	EMP	0.324	0.106	3.056	0.000

Source: Authors' computation

Hypothesis 31: Social Capital has no significant impact on the development of Member Empowerment

The results indicate a strong and statistically significant positive relationship between Social Capital (SCL) and Member Empowerment (EMP), with an estimated coefficient of 0.814, a standard error of 0.113 and a critical ratio of 7.203. The p-value is denoted by "0.000," indicating a significance level well below the conventional threshold of 0.001. This implies that the null hypothesis, that there is no significant effect of social capital on empowering members, is rejected. Scholars conclude that in real-world activities, the greater the social capital, the greater the feeling of empowerment among members, that is, higher rates of trust, participation and social network harmony. This brings into focus the supportive nature of social capital, which can help members of a community or organisation feel more capable, independent and engaged in decision-making.

Hypothesis 32: Social Capital has no significant impact on the development of member satisfaction.

The path coefficient from social capital to member satisfaction is 0.634 with a standard error of 0.201 and a critical ratio of 3.154, which is statistically significant at the $p < 0.001$ level, as indicated by the "0.000". This statistical evidence causes the null hypothesis to be rejected, as there is a significant and positive effect of social capital on member satisfaction. The size of the estimate leads to the moderate strength of the relationship, implying that the higher the quality and depth of social capital, the more satisfied its members are likely to become. This may be a result of increased interpersonal trust, improved communication, mutual assistance and the feeling of belonging which are some of the defining qualities of social capital that lead to the overall fulfilment and satisfaction of members of an organisation or group.

Hypothesis 33: Member Empowerment has no significant impact on the development of member satisfaction.

The relationship between member empowerment and member satisfaction is also statistically significant, with an estimated path coefficient of 0.324, a standard error of 0.106 and a critical ratio of 3.056. The p-value is again highly significant (0.000), clearly below 0.001, which leads to the rejection of the third null hypothesis. In

addition, the impact on EMP is more moderate than the impact of SCL, but it shows a statistically significant and significant influence. This observation suggests that the more the members experience empowerment whereby they possess more control, voice and input in the processes of the organisation or community of which they are members, the more satisfied they are. This encourages both the feeling of worth and participation, which equate to an even more rewarding experience as part of the group and this further demonstrates the significance that enabling structures and practices that lead to empowerment should be pursued so as to boost the satisfaction levels.

5.6.4 Mediation Model

The mediation model proposed in this study seeks to investigate the indirect effect of social capital (SCL) on member satisfaction (MSA) through the mediating construct of member empowerment (EMP). The basis of the model lies in the theory that structural and relationship resources impregnated by social networks increase personal implications and in this model, the encouragement of strong social capital presence will lead to the manifestation of higher perceptions of empowerment among members who, in turn, will have higher levels of satisfaction. The mediation model adds sophistication to the study of direct effects by commenting on the process of empowerment as a mediating mechanism. Its implicit assumptions are that social capital alone does not necessarily and directly lead to satisfaction; rather, it builds empowerment in the form of autonomy, participation and access to support and that these eventually lead to increased satisfaction by the members. The pathway also highlights the importance of the psychological and participatory impact of collective social assets on the translation process at the individual level.

To empirically test the mediation effect in this study, bootstrapping-based mediation analysis was conducted, which is a strong non-parametric resampling process that can be used to investigate indirect effects in structural equation modelling. Whereas traditional methods, such as the Sobel test, assume that the sampling distribution is normal, bootstrapping does not make the same assumption and hence provides very precise confidence limits for indirect effects. Different resamples that were randomly chosen based on the original dataset were used to create a bias-corrected confidence interval of the indirect effect of SCL on MSA through EMP. Mediation is said to be statistically significant if the confidence interval of the indirect effect does not include

zero. This strategy increases the power of the mediation test and makes the results more reliable. The results of the bootstrapping process ensured that the most significant factor mediating the correlation between Social Capital and Member Satisfaction is Member Empowerment, the exertion of which should be aimed at enabling the most positive influence of Social Capital on the members and their overall well-being.

Hypothesis 34: Member Empowerment (EMP) does not mediate the relationship between Social Capital (SCL) and Member Satisfaction (MSA).

Table 5.66 Mediation Effect of Member Empowerment between Social Capital and Member Satisfaction

Effect	Standardized Estimation	Un-Standardized Estimate	Confidence Interval Low/High	P-value
Indirect Effect (SC→ EMP→ MSA)	0.092	0.109	0.031/0.274	0.011
Direct Effect (SCL→MSA)	0.534	0.632	0.078/0.672	0.001
Total Effect (SCL→MSA)	0.626	0.741	0.083/0.753	0.002

Source: Authors' computation

Table 5.66 presents the results of the mediation analysis assessing the role of Member Empowerment (EMP) as a mediating variable in the relationship between Social Capital (SCL) and Member Satisfaction (MSA). The indirect effect of SCL on MSA via EMP was significantly estimated to be 0.092 (standardised) and 0.109 (unstandardized) when the p-value was less than 0.05. The confidence value of the indirect effect was 0.031 to 0.274 with a corresponding p-value of 0.011, which was significantly lower than 0.05, implying that the mediation effect was significant. This indicates that at least one mediator (Member Empowerment) partially mediates the relationship between Social Capital and Member Satisfaction. Thus, the relationship between social capital and member satisfaction is related not only directly but also indirectly by increasing the sense of empowerment of the members. The direct relationship between SCL and MSA with no mediation effect of EMP was also found to be significant owing to a standardised estimate of 0.534, an un-standardised

estimate of 0.632 and confidence intervals of 0.078 and 0.672 with p-values of 0.001. This indicates that Social Capital has a significant and strong direct relationship with Member Satisfaction, even in the presence of the mediating variable. The overall effect, that is, the direct and indirect effects combined, had a standardised estimate of 0.626 with an unstandardized estimate of 0.741 and confidence interval of 0.083 to 0.753 and a p-value of 0.002 which further reinforces the overall significance of Social Capital in determining Member Satisfaction. The findings present empirical support for the assumed mediation model and emphasise the necessity of developing empowerment as a means by which social capital can contribute to the satisfaction of the members of a community or organisation. Thus, the policy holders shall recognize the pivotal role played by the member empowerment in mediating between SCL and MSA and while formulating policies and strategies.

Table 5.67 Type of Mediation Effect (Baron and Kenny's, 1986 Classical Approach)

Effect	Standardized Estimation	p-value	Result	Mediation
Total Effect	0.626	0.002	Significant Impact	**Partial Mediation**
Direct Effect	0.534	0.001	Significant Impact	
Indirect Effect	0..092	0.011	Significant Impact	

Source: Authors' computation

Table 5.67 illustrates the classification of the mediation effect of member empowerment in the relationship between social capital and member satisfaction based on Baron and Kenny's (1986) classical approach to mediation analysis. Under this model, mediation is known by the sequential importance of the total, direct and indirect impacts. Overall, the impact of SCL on MSA was statistically significant in this situation, where the standardised estimation was 0.626 and the p-value was 0.002, which also signified a high degree of influence. The direct impact of SCL on MSA with EMP as a mediating variable in the model was significant, with a standardised estimate of 0.534 and a p-value of 0.001. Furthermore, the indirect effect is also significant, with a value of 0.092 and a p-value of 0.011. Both the direct and indirect effects are large and the direct effect, even when the mediator is included, is large; therefore, the outcome is given as partial mediation. This means that although Member Empowerment mediates the relationship between social capital and member

satisfaction, social capital has a causal implication on satisfaction independent of empowerment. Hence, the effect of social capital on satisfaction can be said to be improved by the inclusion of empowerment, which, however, does not fully explain it and contributes to emphasising the combined nature of structural assistance and individual agency in promoting positive outcomes in members. The study further identified the composite reliability, convergent validity, discriminant validity and HTMT criterion. Considering all these the study developed the confirmatory model which is depicted in figure 5.6.

Figure 5.6 Confirmatory Model: The Role of Social Capital in Empowering and Satisfying Members and the Mediating Role of Member Empowerment between Social Capital and Member Satisfaction

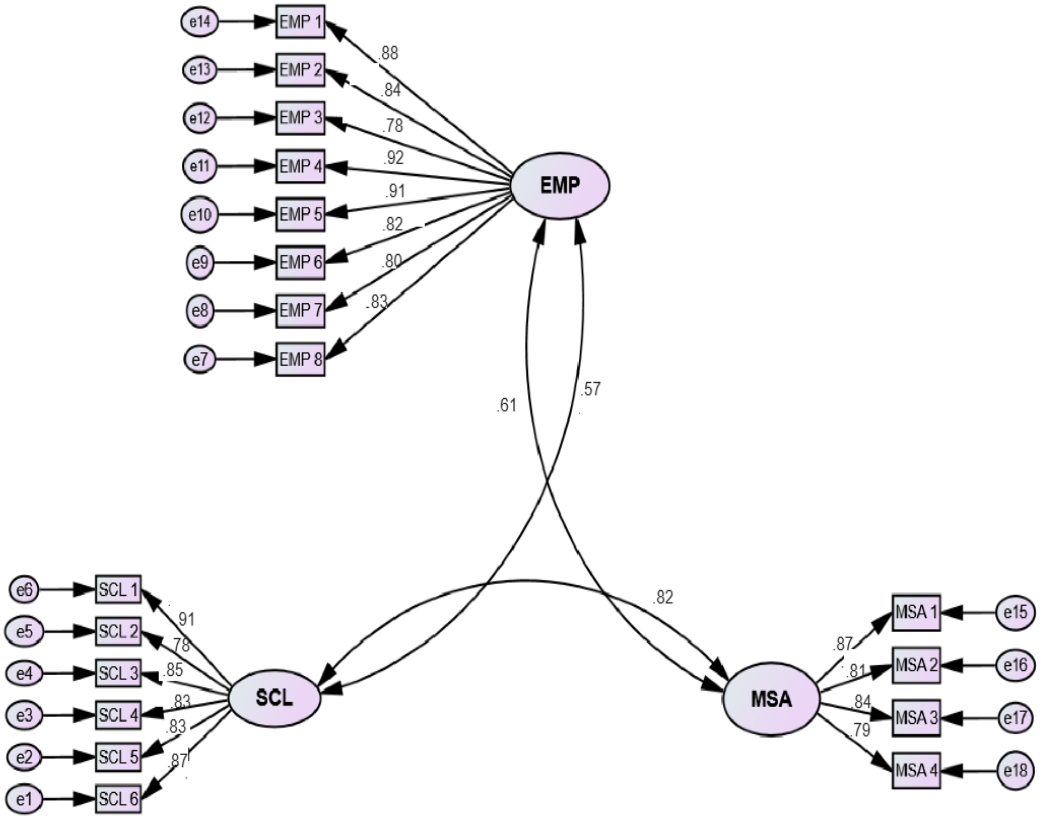


Table 5.68 presents the standardised and unstandardized regression weights of the model, highlighting how well each observed (indicator) variable represents its corresponding latent construct: social capital (SCL), member empowerment (EMP) and member satisfaction (MSA). The unstandardized regression weights indicate raw estimates of the links between every indicator and its latent variable, whereas the

standardised regression weights present unified values that can be compared. For social capital, all six indicators (SCL1 to SCL6) showed high standardised loadings ranging from 0.789 to 0.918, indicating that each item was a strong and reliable reflection of the latent construct, with SCL1 having the highest contribution (0.918) and SCL2 the lowest (0.789).

Table 5.68 Standardized and Unstandardized Regression Weights of the Model

Unstandardized Regression Weights							Standardized Regression Weights
Indicator Variable	<---	Latent Variables	Estimate	S.E.	Critical Ratio	P-value	
SCL1	<---	SCL	1				0.918
SCL2	<---	SCL	1.7	0.109	15.548	0.000	0.789
SCL3	<---	SCL	1.639	0.105	15.556	0.000	0.848
SCL4	<---	SCL	1.717	0.109	15.712	0.000	0.839
SCL5	<---	SCL	1.59	0.105	15.089	0.000	0.817
SCL6	<---	SCL	0.767	0.068	11.314	0.000	0.869
EMP1	<---	EMP	1			0.000	0.872
EMP2	<---	EMP	2.073	0.217	9.553	0.000	0.847
EMP3	<---	EMP	4.243	0.334	12.719	0.000	0.774
EMP4	<---	EMP	0.766	0.17	4.515	0.000	0.923
EMP5	<---	EMP	1.041	0.235	4.431	0.000	0.912
EMP6	<---	EMP	1.039	0.141	7.368	0.000	0.813
EMP7	<---	EMP	1.315	0.169	7.757	0.000	0.794
EMP8	<---	EMP	0.319	0.186	1.717	0.000	0.824
MSA1	<---	MSA	1			0.000	0.886
MSA2	<---	MSA	0.28	0.052	5.374	0.000	0.813
MSA3	<---	MSA	1.008	0.31	3.251	0.000	0.833
MSA4	<---	MSA	0.099	0.034	2.871	0.000	0.784

Source: Author's computation

Similarly, the indicators for member empowerment (EMP1 to EMP8) also show strong standardised loadings, mostly above 0.8, with EMP4 (0.923) and EMP5 (0.912) being the most influential indicators. Even EMP8, despite having a relatively lower critical ratio (1.717), demonstrated good loading (0.824), suggesting its relevance. For Member Satisfaction, all four indicators (MSA1 to MSA4) also showed satisfactory loadings, with MSA1 being the strongest (0.886). Notably, the statistical significance of all paths ($p < 0.001$, i.e., 0.000) and the high critical ratios confirm that each indicator reliably contributes to measuring its respective latent variable. This confirms

construct reliability and provides sufficient justification for the feasibility of the measurement model. To provide further structural analysis.

5.6.5 Model Fit Measures Related to Social Capital, Member Empowerment and Members Satisfaction

In the SEM, the evaluation of model fit is critical to ascertain the effectiveness of the proposed theoretical framework in explaining observed data. Table 5.67 explains the state of normed chi-square, CFI, GFI, IFI, NFI, RMSEA and SRMR and concerned threshold limits.

Table 5.69 Model Fit Measures Related to Social Capital, Member Empowerment and Members Satisfaction

Model Fit Indices	Citation	Threshold Limit	Estimated Value	Interpretation
Normed Chi-Square	Jackson, J A. (1998)	< 3	207.776/ 133- CMIN/DF = 1.562	Excellent
CFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	> 0.90	0.923	Acceptable
GFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D&Revuelta, J. (2022) and., Xia, Y., & Yang, Y. (2018)	>.90	0.918	Good
IFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	>.90	0.912	Good
NFI	Shi, D., Lee, T. &Maydeu-Olivares, A. (2018), Ximénez, C., Maydeu-Olivares, A., Shi, D., &Revuelta, J. (2022) and Xia, Y., & Yang, Y. (2018)	>.90	0.927	Good
RMSEA	Hooper, D., Coughlan, J. & Mullen, R M. (2008),	< 0.08	0.043	Acceptable
SRMR	Pavlov, G., Maydeu-Olivares, A. & Shi, D. (2020).	< 0.06	0.028	Excellent

Source: Compiled and computed by the author

Notes: CFI-Comparative fit index, GFI-Goodness of fit index, IFI-Incremental fit index, NFI-Normed fit index, RMSEA-Root mean square error of approximation, SRMR-Standardized root mean square residual

The indices of the appropriate model are listed in table 5.69. According to the model fit requirements, the GFI, IFI, NFI and CFI values should be greater than 0.9, the goodness of fit to degrees of freedom ratio (normed chi-square) should not be greater than 3 and the RMSEA and SRMR should be less than 0.08 and 0.06 respectively. From the results, it is evident that the model met all the set standards, thus, the model is fit for further analysis. The study also identified composite reliability, convergent validity, discriminant validity and HTMT criterion.

5.6.6 Model Reliability and Validity

To check the reliability and construct validity of the model, the study found the composite reliability, convergent validity, discriminant validity and HTMT criterion. The results are discussed in the tables below.

Table 5.70 Composite Reliability of the Model

	CR	AVE	MSV	MaxR(H)
EMP	0.953	0.719	0.453	0.963
MSA	0.899	0.692	0.421	0.912
SCL	0.937	0.713	0.388	0.942

Source: Authors' computation

Table 5.70 provides information on the various measures used to assess the quality and reliability of latent constructs within a Structural Equation Model (SEM). Composite Reliability reflects the model of latent construct reliability. It is also advisable that when the values increase above 0.70, they are acceptable. All constructs (SCL, EMP and MSA) exceeded this threshold, indicating good reliability. The Average Variance Extracted provides an indication of how much variance is being measured by the construct compared to how much is being measured as a result of measurement error. Values higher than 0.50 were considered acceptable. In this example, none of the constructs fall short of that issue and may have a good convergent validity. Maximum Shared Variance checks how much a construct shares with the rest of the other constructs in the model in the sense that a construct represents more variance to the other constructs in the model than it does its own measures. Lower values are desirable and in this instance, all constructs are below the value that signifies good discriminant validity. Max Redundancy traces that part of the latent

variable variance that is applied to explain indicators. Higher values indicate immense reliability and convergent validity. All constructs demonstrated high MaxR(H) values, indicating strong relationships between the latent variables and their indicators. Finally, the values of Composite Reliability, Average Variance Extracted, Maximum Shared Variance and Maximum Redundancy collectively suggest that the latent constructs (SCL, EMP and MSA) in the SEM are reliable. These indices help build the strength of the SEM measurement model.

Table 5.71 Convergent Validity of the Model

Indicator Variable	<---	Latent Variable	Standardized Loading	Square of Standardized Loading	Sum of Square of Standardized Loading	Number of Indicators	AVE
SCL1	<---	SCL	0.908	0.824	4.278	6	0.713
SCL2	<---	SCL	0.779	0.607			
SCL3	<---	SCL	0.849	0.721			
SCL4	<---	SCL	0.829	0.687			
SCL5	<---	SCL	0.827	0.684			
SCL6	<---	SCL	0.869	0.755			
EMP1	<---	EMP	0.875	0.766	5.751	8	0.719
EMP2	<---	EMP	0.843	0.711			
EMP3	<---	EMP	0.779	0.607			
EMP4	<---	EMP	0.921	0.848			
EMP5	<---	EMP	0.911	0.83			
EMP6	<---	EMP	0.823	0.677			
EMP7	<---	EMP	0.795	0.632			
EMP8	<---	EMP	0.825	0.681			
MSA1	<---	MSA	0.886	0.785	2.77	4	0.692
MSA2	<---	MSA	0.811	0.658			
MSA3	<---	MSA	0.843	0.711			
MSA4	<---	MSA	0.785	0.616			

Source: Authors' computation

Table 5.71 reveals the convergent validity of the model. To achieve convergent validity, the Average Variance Extracted (AVE) must be 0.5 or more than 0.5 and standard factor loadings must be greater than 0.50. According to this model, the AVE

of SCL is 0.713, EMP is 0.719 and MSA is 0.692. The loadings of all the latent variables of the indicator variables were above 0.5. Therefore, the results provide evidence of convergent validity, indicating that the latent variables (SCL, EMP and MSA) in the model are effectively measured by their respective indicator variables. The squared standardised loadings made a positive contribution to the convergent validity and the value of AVE was quite acceptable, which confirmed that a significant proportion of variance in the latent variables was accounted for by their indicators. These results increase the validity of the measurement model and the correlation between the latent and measured variables.

Table 5.72 Discriminant Validity of the Model

	SCL	EMP	MSA
SCL	**0.844**		
EMP	0.571	**0.848**	
MSA	0.516	0.611	**0.832**

Source: Authors' computation

Table 5.72 shows the discriminant validity of the model based on the Fornell-Larcker criterion, which determines the distinctness of each construct in the model. The diagonal values represent the square roots of the Average Variance Extracted (AVE) for each latent construct: Social Capital (SCL), Member Empowerment (EMP) and Member Satisfaction (MSA). These values 0.844 of SCL, 0.848 of EMP and 0.832 of MSA are matched in opposition to the off-diagonal correlation between constructs. For discriminant validity to be established, the square root of each construct's AVE (the diagonal value) should be greater than its correlation with other constructs (the off-diagonal values in the corresponding row and column). In this case, SCL's AVE square root (0.844) is greater than its correlation with EMP (0.571) and MSA (0.516); EMP's AVE square root (0.848) is higher than its correlation with SCL (0.571) and MSA (0.611); and MSA's AVE square root (0.832) is greater than its correlations with both SCL (0.516) and EMP (0.611). All these comparisons, which are shown on the basis of variance, prove that each construct has strong discriminant validity because every construct shares more variance with its indicators than with the others. This implies that the constructs of social capital, member empowerment and member

satisfaction are statistically independent of each other within the measurement model. Thus, the instrument used in this study has a theoretical structure and validity.

Table 5.73 Heterotrait-Monotrait (HTMT) Criterion Related to the Model

	SCL	EMP	MSA
SCL			
EMP	0.658		
MSA	0.613	0.747	

Source: Author's computation

Table 5.73 presents the Heterotrait-Monotrait Ratio (HTMT) of correlations, which is a modern and more stringent criterion used to assess discriminant validity among latent constructs in a structural equation model. HTMT values represent the ratio of the average correlations across constructs (Heterotrait-Heteromethod) to the average correlations within the same construct (Monotrait-Heteromethod). In this table, the HTMT value between social capital and member empowerment (EMP) is 0.658, between SCL and member satisfaction is 0.613 and between EMP and MSA is 0.747. All these values were below the commonly accepted threshold of 0.85 (or a more conservative 0.90), indicating that the constructs were empirically distinct from one another. The closer the HTMT value is to zero, the more confident one can be that the measurement of constructs does not overlap to the same degree and hence they do not measure the same. Thus, the outcomes of this table also prove that discriminant validity is achieved in the three latent constructs, social capital, member empowerment and member satisfaction, which further supports the reliability and conceptual clarity of the measurement structure of the model.

5.7 The Change in Empowerment Attained by Cooperative Members After becoming a Member in a Cooperative Society (Objective 4)

Cooperative societies are community based organisations, would have a key role fostering empowerment, especially for marginalised and economically challenged groups of people. This study seeks to explore the change journey that some of the members undergo in the process of their interaction within the cooperative societies, with a particular emphasis on quantifying the change of empowerment levels in different levels of knowledge empowerment before and after their joining the

cooperative society. These dimensions can incorporate economic empowerment, which includes increased income and savings; social empowerment, which encompasses higher status and network connections; economic empowerment through participation in governance; and politico-legal empowerment through increased confidence, access to resources and self-efficacy. Through a comparative assessment of the pre-membership and post-membership conditions, the study demonstrates the material and immaterial gains that come from participating in cooperation. After registering a change in empowerment of members after becoming a cooperative member, the study assessed whether those changes are significant nor not. A detailed analysis are as follows.

Table 5.74 Descriptive Statistics of Empowerment among Cooperative Members

Variables	Mean	Std. Deviation
Collective bargaining power (EMP 1) - Before	2.126	1.414
Improving the overall economic conditions (EMP 2)-Before	1.683	0.466
Sense of belonging and inclusion (EMP 3)- Before	1.438	0.635
Increased access to education, healthcare (EMP 4)-Before	1.733	0.620
Access resources (EMP 5)- Before	1.769	0.605
Increase in your decision making abilities (EMP 6)-Before	1.341	0.474
More informed (EMP 7)- Before	1.550	0.498
Platform to voice your concerns (EMP 8)- Before	1.434	0.496
Collective bargaining power (EMP 1) - After	4.288	0.684
Improving the overall economic conditions (EMP 2)-After	4.364	0.484
Sense of belonging and inclusion (EMP 3)-After	4.575	0.516
Increased access to education, healthcare (EMP 4)-After	4.628	0.510
Access resources (EMP 5)-After	4.406	0.510
Increase in your decision making abilities (EMP 6)-After	3.876	0.801
More informed (EMP 7)-After	4.247	0.594
Platform to voice your concerns (EMP 8)-After	4.566	0.496

Source: Authors' computation

The descriptive statistics provide an indication of the levels of empowerment that the cooperative members experienced pre- and post-participation in the cooperative

society on eight core dimensions of empowerment. The figures vividly show a substantial increase in the mean scores for all the variables after membership, demonstrating that there was a remarkable improvement in terms of empowering the members. For instance, the mean score for collective bargaining power (EMP 1) increased from 2.126 (SD = 1.414) before joining to 4.288 (SD = 0.684) after joining, signifying that cooperative members felt substantially more capable of negotiating and voicing their collective needs after membership. Similarly, the variable improving overall economic conditions (EMP 2) increased from 1.683 to 4.364, showcasing the cooperatives' role in positively influencing the financial well-being of their members. A pronounced change is also visible in sense of belonging and inclusion (EMP 3), rising from a low 1.438 (SD = 0.635) before joining to 4.575 (SD = 0.516) after joining, indicating that cooperative membership fosters greater social integration and acceptance. The dimension of increased access to education and healthcare (EMP 4) improved from 1.733 to 4.628, highlighting the indirect benefits of cooperative participation in improving members' quality of life through better access to essential services. Furthermore, access to resources (EMP 5) increased from 1.769 to 4.406, while decision-making abilities (EMP 6) witnessed a sharp rise from 1.341 to 3.876, underscoring the psychological and political empowerment that members gained through participatory mechanisms. Members also reported feeling more informed (EMP 7), with mean scores moving from 1.550 to 4.247 and found greater opportunities to voice their concerns (EMP 8), which increased from 1.434 to 4.566. These steady improvements based on all measures of empowerment not only confirm the contribution made by the cooperatives in improving the agency, confidence and capacity of the individual, but also indicate the overall contribution of the cooperatives in enhancing sustainable, inclusive, community growth. The low standard deviations in post-membership responses confer more uniformity in perception of empowerment gains and thus this fact denotes that cooperative membership benefits are more uniformly distributed among members.

Hypothesis 35: Membership in cooperative societies has not changed the level of empowerment

To determine the change in empowerment achieved by cooperative members prior to and after joining the cooperative society, it is necessary to statistically determine

whether the differences in the levels of empowerment observed are significant or just by chance. In the above situation, empowerment comes with several dimensions, including the ability to finance oneself, the ability to make decisions, accessibility to resources and social integration which will be enhanced by taking part in cooperation. However, to give these expectations an empirical foundation, we need a hypothesis test. The null hypothesis presupposes the lack of statistical distinction between the levels of empowerment of people before admission and after adopting the cooperative membership status. The hypothesis is used to determine the extent to which membership in a cooperative society generates quantifiable enhancements in empowerment. Specifically, by using the Wilcoxon Signed-Rank Test, an adequate non-parametric test when paired data are used, this study will identify whether the changes in empowerment indicators at the two time points are significant. The test outcomes will enable proving or disapproving the assertion that cooperative societies have a transformative role in advancing the empowerment of their members, thus giving empirical power to the cooperative-driven development story.

Table 5.75 Wilcoxon Signed Rank Test Summary of Cooperative Members Before and After Joining the Cooperative Society

Variables	Related-Samples Wilcoxon Signed Rank Test Summary	
Collective bargaining power (EMP 1) - Before, Collective bargaining power (EMP 1) - After	Total N	756
	Test Statistic	227080.500
	Standard Error	5159.723
	Standardized Test Statistic	20.909
	Asymptotic Sig.(2-sided test)	0.000
Improving the overall economic conditions (EMP 2)- Before, Improving the overall economic conditions (EMP 2)-After	Total N	756
	Test Statistic	286146.000
	Standard Error	5870.291
	Standardized Test Statistic	24.372
	Asymptotic Sig.(2-sided test)	0.000
Sense of belonging and inclusion (EMP 3)- Before, Sense of	Total N	756
	Test Statistic	285390.000

Variables	Related-Samples Wilcoxon Signed Rank Test Summary	
belonging and inclusion (EMP 3)-After	Standard Error	5888.319
	Standardized Test Statistic	24.234
	Asymptotic Sig.(2-sided test)	0.000
	Total N	756
Increased access to education, healthcare (EMP 4)- Before, Increased access to education, healthcare (EMP 4)-After	Test Statistic	285390.000
	Standard Error	5902.632
	Standardized Test Statistic	24.175
	Asymptotic Sig.(2-sided test)	0.000
	Total N	756
Access to resources (EMP 5)-Before, Access to resources (EMP 5)-After	Test Statistic	286146.000
	Standard Error	5900.903
	Standardized Test Statistic	24.246
	Asymptotic Sig.(2-sided test)	0.000
	Total N	756
Increase in decision making abilities (EMP 6)- Before, Increase in decision making abilities (EMP 6)-After	Test Statistic	258121.000
	Standard Error	5429.365
	Standardized Test Statistic	23.771
	Asymptotic Sig.(2-sided test)	0.000
	Total N	756
More informed (EMP 7)- Before, More informed (EMP 7)-After	Test Statistic	280875.000
	Standard Error	5806.447
	Standardized Test Statistic	24.186
	Asymptotic Sig.(2-sided test)	0.000
	Total N	756
Platform to voice concerns (EMP 8)- Before, Platform to voice concerns (EMP 8)-After	Test Statistic	286146.000
	Standard Error	5884.356
	Standardized Test Statistic	24.314
	Asymptotic Sig.(2-sided test)	0.000

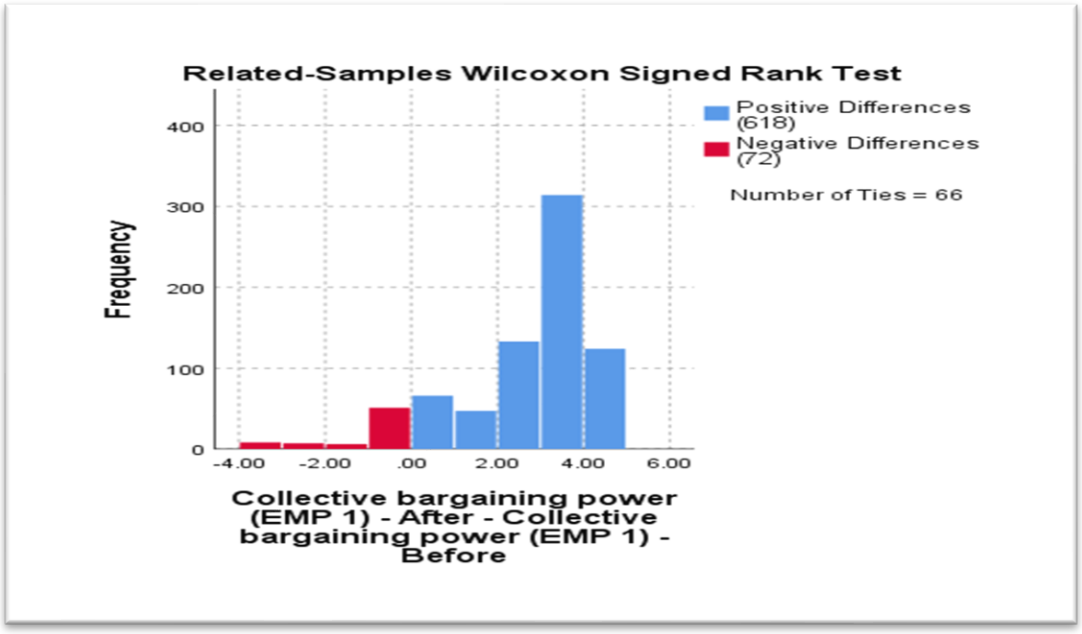
Source: Authors' computation

Table 5.75 presents the findings of the Wilcoxon Signed Rank Test, which was conducted to investigate the possibility of a statistically significant variation between the empowerment of cooperative members before they joined the cooperative society and after they joined the cooperative society on eight paramount dimensions of empowerment. The variables were implemented by testing a sample of 756 individuals to determine the difference between performance pre- and post-cooperative membership. The findings reveal that all empowerment indicators show highly significant results, with Asymptotic Significance (2-sided test) values equal to 0.000, indicating that the probability of these results occurring by chance is less than 0.001. The standardised test statistics (Z-values) for each variable ranged from 20.909 to 24.372, all of which were well above the typical threshold for significance in social sciences. This strongly indicates that the gains made in empowerment are statistical. For example, the dimension "Improving the overall economic conditions (EMP 2)" yielded a standardised test statistic of 24.372, the highest among all variables, indicating a considerable perceived economic benefit after membership. Similarly, “Platform to voice your concerns (EMP 8)” and “Access to resources (EMP 5)” also recorded high standardised test statistics of 24.314 and 24.246, respectively, implying significant gains in political voice and access. Decision-making ability, collective bargaining power and sense of inclusion are other variables that have shown a robust statistical relationship, implying that cooperative societies are not only useful in enhancing economic outcomes but also in facilitating social empowerment, service access and engagement in decisions made at the community level. Overall, the fact that all variables were significant supports the rejection of the null hypothesis, based on the idea that cooperative membership has contributed to a statistically significant improvement in the empowerment of members.

5.7.1 Positive and Negative Differences in Empowerment

This part of the study depicts the positive and negative differences in empowerment attained by the members f cooperative societies after they becoming a member in the society with regard to their collective bargaining power, overall economic conditions, sense of belongingness and inclusion, increased access to education and healthcare, access resources, increase decision making abilities and opportunity to voice their concerns. Figures 5.7 to 5.14 depicts those changes.

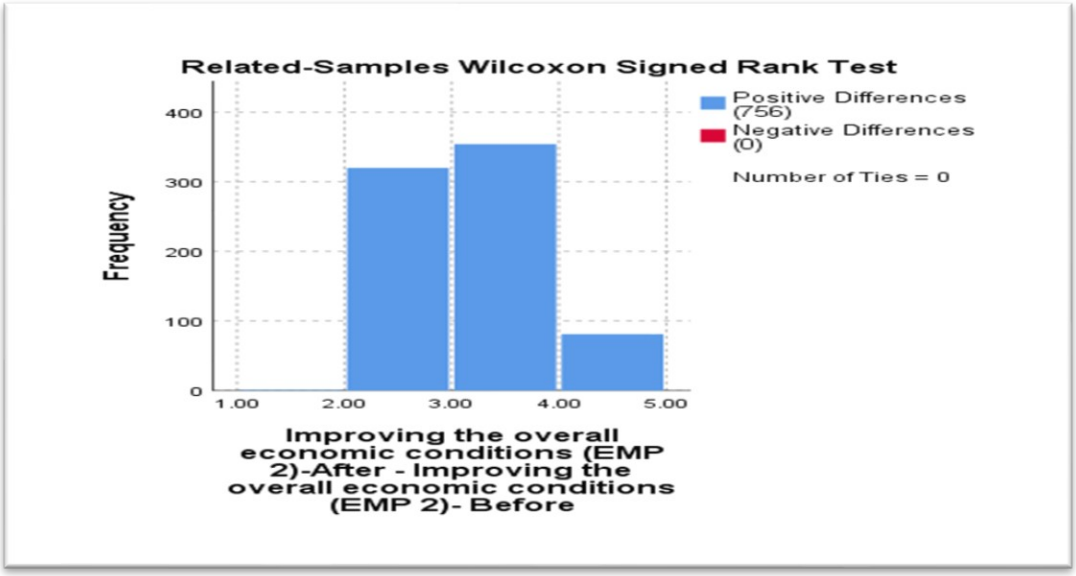
Figure 5.7 Change in the Collective Bargaining Power of Members



Source: Authors' computation

Figure 5.7 illustrates the distribution of differences in collective bargaining power (EMP 1) of cooperative members before and after joining the cooperative society, as measured by the related-samples Wilcoxon signed-rank test. The histogram shows the frequency of respondents who reported positive, negative and no change (ties) in their perceptions of collective bargaining power. Of the 756 respondents, 618 (highlighted in blue) reported positive differences, indicating a clear increase in their collective bargaining power after becoming cooperative members. A smaller group of 72 respondents (in red) reported negative differences, suggesting a decline in their perceived bargaining power. In addition, 66 respondents did not report any change, as represented by the number of ties. The distribution is strongly skewed to the right and most of the differences lie within the 2.0 to 4.0 range which illustrates a significant rise in this indicator of empowerment. The overall figures supported by positive differences largely support the findings of the Wilcoxon test which confirmed the view that there was a significant increase in collective bargaining power after membership. This figure is effective in indicating how cooperative membership has been influential in empowering members through collective negotiations which is a major element of social and economic power.

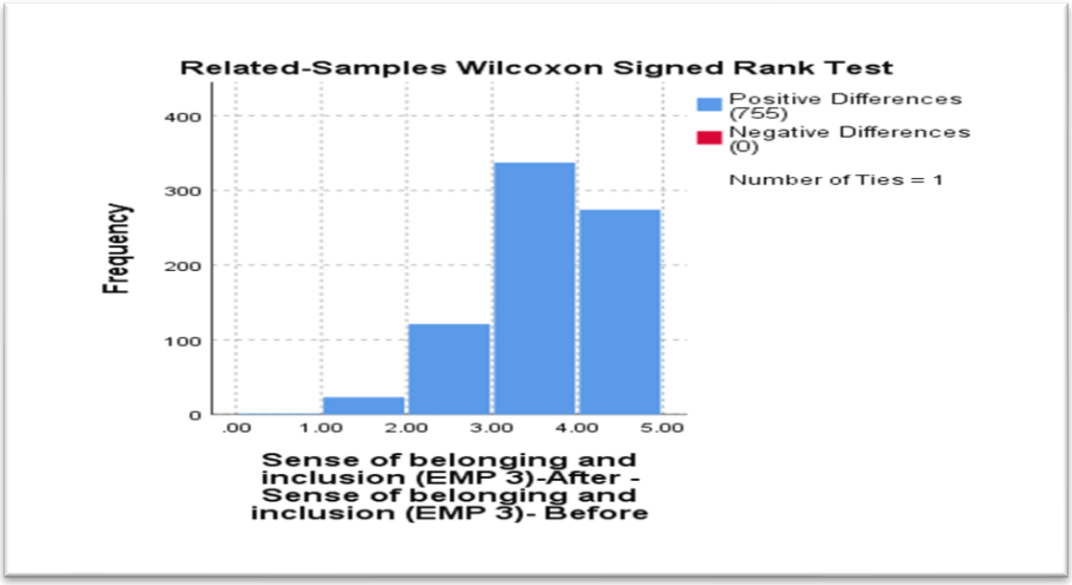
Figure 5.8 Change in Overall Economic Conditions of Members



Source: Authors' computation

Figure 5.8 provides a graphical representation of the results of the related-samples Wilcoxon signed-rank test, illustrating the change in cooperative members' perceptions of the improvement in their overall economic conditions (EMP 2) before and after joining the cooperative society. The histogram indicates a highly positive outcome: all 756 respondents (100%) reported positive differences, with zero negative differences and no ties, meaning that every respondent experienced an improvement in their economic conditions after becoming a member of the cooperative. This overall pronounced positive change is scattered along the difference scores, with the highest frequency of change between 3.0 and 4.0. A high degree of clustering of the data in the high difference category indicates a high perception of economic gain among the members who have been involved in the cooperative activity. The fact that there were no negative feedbacks or indifferent relationships further confirms the statistical reliability of this outcome, as this was also confirmed based on the previous Wilcoxon test that indicated a highly significant standardised test value. Overall, the figure graphically backs up the fact that cooperative membership has impacted enormously and consistently favourably on the economic welfare of its members, giving credit to the importance of cooperatives as tools of key financial empowerment of the grassroots.

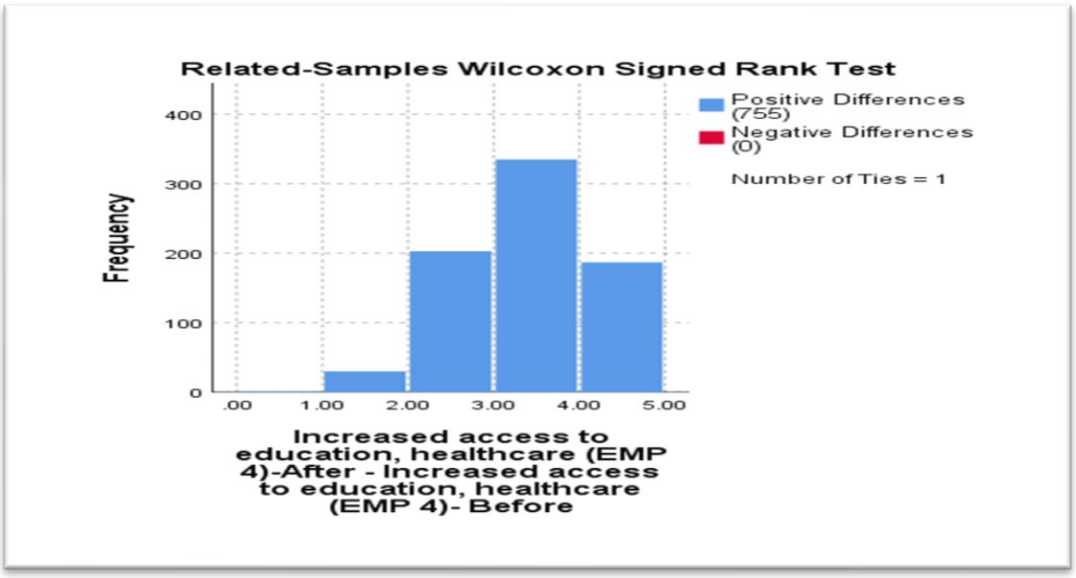
Figure 5.9 Sense of Belongingness and Inclusion of Cooperative Members



Source: Authors' computation

Figure 5.9 visually represents the results of the related-samples Wilcoxon signed-rank test applied to assess the change in cooperative members' sense of belonging and inclusion (EMP 3) before and after joining the cooperative society. Regarding the differences in the results among the respondents, the histogram gives a clear picture of a trend, with an overwhelming majority (755/756) of the respondents identifying a tremendous difference in their sense of social integration and inclusion upon joining as cooperative members. Notably, there was no negative result with a single tie, representing almost unanimous agreement that there was improvement. The concentration of frequency distribution was between the difference scores of 2.0 and 5.0, with the most responses being witnessed between 3.0 and 4.0. Such a positive skew indicates that a high level of cooperative membership was rather successful in increasing the sense of belonging as well as the feeling of personhood or personhood inclusion within the social and economic surroundings. The complete absence of negative differences shows the credibility and constancy of this pattern in the sample as a whole. Overall, the figure confirms that cooperative societies play a vital role in strengthening social bonds and fostering a supportive community atmosphere, thereby contributing meaningfully to members' psychological and social empowerment.

Figure 5.10 Change in the Level of Access to Education and Healthcare

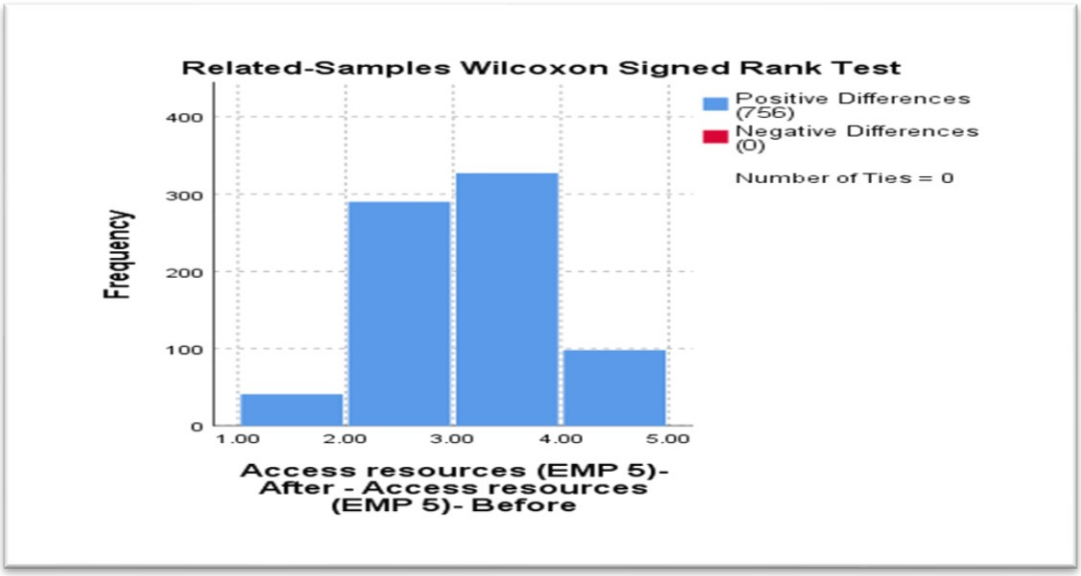


Source: Authors' computation

Figure 5.10 illustrates the distribution of differences in cooperative members' perceived access to education and healthcare (EMP 4) before and after joining the cooperative society, based on the related-samples Wilcoxon signed-rank test. The graph reveals a truly outstanding result: 755 out of the total 756 members have shown a positive difference, that is, they have seen a rise in their access to needed services after they have become a cooperative member. It consisted of no negative differences and only one tie which means that all respondents generally sensed a positive change in the well-being of almost the whole group. The concentration on the distribution of frequency is inside the range of 2.0 to 5.0 with the highest frequency evoking around the range of 3.0 to 4.0, indicating a high and steady advancement of levels of accessibility. This is a good indication that cooperative membership has played a major role in improving the availability and affordability of education and healthcare services for its members, which could be through increased income, collective welfare programs, or increased awareness. The fact that no adverse reactions were actually observed and that the higher difference scores largely dominate in the graphic material, is in itself an important confirmation of the statistical indicators that the progress registered is not only in the smallest but in the largest measure actually significant. The figure generally adds weight to the conclusion that cooperative societies have been at the forefront of enhancing the social welfare and quality of life

of their members by increasing their access to basic services, including education and healthcare systems.

Figure 5.11 Change in the Level of Access to Resources of Members

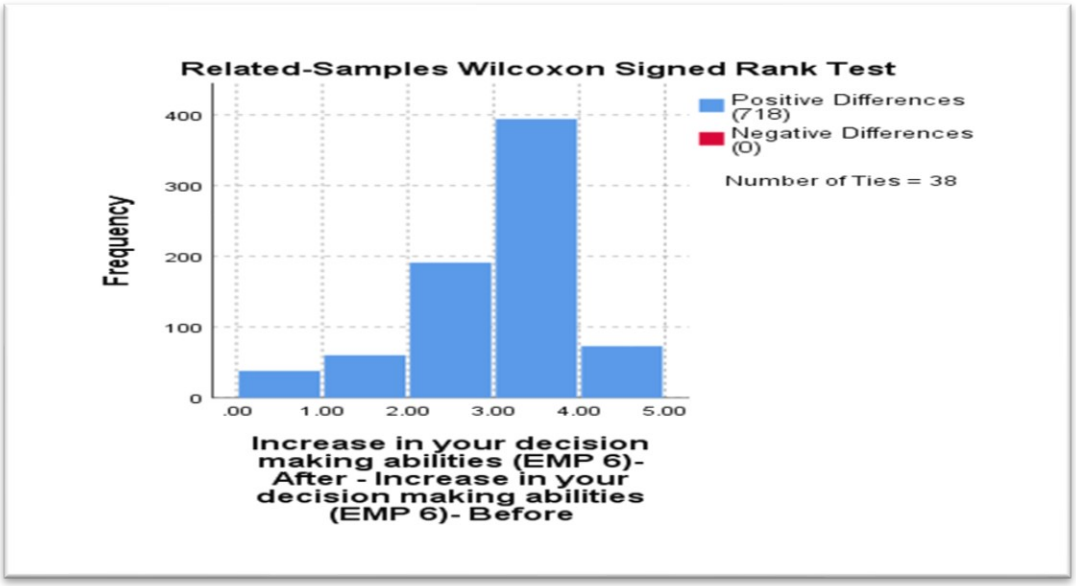


Source: Authors' computation

Figure 5.11 presents the results of the related-samples Wilcoxon signed-rank test for assessing the change in cooperative members' access to resources (EMP 5) before and after joining the cooperative society. The histogram clearly shows the positive difference to be unanimous, with 756 respondents giving a positive difference and no negative differences and no ties which would point towards all the participants feeling that their ability to access key resources like credit, tools, inputs, or infrastructure increased after becoming a member of the cooperative. The positive differences are skewed on a scale between 2.0 and 5.0, with the maximum at 3.0 to 4.0, indicating that the majority of the members gave a significant gain. The visual clustering in the upper intervals of differences exemplifies strongly that the cooperative model has hugely benefited the increased avenues that the member have to the economic and operational resources that are vital to them, as this may be attributed to pooling or shared networks, institutional assistance and member-oriented policies. This makes the findings further affirmative, with not a single negative or neutral score being recorded. Overall, the figure is quite conclusive that cooperative membership is an important tool that facilitates bridging the gaps in resource requirements of

individuals, particularly in rural or underserved communities and in turn empowers them systematically.

Figure 5.12 Change in Decision Making Ability

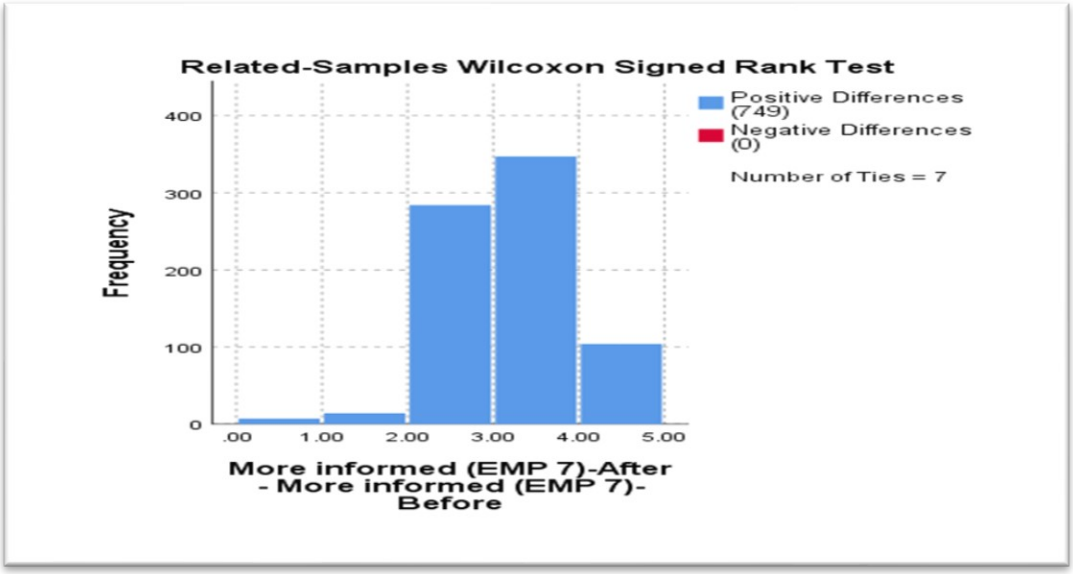


Source: Authors' computation

Figure 5.12 displays the results of the related-samples Wilcoxon signed-rank test analysing the change in cooperative members' decision-making abilities (EMP 6) before and after joining the cooperative society. The histogram shows the presence of mostly positive differences, as 718 of the 756 respondents who improved their decision-making capacities after joining the cooperative. There was no negative difference and 38 members registered ties, indicating no alteration in their decision-making skills. The positive difference distribution tended to vary between 1.0 and 5.0, with the highest occurrence on averages in the 3.0 range, indicating a significant but moderate increase in decision-making and independence. This is a good trend considering the effect of collaborative engagement in empowering individuals to take initiatives to make informed decisions besides participating in personal or collective decision-making. A moderate volume of ties could be perceived as evidence that some members could be confident decision-makers before becoming members or continue to derive the benefits of empowerment in this dimension. Nonetheless, the overwhelmingly positive responses reinforce that cooperative structures, through inclusive governance and participatory mechanisms, play a crucial role in fostering leadership qualities and enhancing members' capacity to contribute meaningfully to

decision-making processes. This number confirms the general finding that cooperatives are viable channels of psychosocial and political empowerment.

Figure 5.13 Change in the Level of Access to Information

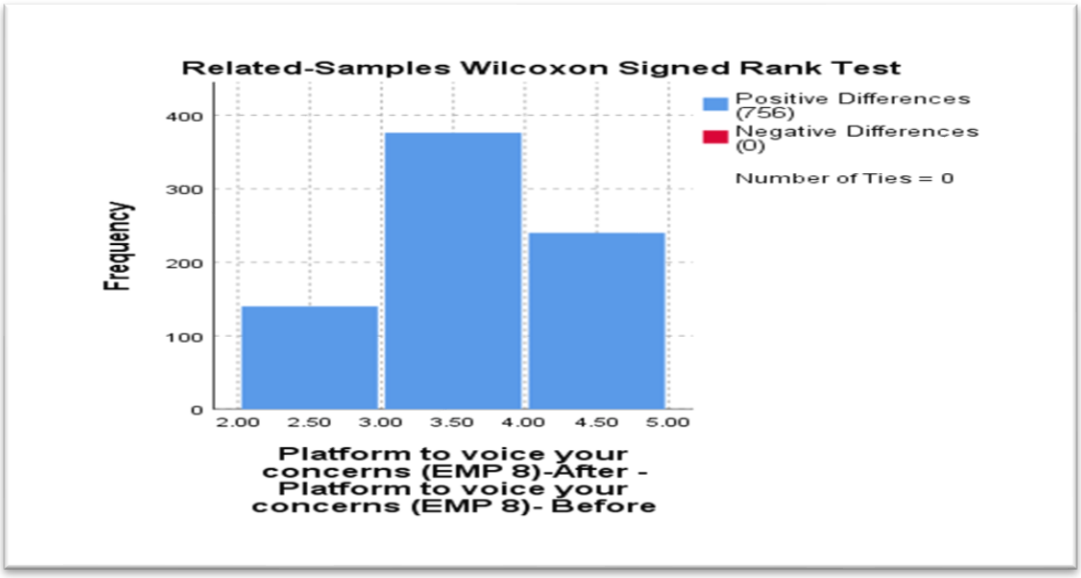


Source: Authors' computation

Figure 5.13 illustrates the outcomes of the related-samples Wilcoxon signed-rank test used to measure the change in the level of information awareness (EMP 7) among cooperative members before and after joining the cooperative society. The graph indicates a positive change that was very high, with 749 out of 756 respondents recording an increase in their level of being informed by the time they became cooperative members. The negative differences are not present and there are only seven ties which explains that almost all the members saw a significant change in their accessibility and familiarity with relevant information. The frequency distribution was in the range of difference scores of 2.0 to 4.0 and the peaks of the responses were based in the 3.0 range, indicating a moderate to large increase in awareness levels. Such an improvement might be explained by the presence of cooperative-led activities, such as training members, knowledge-sharing networks, joint decision-making mechanisms and access to market or policy information. The figure proves that cooperative membership is an essential factor that empowers people with knowledge and awareness, enabling them to make better economic, social and personal decisions. The lack of adverse feedback also supports the premise that

cooperatives are effective mechanisms for delivering beneficial information, thus boosting the level of general empowerment of information to their members.

Figure 5.14 Platform to Voice the Concerns of Members



Source: Authors' computation

Figure 5.14 shows the results of the Related-Samples Wilcoxon Signed Rank Test assessing the difference in cooperative members' access to a platform for voicing their concerns (EMP 8) before and after joining the cooperative society. The histogram shows a consistently positive shift, that is, 100% of the 756 respondents reported positive differences and there were no negative differences and ties, which indicates that there was a unanimous increase in this important empowerment construct. The spectrum of the responses is highly focused between a difference of scores of 2.5- 4.5 with the highest cluster of 3.0-4.0 indicating that there is significant improvement in the ability of the members to share opinion, raise issues and engage in a dialogue upon joining the cooperative. This is a telling sign that cooperative societies are successful in making inclusive and democratic engagements, whereby members feel heard and respected. The percentage of negative or neutral answers is zero, which also supports the conclusion that the existence of cooperatives is a significant boost in civic empowerment because it provides an organised platform for collective voice and bargaining in a measured environment. This will not only improve the dignity and representation of individuals but also strengthen an honest and participatory government in the structure of the cooperative. In this way, the figure is quite eloquent

about the position of cooperatives as platforms of social justice and participatory development.

Table 5.76 Member Empowerment - Before and After Joining the Cooperative Society: Wilcoxon Signed Rank Test Results

Null Hypothesis	Sig.	Decision
The median of differences between Collective bargaining power (EMP 1) - Before and Collective bargaining power (EMP 1) - After equals 0.	0.000	Rejected H0 in all cases
The median of differences between Improving the overall economic conditions (EMP 2)- Before and Improving the overall economic conditions (EMP 2)-After equals 0.	0.000	
The median of differences between Sense of belonging and inclusion (EMP 3)- Before and Sense of belonging and inclusion (EMP 3)-After equals 0.	0.000	
The median of differences between Increased access to education, healthcare (EMP 4)- Before and Increased access to education, healthcare (EMP 4)-After equals 0.	0.000	
The median of differences between Access resources (EMP 5)- Before and Access resources (EMP 5)-After equals 0.	0.000	
The median of differences between Increase in your decision making abilities (EMP 6)- Before and Increase in your decision making abilities (EMP 6)-After equals 0.	0.000	
The median of differences between More informed (EMP 7)- Before and More informed (EMP 7)-After equals 0.	0.000	
The median of differences between Platform to voice your concerns (EMP 8)- Before and Platform to voice your concerns (EMP 8)-After equals 0.	0.000	

Source: Authors' computation

The hypothesis test summary in table 5.76 is identified using the Related-Samples Wilcoxon Signed Rank test to determine the changes in different dimensions of the empowerment of the cooperative 's members before and after joining the cooperative society. For each of the eight empowerment variables collective bargaining power (EMP 1), economic condition improvement (EMP 2), sense of belonging and

inclusion (EMP 3), access to education and healthcare (EMP 4), access to resources (EMP 5), decision-making abilities (EMP 6), being more informed (EMP 7) and platform to voice concerns (EMP 8) the null hypothesis posited that the median difference between the "before" and "after" conditions equals zero. However, all variables yielded a p-value (Sig.).. The p-value was 0.000, which is far below the 5% level of significance, leading to the rejection of the null hypothesis in all cases. This finding is highly suggestive that the difference in the level of empowerment of the members of cooperatives to join the cooperative is statistically significant in all aspects of the emerged dimensions. The consistent rejection of the null hypotheses supports the use of cooperatives in empowering social, economic, informational and participatory activities among the associates. These findings provide robust empirical support for the conclusion that cooperative membership meaningfully improves members' quality of life and agency.

The findings of the study clearly confirm that there is a statistically significant difference between the degree of empowerment before and after joining the cooperative society to the cooperative member. Drawing on the related-samples Wilcoxon signed-rank test, all eight key dimensions of empowerment namely, collective bargaining power, economic condition improvement, sense of belonging and inclusion, access to education and healthcare, access to resources, decision-making abilities, being more informed and having a platform to voice concerns exhibited highly significant p-values (0.000), indicating consistent and substantial improvements post-membership. The hypothesis test summary further solidifies this conclusion by rejecting the null hypothesis in all cases, establishing that the observed differences are not due to chance. Complementary to the statistical outputs, the descriptive statistics and graphical representations highlight a marked upward trend in members' perceived empowerment across all variables, with positive differences recorded almost universally. Particularly, aspects such as access to information, collective decision-making and avenues for expression saw strong gains, pointing toward the cooperative's role in not only economic upliftment but also in fostering democratic participation and social inclusion. The above findings serve to highlight the crucial role played by cooperative societies as grassroots organisations empowering people in terms of their economic, social and psychological status and hence legitimising their further propagation as a tool of inclusive development.

5.8 Conclusion

An attempt to identify the level of social capital among cooperatives in Kerala reveals that, there is a high level of social capital among members of cooperatives in Kerala. Interestingly, the factors like trust, social networks, communication and information sharing, norms and values and leadership and governance have a key role in the formation of social capital. It is also found that the social capital formed among the members also helps in member empowerment and member satisfaction. Further, it is evident from the results that the member empowerment plays a partial mediation role between social capital and member satisfaction.

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Chapter VI
Findings, Suggestions and Scope for Future Research

6.1	*Introduction*
6.2	*Specific Findings of the Study*
6.2.1	*The Level of Social Capital Formation among Cooperatives in Kerala (Objective 1)*
6.2.2	*The Role of Key Influencing Factors in the Formation of Social Capital among Cooperative Members (Objective 2)*
6.2.3	*The Role of Social Capital in Empowering and Satisfying Cooperative Members and the Mediating Effect of Member Empowerment between Social Capital and Member Satisfaction (Objective 3)*
6.2.4	*The Change in Empowerment Attained by Cooperative Members After Becoming a Member in Cooperative Society (Objective 4)*
6.3	*General Findings of the Study*
6.4	*Suggestions of the Study*
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6.6	*Conclusion*

Chapter VI

Findings, Suggestions and Scope for Future Research

6.1 Introduction

This chapter presents the main findings with feasible suggestions based on the research undertaken among members of primary cooperatives in Kerala. This study set out to discuss how social capital was formed in the cooperative institutions and how this social capital affects the empowerment and satisfaction of the members. Considering the central role of cooperative societies in socio-economic development, particularly in Kerala, this study aims to explore the causative factors that support the concept of social capital, such as trust, participation, value systems and leadership and their influence on the overall strength and effectiveness of cooperative societies.

In line with the study objectives, this chapter begins by summarising the main empirical results obtained from the data analysis. The findings highlight the extent of social capital available among the members, the shaping factors leading to its development and the transformational nature of social capital for the empowerment of the members. Moreover, the study questions how much 'empowerment' can serve as an intermediary influence between social capital and member satisfaction, which will lead to competent novel findings in cooperative relations. The research also provides the perception of the alteration in empowerment after joining cooperatives, which portrays the transformational capability of cooperatives.

6.2 Specific Findings of the Study

This section discusses the specific findings of this study. These findings were derived from the results of the analysis which were conducted to attain the objectives of the study. The details are as follows.

6.2.1 The Level of Social Capital Formation among Cooperatives in Kerala (Objective 1)

- Younger members reported the highest overall trust levels across all four trust indicators (TRT 1 to TRT 4), with the highest mean score of 4.714 for TRT 1 (i.e. comfort in discussing personal sensitive topics with other members) compared to all other age groups. Simultaneously, the 30-40 year age group reported the lowest

mean score for TRT 1 (3.764), indicating relatively lower comfort in personal discussions within the society. This implies that younger colleagues are usually more secure and open to each other in terms of communication and displaying increased interpersonal trust.

- The Kruskal-Wallis test results show that there are statistically significant differences across age groups in terms of comfort in discussing personal sensitive topics (TRT 1) and trust in leaders and management (TRT 2), as indicated by p-values of 0.000. However, no significant differences were found across age groups for the level of commitment (TRT 3) and reliability in fulfilling cooperative responsibilities (TRT 4), with p-values of 0.050 and 0.164, respectively. This implies that age affects the perception of interpersonal and leadership trust but not commitment or reliability in cooperation.
- A gender-wise analysis of trust among cooperatives reveals that male respondents reported higher levels of trust across all four trust indicators (TRT 1 to TRT 4) compared to female respondents. The mean score for TRT 1 (comfort in discussing personal sensitive topics) was 4.272 among males and 3.830 among females. The same pattern can be observed in the rest of the indicators, that is, the presence of a stronger feeling of trust and reliability in society, which applies to male members of society compared to their female counterparts.
- In addition, according to the findings of the Mann-Whitney U Test, there are also statistically significant differences between men and women in all four indicators of trust. Specifically, gender had a significant impact on comfort in discussing personal sensitive topics (TRT 1), trust in leaders and management (TRT 2), level of commitment (TRT 3) and reliability in fulfilling cooperative responsibilities (TRT 4), with all p-values less than 0.01. This implies that there is a significant difference in the manner in which men and women perceive trust among members of society.
- Respondents with postgraduate qualifications reported the highest levels of trust across almost all indicators, with the highest mean score of 4.448 for TRT 1 (i.e. comfort in discussing personal sensitive topics). The level of education protects from cheating and frauds. This implies that there is a definite positive relationship between existing educational attainment and the perception of trust in society.

- The study also states that there are statistically significant differences in the various levels of educational qualifications regarding all four indicators related to trust. This includes comfort in discussing personal sensitive topics (TRT 1), trust in leaders and management (TRT 2), level of commitment (TRT 3) and reliability in fulfilling cooperative responsibilities (TRT 4), with all p-values being 0.000. This implies that educational background is an important factor that determines the perceptions of trust in cooperative societies.
- The research shows that, respondents earning between Rs. 10,000 to Rs. 20,000 per month reported the highest level of commitment to the goals and values of the society (TRT 3), with a mean score of 4.286, despite having a relatively lower mean for TRT 1 (3.813). Meanwhile, those in the Rs. 30,000 to Rs. 40,000 income bracket reported the highest trust in discussing sensitive personal topics (TRT 1) at 4.174. This implies that various groups of individuals have diverse incomes that are likely to give them different priorities regarding trust in society.
- The outcome identified in the test shows that there are no statistically significant variations in the four indicators of trust between the different monthly income levels. Specifically, comfort in discussing personal sensitive topics (TRT 1), trust in leaders and management (TRT 2), level of commitment (TRT 3) and reliability in fulfilling cooperative responsibilities (TRT 4) all had p-values greater than 0.05. This implies that there is a lack of a significant effect of monthly income on trust perceptions in the given society.
- Respondents aged 20 to 30 years reported the highest mean score for frequent interaction between members (SNT 1) at 4.279, suggesting that this age group most actively engages in regular communication within the society. Meanwhile, those under 20 years showed the highest mean for personal relationships with fellow members (SNT 2) at 4.143 and for the formation of social networks (SNT 3) at 4.190. Participation in informal and formal gatherings (SNT 4) was relatively consistent across all age groups, with the 30-40 and above 50 age groups showing slightly higher mean values. This implies that certain unique roles are played by diverse age groups in the creation of social networks in society.
- The KW test results reveal that there are statistically significant differences across age groups in terms of frequent interaction between members (SNT 1) and

personal relationships (SNT 2), with p-values of 0.008 and 0.043, respectively. However, no significant differences were found for social networks formed among members (SNT 3) and participation in informal and formal gatherings (SNT 4), as indicated by higher p-values of 0.684 and 0.089, respectively. This implies that age plays a role in determining the frequency of occurrence of an interaction and personal relations, but it has no significant difference in the formation of wider networks and group activities.

- As can be seen in the analysis, the mean scores are higher among the male respondents than the female respondents in all four indicators of social network. Notably, males had a mean score of 4.356 for participation in informal and formal gatherings (SNT 4), compared with 3.793 for females, indicating a greater level of social engagement. Similarly, men scored higher in frequent interaction (SNT 1), personal relationships (SNT 2) and network formation (SNT 3). This implies that male members are more social and interactive with society than female members.
- The results of the hypothesis test indicate that gender has a statistically significant influence on personal relationships with fellow members (SNT 2), social network formation (SNT 3) and participation in informal and formal gatherings (SNT 4), as reflected by p-values below 0.05. However, no significant difference was found in frequent interactions between members (SNT 1), with a p-value of 0.103. This implies that the rate of interaction between men and women may be equal; however, the intensity of the relationship, network development and involvement in gatherings may vary according to gender.
- Respondents with postgraduate qualifications reported the highest mean score for participation in informal and formal gatherings (SNT 4) at 4.508, indicating strong social involvement. Similarly, those with undergraduate and postgraduate qualifications had consistently high scores across all social network indicators (SNT 1 to SNT 4) above 4.3. In contrast, the scores of respondents whose education only went up to matriculation were the lowest in all the indicators, with means of approximately 3.3. This implies a definite positive correlation between a higher level of education and better social networking in the community.

- The statistical test results revealed significant differences across all educational qualification groups for each of the four social network indicators: frequent interaction (SNT 1), personal relationships (SNT 2), social network formation (SNT 3) and participation in informal and formal gatherings (SNT 4), with all p-values at 0.000. This means that education clearly has a pertinent impact on how people interact socially in cooperative societies, as it implies that the highly educated are more prone to social interactions and network ratifications.
- Income-wise analysis of respondents reveals that the less than Rs. 10,000 income category reported the highest mean score for the formation of social networks (SNT 3) at 4.288, indicating strong social ties within this income group. Meanwhile, those earning Rs. 10,000-20,000 had the highest mean for participation in informal and formal gatherings (SNT 4) at 4.321. Respondents in the highest income group (above Rs. 40,000) showed relatively high but more balanced scores across all the indicators. These results indicate that the lower and middle-income groups might be more willing to create and support social networks through the community.
- The results also indicate that there are no statistically significant differences in any of the four social network indicators, that is, frequent interaction (SNT 1), personal relationships (SNT 2), social network formation (SNT 3) and participation in informal and formal gatherings (SNT 4) across different monthly income groups, as all p-values are greater than 0.05. This implies that monthly salaries are not a significant determinant of social networking behaviour in the community.
- Respondents below 20 years of age reported the highest mean score for belief in shared norms and values (NAV 2) at 4.595, indicating a strong sense of collective agreement among the youngest group. This group also showed the highest overall mean for NAV 1 (4.238), which relates to agreement with the societal norms. In contrast, respondents aged 40–50 years had the lowest mean score for NAV 3 (3.761), reflecting comparatively lower alignment of behavioural expectations. When analysing the data as a whole, it may be said that younger people are more likely to demonstrate compliance with the norms and values of the community compared to older groups.

- The K-W h test results revealed statistically significant differences across age groups in terms of adherence to ethical guidelines and the code of conduct (NAV 2) and willingness to help each other (NAV 3), with p-values of 0.000 and 0.002, respectively. This implies that age is an important factor in these aspects of shared norms and values. However, no significant differences were found across age groups for the following recognised cooperative principles over time (NAV 1) and mutual respect and consideration (NAV 4), as indicated by p-values of 0.077 and 0.146. This indicates that the two aspects are viewed in the same way, regardless of age.
- The mean value of all (male) was higher than that of female respondents on four indicators dealing with norms and values. As can be seen, the difference is most pronounced in NAV 1, where there is adherence to the norms of society, where males averaged 4.311 and females 3.767. Similarly, men had higher scores for belief in shared norms and values (NAV 2), behavioural expectations (NAV 3) and moral obligations (NAV 4). This implies that male members are more likely to feel a greater alignment and identification with community norms and values than females.
- The outcome of the norms and values indicators of the Mann-Whitney U type tests shows that gender has a significant impact on all four indicators. Significant differences were found in the following cooperative principles (NAV 1), adherence to ethical guidelines and code of conduct (NAV 2), willingness to help others (NAV 3) and mutual respect and consideration (NAV 4), with all p-values below 0.01. This implies that perceptions and practices, which involve common norms and values among respondents, differ meaningfully between men and women.
- Members with postgraduate qualifications reported the highest mean score for moral obligations (NAV 4) at 4.464, indicating a strong sense of ethical responsibility among the most educated group. Simultaneously, the postgraduate and undergraduate respondents scored high averages across the board on the four indicators of the norms and values survey, with the averages being more than 4.3. On the other hand, those educated through matriculation scored the least, with a mean of approximately 3.38, indicating a lower distribution adhering to

community conventions and requirements. These findings also show that there is a positive correlation between higher educational levels and enhanced conformity to collective norms and values.

- The K-W test results show that educational qualification statistically influences all four dimensions of norms and values. Specifically, there were significant differences across education levels in the distribution of responses related to the following cooperative principles (NAV 1), adhering to ethical guidelines and code of conduct (NAV 2), willingness to help each other (NAV 3) and mutual respect and considerations (NAV 4), with all p-values at 0.000. This suggests that individuals' alignment with cooperative norms and ethical behaviour is strongly influenced by their level of education.
- The income group of Rs. 10,000 to Rs. 20,000 reported the highest mean score for moral obligations (NAV 4) at 4.321, suggesting a strong sense of ethical responsibility within this group. At the same time, those earning less than Rs. 10,000 had the highest mean for behavioural expectations (NAV 3) at 4.207, indicating strong alignment with expected behaviours despite a lower income. In all indicators, the measure is about the same and it does not clearly show any tendency to either greater or lesser measures as income increases. That is, monthly income lacks a consistent effect on the ideas of norms and values as perceived by individuals, although certain differences are evident based on given indicators.
- The statistical test results also show a significant difference in perceptions of following recognised cooperative principles over time (NAV 1) across different monthly income groups, with a p-value of 0.004. This implies that the level of income determines the degree to which people identify with the long-run commitment to adherence to the ideals of cooperation. However, no significant differences were found for ethical guidelines and code of conduct (NAV 2), willingness to help each other (NAV 3), or mutual respect and consideration (NAV 4), indicating that these values are generally consistent regardless of income.
- The analysis revealed that youngsters reported the highest mean scores for CIS 1 (4.262), CIS 2 (4.357) and CIS 4 (4.262), suggesting that they were most satisfied with these aspects of the communication and information system. However, the highest mean score for CIS 3 (4.148) was reported by the 20–30 years age group.

Quite high and consistent levels of satisfaction with all CIS indicators were demonstrated by respondents in the age group of 40 50 years and 30 to 40 years. In contrast, those over 50 years had a lower mean score for CIS 3 (3.738), indicating comparatively less satisfaction. Overall, the evidence indicates that younger members are more likely to have a positive perception of communication and information systems than older members.

- Age also has a profound effect on the perceptions of communication and sharing information in several ways which require some understanding through testing hypotheses. There were significant differences across age groups in terms of access to relevant information (CIS 2), sharing of information and knowledge (CIS 3) and the relevance of the information shared (CIS 4), as indicated by p-values less than 0.05. However, there was no significant difference among the age groups regarding the frequency of informal and formal communication (CIS 1), as the p-value was greater than 0.05. This implies that although the older and younger communication rates are equal, the older and younger groups express differences in their views on the quality of information transparency and information exchange.
- The findings show that male respondents consistently reported higher mean scores across all four Communication and Information System (CIS) indicators compared to female respondents. This variation is the most notable in CIS 1 and CIS 2, where males reported a mean result of 4.224 and 4.240 respectively, as opposed to females reporting an average of 3.833 and 3.881 respectively. This indicates that men favour communication and information equipment more than women in the context of cooperation.
- It is also essential that gender plays a leading role in defining most communication and information exchanges in the group, as revealed in the analysis. Specifically, significant differences were observed between males and females in the frequency of informal and formal communication (CIS 1), access to relevant information (CIS 2) and the extent to which information and knowledge were freely shared (CIS 3), as all three variables had p-values less than 0.05. However, there was no significant difference between the sexes in their perception of the relevance and importance of the information shared (CIS 4), as the p-value exceeded 0.05. This

implies that although gender influences the way the communication process works with regard to the level of openness and the availability of information, respondents (both male and female) view the utility of the information that they share in the same way.

- This study establishes a definite positive correlation between communication and information sharing and education level. Respondents with undergraduate and postgraduate qualifications reported the highest mean scores across all four CIS indicators, with undergraduates showing the highest overall satisfaction (e.g., CIS 1 a mean of 4.404). Conversely, the mean scores of education up to matriculation were reportedly lower than all indicators, implying a low level of satisfaction. This implies that an increase in the education level indicates a better view of communication and information systems when working in cooperatives.
- Significance analysis of the inferential revealed a significant difference between the four dimensions of communication and sharing of information according to educational qualifications. Specifically, the levels of frequent informal and formal communication (CIS 1), ease of access to relevant information (CIS 2), openness in sharing information and knowledge (CIS 3) and access to relevant and crucial information (CIS 4) vary significantly among individuals with different educational backgrounds. This implies that the level of education is important in determining the manner in which the members interact in terms of communication and information access and sharing in the town.
- The research found that the satisfaction of communication and information systems does not have a strictly linear correlation with monthly income. Respondents who fell in the Rs. 10,000 to20,000, Rs. 30,000 to Rs. 40,000 income categories reported high mean scores in most of the CIS indicators, especially in CIS 1 and CIS 4. Interestingly, those earning above Rs. 40,000 had lower mean scores for CIS 1 (3.835) compared to lower income groups, although their scores for CIS 3 and CIS 4 remained relatively high. This implies that moderate income earners are likely to feel more positive about the systems of communication and the information than the lowest and highest income earners.
- The findings show that it is not possible to note any marked disparity in the allocation of all four variables of communication and information sharing in

different monthly wealth strata. This indicates that an equal investment in informal and formal communication, access to comparable information, freedom in disseminating knowledge and availability of critical information in the community or organisation has been seen by the members, irrespective of the level of income.

- Younger respondents reported the highest mean scores across most leadership and governance indicators, particularly for timely decision making and execution (LNG 4) at 4.643 and transparent and responsible leadership (LNG 3) at 4.381. In contrast, those in the 20–30 age group showed a notably lower mean of 3.590 for transparent leadership (LNG 3), the lowest among all age groups. This indicates that the manner and ways of leadership and governance are perceived better by younger members, whereas the circle of perceptions is more diverse in older population groups.
- The analysis using the Independent-Samples Kruskal-Wallis Test shows that age does not significantly influence perceptions of the opportunity to participate in decision-making and governance (LNG 1) or transparency in the decision-making process (LNG 2), as the p-values for both are above the typical 0.05 threshold. However, significant differences were found in the distribution of responses across age groups for representation and opportunities for marginalised members in governance structures (LNG 3) and leadership development programmes (LNG 4), indicating that perceptions of these aspects vary notably by age.
- Evidence indicates that male respondents, compared to female respondents, provided greater mean scores for all four indicators of leadership and governance. Specifically, males rated transparent and responsible leadership (LNG 3) highest at 4.322, while females gave the lowest mean rating for the same indicator, at 3.814. This trend indicates that men tend to view leadership and governance practices in the organisation more positively than women.
- The outcome of the Independent-Samples Mann-Whitney U Test shows that gender is one of the most influential factors that define the perception levels in all four aspects of governance. There are statistically significant differences between the genders in how they perceive the opportunity to participate in decision-making and governance (LNG 1), transparency in the decision-making process (LNG 2), representation and opportunities for marginalised members in governance

structures (LNG 3) and leadership development programmes (LNG 4). These results indicate that the experiences and views regarding governance differ significantly between male and female respondents.

- Those with better education levels had more positive attitudes towards leadership and governance. Those with postgraduate qualifications gave the highest mean scores across all indicators, especially for transparent and responsible leadership (LNG 3) at 4.475. In contrast, individuals with education up to matriculation had the lowest ratings, with a mean of 3.333 for commitment to cooperative values (LNG 1). This trend dictates that a higher educational level would mean a higher perception of the positive practice of leadership and governance within the organisation.
- The Independent-Samples KW test indicates that educational qualification has a huge impact on perceptions of all four aspects of governance-related parameters. There are statistically significant differences in how individuals with different levels of education perceive the opportunity to participate in decision-making and governance (LNG 1), transparency in the decision-making process (LNG 2), representation and opportunities for marginalised members in governance structures (LNG 3) and leadership development programmes (LNG 4). This indicates that educational background plays a key role in shaping individuals' views on governance participation and inclusivity.
- Members with a monthly income of less than 10,000 reported the highest mean score for commitment to cooperative values (LNG 1) at 4.225 and for timely decision-making and execution (LNG 4) at 4.207, respectively. Conversely, individuals with a median salary range of 10,000-20,000 obtained the lowest mean LNG 4, that is, 3.821. The highest perception of transparency and responsible leadership (LNG 3) was noted among those earning 20,000–30,000, with a mean score of 4.171. Overall, the perceptions of leadership and governance do not obey a rigid income gradient, but some lower- and middle-income groups mentioned a more positive experience of certain aspects of leadership.
- The results of the Kruskal-Wallis Test do not show a significant impact of monthly income on the impressions of any of the four issues related to the area of governance. Specifically, there were no statistically significant differences in how

individuals from different income groups viewed the opportunity to participate in decision-making and governance (LNG 1), transparency in the decision-making process (LNG 2), representation and opportunities for marginalised members in governance structures (LNG 3), or leadership development programmes (LNG 4). This implies that income level makes no significant difference in forming attitudes towards participation in governance and other related opportunities.

6.2.2 The role of Key Influencing Factors in the Formation of Social Capital among Cooperative Members (Objective 2)

- This study offers strong evidence that trust plays a major role in enhancing social capital in cooperative institutions in Kerala. The statistical findings show that there is a positive and significant correlation between the two variables. Specifically, the path coefficient of 0.294 suggests that with every unit increase in the level of trust (TRT) among members, the level of social capital (SCL) increases by 0.294. The critical ratio (C.R.) of 1.757 and a p-value less than 0.05 further confirm the statistical significance of this relationship.
- These results underline the centrality of interpersonal and institutional trust as factors that stimulate cooperative values. Thus, trust development and facilitation is likely to be identified as a long-term leadership strategy affecting the success and sustainable composure of the organisation through its social capital, which constructs the coherence and record of the organisation.
- The study establishes that Norms and Values (NAV) play a significant and powerful role in the development of Social Capital (SCL) among cooperative sector members in Kerala. The analysis indicates a positive relationship (0.847) which is strong and the standardised estimate is 0.847 with a 0.847 standardised rise in social capital as increases in shared norms and values increase by 1 unit. The result is supported by a critical ratio (C.R.) of 2.767 and a p-value of less than 0.05, confirming that the relationship is statistically significant. This implies that cooperative members are progressively being oriented towards collective values.
- These results identify value-based culture as having underlying significance in cooperative institutions. The high magnitude of the coefficient (0.847) suggests

that norms and values are among the most influential factors contributing to social capital formation in cooperatives.

- The analysis confirms that Social Networks (SNT) have a highly significant and positive impact on the development of Social Capital (SCL) among cooperative members in Kerala. The standardised estimate of 1.093 means that every single unit value increase (similar to the strength or extent of the social networks), the level of social capital increases by approximately 1.093 units. This is a substantial effect, further validated by a critical ratio (C.R.) of 3.506 and a p-value less than 0.05, confirming statistical significance at a high level of confidence.
- The findings also clarify the most significant aspects of social networking, such as official and hidden relationships, communication connections, group interaction and interpersonal relationships, in the generation and maintenance of social capital in cooperative societies. The magnitude of the relationship (1.093) suggests that among all the measured variables, social networks are an influential driver of social capital in the studied cooperatives. Thus, one can conclude that social networking opportunities among members should not only be considered useful but also necessary to sustain the development of social capital in cooperatives.
- The results demonstrate that Communication and Information Sharing (CIS) significantly and positively influence the development of Social Capital (SCL) among cooperative institutions in Kerala. This revealed that a path coefficient of 0.415 implies that an increase of one unit in the grade of communication and information sharing among members has an increment in social capital of 0.415 units. This relationship is statistically significant, as confirmed by the critical ratio (C.R.) of 2.188 and a p-value less than 0.05, indicating that effective communication processes are instrumental in strengthening social capital within cooperative settings.
- As seen in the findings, transparency, timely and participatory communication and information sharing in cooperatives increase trust-based cooperation and mutual understanding among cooperative members. Although the effect size (0.415) is moderate compared to other factors such as norms and values, it is nonetheless critical. Hence, cooperative leadership must invest in communication structures

and processes, including member newsletters, frequent meetings, online sites, suggestion peddles and interactive discussion forums on decision-making.

- The study's findings reveal a significant and positive impact of Leadership and Governance (LNG) on the development of Social Capital (SCL) within cooperative institutions in Kerala. The regression analysis results show that the estimate was 0.320, because when effective leadership and governance is increased by one unit, the level of social capital stands at 0.320 among cooperative members. This relationship is strongly supported by a critical ratio (C.R.) of 8.207, one of the highest observed in the study and a p-value of less than 0.05, confirming a high level of statistical significance.
- This finding reinforces the fact that leadership quality and good governance practices are critical for fostering social capital. The effect size of 0.320 can be determined as moderate; however, the large value of the critical ratio indicates that the effect of leadership and governance on social capital is uniform and steady throughout the selected cooperative units in the study. This brings into focus the necessity of capacity building of the cooperative leaders and institutionalising governance standards that embrace accountability and participation of members.

6.2.3 The Role of Social Capital in Empowering and Satisfying Cooperative Members and the Mediating Role of Member Empowerment between Social Capital and Member Satisfaction (Objective 3)

- The SEM provides a clear indication that social capital plays a very influential positive role in empowering members. With a strong coefficient of 0.814 and a highly significant p-value ($p < 0.001$), the results confirm that as social capital increases through greater trust, stronger community engagement and tighter social networks, members are more likely to feel empowered. This finding underscores the importance of fostering social capital to enhance individuals' confidence, autonomy and active participation in governance or organizational decision-making.
- The results demonstrate that social capital has a definite positive impact on the level of satisfaction of its members. In a nutshell, a combination of a higher level of trust, improved communication and a sense of closeness in a group or

community will result in people who are more contented. This finding implies that it is potentially possible to increase the quality of individual relationships and support networks and thus produce better member satisfaction, which means that social capital plays a major role in producing a good and rewarding group experience.

- The analysis shows that member empowerment positively and significantly influences member satisfaction. In other words, individuals who believe that they play a part in the decision-making process, determine the results and have a sense of control in their community or organisation, are more prone to believe they had a good experience. The relationship is moderate, but not weak, which makes it noteworthy. This implies that even a modest increment in empowerment, such as inclusion in discussions, responsibilities, or the trust to give something, is likely to bring about discernible changes in how satisfied and valued members feel. The results revealed the best practice of enhancing empowerment as a means of increasing the overall satisfaction of members.
- These results suggest that there exists a sizeable intermediary role that has been noticed between the correlations of social capital and member satisfaction in terms of member empowerment. In other words, some of the influence that social capital exerts on the level of member satisfaction occurs indirectly through empowerment. This indirect effect is also significant in the sense that the p-value is 0.011, indicating that the indirect effect is significant given the increase in social capital as a result of trust, connectedness and participation and that it improves the empowerment of members, which consequently results in increased satisfaction levels. Meanwhile, the direct impact of social capital on satisfaction is high and significant, indicating that social capital has both direct and indirect impacts on satisfaction. Overall, these results point toward the conclusion that although social capital by itself would seem to bring about member satisfaction, its effect can be increased by the fact that it also brings about a stronger sense of empowerment to the involved members.

6.2.4 The Change in Empowerment Attained by Cooperative Members After becoming a Member in a Cooperative Society (Objective 4)

- The descriptive statistics on the extent of member empowerment before and after being a member of a cooperative unit clearly elucidate that the members have achieved social, economic, political and legal empowerment. It also boosted their decision-making capabilities, availability of technology and access to both education and health care. Moreover, it is plausible that members are better informed due to the formal and informal networking between members, according to the results.
- Wilcoxon Signed Rank Test outcomes indicate strong positive development in all aspects of member empowerment that were measured upon individuals joining the cooperative society. In all eight indicators, including collective bargaining power, economic conditions, sense of belonging, access to education and healthcare, resource access, decision-making abilities, being better informed and having a platform that can raise concerns, members showed statistically significant ratings in the cooperative society after joining as a member. All the p-values obtained in the comparisons were 0.000, indicating that the differences were significant. This implies that membership in the cooperative society was both relevant and beneficial in shaping the lives of the members, especially through the aspect of empowering them socially and economically. The individuals were also more competent, knowledgeable, involved and nurtured when they joined cooperatives.

6.3 General Findings of the Study

The study found from the specific findings that trust, shared norms and values, social networks, communication and leadership play significant roles in building social capital among cooperative members, with social networks and shared values emerging as the most influential factors. This section will generalise the specific findings.

- Men were found to be more interactive and engaged in all social measures than women respondents. Respondents with low incomes were also observed to be more involved in events and networking.
- Younger members have the highest interpersonal trust with them, feeling more secure and open in their ways of operation. The indicators of trust are continuously higher among male members than among female members, thus indicating the differences in the level of male and female perceived reliability in the community.

- Members belonging to the 20–30 age group were more critical, especially regarding transparent leadership. Male members always perceive leadership and practice in governance to be more favourable to them than female members. There is a significant correlation between educational levels and more positive opinions; postgraduates express the highest level of trust towards the leadership and those who obtained only matriculation level of education expressed the least.
- The study indicates that trust is critical for enhancing social capital in cooperative institutions. Empirical evidence reveals a positive significant correlation between trust and social capital, which renders an indicator where trust among the members involved, the level of social cohesion and connectedness within the cooperative increases. The interpersonal and institutional trust shall be developed as a strategic priority because, once established, it will also encourage the unity of the cooperative, its efficiency and long-term sustainability.
- The research uncovers that common norms and values are one of the most important factors in promoting social capital in cooperative institutions. The results indicate a statistically significant and strong correlation between these cultural elements and social capital which makes an organizational culture of values critical. As members of a cooperative adhere to the same values and code of ethics, it significantly adds to the factors of trust, unity and unity. This observation indicates that the strength and sustainability of cooperative networks depend on the development of a culture based on common values.
- In this study, it is evident that social networks are the key and highly sensitive term when it comes to promoting social capital in cooperative institutions. An effective positive significant correlation value reveals that the higher the member is connected and involved in using formal and informal networks, the higher the level of social capital. This emphasises the need to develop interpersonal communication relationships and work with members. Improving social networks is thus something that needs to work better with regards to improving trust, cooperation and group building within cooperatives and is a major component of sustaining and building social capital.
- The research proves that good leadership and governance are significant factors in the growth of social capital in cooperative institutions. The members indicate

that open, accountable and engaging leadership practices have a positive effect on trust, collaboration and mass participation among them and concur on the actions and behaviour of leadership and governance as a reliable and fundamental source of social capital. This proves the significance of enhancing leadership potential and governance structures within the cooperation to facilitate the long-term unification and prosperity of cooperatives.

- The members of the cooperative societies assert that communication and sharing of information are of utmost essence in shaping the social capital of the cooperative institutions. Free, early and open communication motivates people to develop mutual trust, collaboration and awareness of each other. To this end, it is fundamental to invest in powerful communication and participatory practices to create and maintain social capital within cooperatives.

6.4 Suggestions of the Study

- Trust and common values are high among younger cooperative members. Therefore, cooperatives in Kerala should establish leadership programs and units targeting the youth to provide them with a platform to be productive. With such wings, youth can be involved in executing a things such as an awareness campaign and social media engagement. This will also assist them in developing leadership skills as they contribute to the goals of the community. Having young members coupled with more experienced mentors could also help create a situation in which they learn from one another and inculcate the values of cooperation between generations.
- Reducing the trust gap between male and female cooperative members in Kerala can be achieved by incorporating inclusive, gender-sensitive cooperative practices that encourage women's inclusion and boost their confidence. By establishing secure avenues, such as women-only focus groups, female members can raise concerns and develop peer support. Women can learn the skills and knowledge of engaging in governance and decision-making processes through workshops to promote their leadership and confidence building. With regard to practical obstacles, cooperatives are expected to provide individualised meeting times that suit female members. Together with the ongoing monitoring of women's

participation, these measures can help build trust, enhance visibility and create a more inclusive and equitable cooperative environment.

- Cooperatives should provide systematic training opportunities with a focus to access to diminish the trust and participation gap that exists among them due to their educational differences, particularly among members who are only matriculated. Due to the tendency of highly educated members to trust and display higher compatibility with co-operative values and increased engagement, efforts shall be directed towards empowering less-educated members. This can be achieved through free or low-cost workshops on cooperative principles, ethical practices, cooperative leadership and financial literacy, which will be presented in very straightforward formats and local languages. The programmes are also supposed to have avenues to be involved in decision-making and leadership, instilling confidence and more involvement. This broad-based participation, through the lens of education, contributes to the development of trust, knowledge mediation and a closer and fairer cooperative community.
- The format of interaction to facilitate a true process of interaction among various age groups in cooperatives must be considered based on the specific preferences and capabilities of diverse age groups. Junior members, particularly those under 20 years of age, would like to have informal, relationship-oriented interactions and the younger members are highly trusting and in line with their community. In contrast, elderly members over 40 prefer ordered meetings and official talks. These differences can be addressed by cooperatives providing a combination of formats, such as peer and digital events in which youth can participate and seminars or policy gatherings that are suitable for older members. Blending can also be achieved through the blending of informal and formal events to promote intergenerational dialogue and inclusion. Such a balanced style of acting contributes to the creation of mutual respect, enhancement of trust and improvement of social capital throughout the cooperative.
- Given the lack of trust in leadership found by women and members aged 20 to 30, this issue should be addressed with transparency and leadership development programs promoted actively by cooperatives, considering the lower levels noted by the members of the said target groups compared to the more optimistic

impressions received by members of the opposite gender and members of postgraduate education levels. Such initiatives may comprise an encapsulation of inclusive governance training that makes the governance process less emotional, breaking down the opportunities available to members in terms of rights and obligations and developing skills in ethical leadership and presentation skills.

- Particular enforcement shall be given to ensuring female representation on cooperative boards and committees through mentorship, confidence-building seminars and quotas, where necessary, to ensure that women not only form part of the process but also take part in decision-making processes. Cooperatives can minimise the distances of trust and improve gender composition in the governance structure, diversifying it and enhancing its organizational culture of accountability, through the establishment of clear and supporting female paths to leadership.
- It was determined that women using cooperatives tend to be less satisfied with all indicators of communication and information systems compared to their male counterparts, such as frequency of communication, accessibility of relevant information and being liberal in information sharing, among others. Therefore, cooperatives must improve communication access and equity for female members. To succeed in this respect, cooperatives can implement a multi-format approach to communication that is focused on both the specifications and preferences of women. This can incorporate the adoption of visual aids, narration and the use of basic infographics to cater to even the less literate members, as well as commencing communication using local languages to support cultural and linguistic attainability.
- As some women might not have much time to attend presentations due to childcare or other household-related matters, mobile-based updates, such as SMS alerts, WhatsApp messages, or voice notes, could be an option because one does not have to be physically present. In addition, local communication nodes, including women-run community liaison groups or neighbourhood bulletin points, can be established to allow peer-to-peer information sharing and enable frequent interaction. Having resolved these communication obstacles, cooperatives not

only enable women to become more actively empowered to engage but also create a more educated, integrated and representative membership.

- As seen in the study, even with minimal financial sources, lower- and middle-income members strive for high social cohesiveness, keen network formation and strong adherence to moral obligations in cooperatives. This shows good social capital that can be tactically utilised to enhance general interaction within the community. Informal leaders and other active members of these income levels must be identified and supported with transport subsidies or small honorariums by the cooperatives. Such resources could enable them to plan peer-engagement-related activities, community-oriented activities and collective decision-making procedures to represent their groups. Making them the new group of leaders would be more inclusive and, in addition, would ensure that grassroots are included in governance and planning by contributing their voice to it.
- The study clearly indicates that members with the highest education standards will always exhibit a greater orientation towards the ideas of cooperation, ethical performance and collective values, including supportive care and responsibility. To diffuse these values throughout the entire membership of the cooperative body, particularly the lower part of its educational scales, there is a need to incorporate core values in the orientation of new members as well as general education programs. This may be achieved through the organisation of frequent training focused on the concepts of cooperation, morality and responsibility that should be communicated in an easy way. These value-oriented practices not only contain the identity and mission of the cooperative but also create a common morale base that enhances social bonding, trust and commitment among members in the long run, irrespective of their backgrounds.
- To harmonise the different communication needs and levels of satisfaction among the different age groups in cooperatives, a multigenerational communication strategy is needed. The data show that younger members (particularly those under 20) express high satisfaction with communication and information systems, reflecting their comfort with digital tools and informal interactions. Conversely, older members, especially those over 50 years old, are less satisfied, especially with some topics, such as information precision and content relevancy, hence

more related to the traditional, more straightforward channels of communication. Instead of settling on one way of ensuring that every member feels informed and part of the cooperative, cooperatives are advised to take a combination which involves the use of mobile applications, WhatsApp groups and the Internet to communicate with the younger generation, whereas printed newsletters, updates on bulletin boards and visiting/calling the members can be used to communicate with the older generation. Such a dual system will guarantee that important updates about cooperation, learning materials and meeting notices can be reached by all people, without considering their age or digital literacy. With the right adjustments of communication tactics to the generational interests, the cooperatives will be able to increase the general trust, decrease the information gap and will be able to create a more coherent and responsive community of membership.

- To resolve the differences in the perception of governance and decision-making opportunities in cooperatives among the different groups, it is important to institutionalise an inclusive governance structure. The data highlight that males and members with higher educational qualifications, particularly postgraduates, report more positive perceptions of leadership and governance, while women, individuals with lower education levels and certain age groups (especially those aged 20 to 30) feel less represented and involved. Cooperatives must focus on divergent representation to make the environment more balanced by ensuring that leadership roles are also allocated to women, SC/ST, young and less educated members. Forming special equity or inclusion committees will help keep track of representation and address structural biases. Cooperatives should rotate leadership positions among qualified applicants with different backgrounds to have wider engagement and views.
- Cooperatives shall institute an annual review of governance with structured member feedback on transparency, participation and fairness in decision-making. Such activities will increase the level of trust.

6.5 Scope for Future Research

- Further studies should seek to understand the dynamics of trust and social norms and the relationships among cooperative members over the long term. These

studies would aid in monitoring how social capital is sustainable and its influence on member retention, governance participation and cooperative success over a long period, particularly when responding to challenges, whether internally or externally.

- Given the generational differences in communication preferences, it would be useful to investigate how digital platforms (such as mobile apps, WhatsApp groups, or cooperative management systems) enhance or limit participation across age groups. This may provide insight into devising more inclusive communication strategies that will fit both young and old members.
- Although the study indicates less developed trust and engagement levels among women, additional qualitative research can be used to identify how it can be achieved by changing cultural, social and operational elements. Understanding the experiences of women within cooperatives can help design gender-sensitive policies that address structural and perception-based barriers.
- The current results indicate the variances between religions in terms of trust and norms. In future studies, it will be possible to evaluate the implications of interfaith cooperation initiatives on cohesion, mutual respect and conflict resolution among cooperatives. This is especially true in the pluralistic society of Kerala, where cooperatives exist in a religiously diverse environment.
- As cooperatives in Kerala function in diverse sectors (such as credit, agriculture, housing and fisheries), future research could compare social capital dynamics across these types. Such a comparison might show how certain forms of cooperation are characterised by trust, participation and ethical behaviour and why.
- Bearing in mind that younger members demonstrate a great extent of trust and similarity of values, this can be further investigated in future studies in terms of how leadership programs and youth platforms affect their further involvement. It is also crucial to understand what encourages or discourages youth involvement in succession planning and the sustainability of cooperation.
- Although the present study highlights the social aspects, there is a possibility of establishing definite connections between trust and network density, as well as

their rates and cooperative financial or operational performance in the future. This would assist in justifying the investment in measures of building social capital.

- Future research would be able to evaluate the presence of desired educational interventions, which would yield changes in the perceived levels of transparency, inclusivity and responsiveness of leaders to the members when it comes to issues affecting the members, especially those with low levels of formal education.
- The response to crises, especially economic crises, policy changes and health crises, such as a pandemic, is another useful sphere of study for cooperatives with high social capital. A closer analysis of such scenarios can show whether and how trust, norms and networks affect resilience, adaptability and the rate of recovery.

6.6 Conclusion

The results confirmed that interpersonal and institutional trust, common norms and values, social networks, adequate communication and leadership were vital in enhancing social capital in cooperatives. These social networks and shared values proved to be the most successful, playing a crucial role in establishing cooperation, participation and group unity. These findings issue a vivid field of establishing measures and policies that will help the cooperatives in Kerala to become stronger and more sustainable in the long run.

Chapter VII
Recommendations, Policy Implications and Conclusion

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Chapter VII

Recommendations, Policy Implications and Conclusion

7.1 Introduction

The results of this study unravels that issues of trust, strong social networks, communication, shared values and inclusive leadership and governance are critical for the formation of social capital and an improved member empowerment, which significantly affects the level of member satisfaction. It is also noted that perceptions and participation were influenced by certain demographic variables such as age, gender, education and income level. Based on these revelations, these recommendations suggest ways of enhancing trust, establishing collaborative networks, judicious leadership and governance mechanisms and enabling environments that facilitate the active participation of members.

7.2 Recommendations of the Study

The recommendations proposed in this study are based on empirical findings and are designed to be operationalised at three levels: (i) cooperative-level governance reforms, (ii) interventions at the sector level, and (iii) state-level policy facilitation. While there are some recommendations of general application across the different forms of cooperatives, sectoral variations in organisation, composition of members, and functional goals make it imperative to implement these recommendations in a context of specific relevance. Accordingly, some selected recommendations were modified in accordance with the structural characteristics of special major cooperative sectors, such as Dairy Cooperatives, Credit and Thrift Societies, Consumer Cooperatives, and Educational Cooperatives, to make recommendations more feasible and specific.

The following recommendations would help and ensure a high level of empowerment, based on fair access to resources, transparent decision-making which will enhance member satisfaction and thereby the overall performance of cooperatives in Kerala. These recommendations and suggestions also provide valuable guidelines for further expansion of the cooperative sector in Kerala.

- Cooperatives are encouraged to prepare and carry out organised trust-building activities that directly target members aged 30-40 years, whose level of comfort in discussing personal issues is relatively low. Organising activities such as facilitated small group discussions, personal development workshops and frequent informal get-togethers should be arranged so that collaboration allows building relations.
- To deal with the observed higher levels of trust in male members, cooperatives should implement specific interventions to overcome the trust deficit among female members. These can be in the form of establishing leadership forums for women, peer guidance, and awareness programs facilitated by experienced women leaders. These initiatives will also work positively in increasing women's confidence and trust on other members and leadership which will make them more active.
- Since there is a direct link between higher educational levels and trust, cooperatives must have frequent educational programs to impart knowledge to less educated members. This can include simplified education modules on the principles of cooperation and interactive training and learning on communication and the building of trust.
- Programs like leadership meet-and-greet events, conflict resolution training, and feedback forums need to be equally offered to members irrespective of economic status, since there was no significant effect on trust depending on the level of income.
- Personal trust and the ability to adhere to common norms and values were higher among younger members. This is a strength that cooperatives ought to leverage by creating youth leadership development channels, mentoring programs that match the needs of youth and seasoned members.
- Male members are more active in formal and informal gatherings. Therefore, cooperatives need to implement practices to raise women participation. This may involve carrying out events at the time of convenience to women and resorting to the use of online meeting modes to ensure that women are

involved. They should also organise women focused pre-meet-ups to develop the level of confidence in small groups before a larger gathering.

- It is also recommended to observe days like, international women's day and mothers' day. The study also recommend to introduce women intra groups like 'Amma Sangam', 'Youth Brigade' etc. to improve the interactions between women.
- Education has been shown to improve the strength of the social network; hence, cooperatives must provide capacity-building programs that entail technical skills development along with cooperation values, communication training and conflict resolution skills. Highly educated members should be given opportunities to exchange knowledge and teach others.
- Lower income members also depicted high levels of local network formation that could be used to engage communities. They should be engaged in outreach, volunteer activities and member support systems in cooperatives to take advantage of their effective interpersonal networks for the benefit of the cooperative.
- Norms and values can be perceived differently across genders. Therefore, a harmonised system of values for every individual member of the group can be aided by scenario-based moral deliberations, refresher courses on the principles of cooperation and mixed group team building.
- The connection between higher education and increased observance of norms implies the usefulness of learning among peers. Cooperatives must develop forums of knowledge and experience sharing with the collaboration of highly educated members through workshops and activities on good governance as well as managing cooperatives.
- Income is not an important factor in adherence to norms and values. So, awareness of values should be encouraged among all people. Cooperatives can do this by publishing cooperative principles in common areas, pointing out mutual support acts and promoting efforts by members to invest in values.
- Higher level of education is associated with a better perception of communication and exchange of information; therefore, cooperatives shall

modify the mode of information delivery so that everyone has access to it. These can be in the form of infographics, video updates and summaries in local languages that are circulated across platforms.

- Concerns regarding gender variance and levels of satisfaction with communication should be addressed through the diversification of communication mechanisms. This should be in the form of discussion groups led by women, equal speaking time in meetings and anonymous feedback channels to enable all voices to be heard.
- Cooperatives should create generational mentorship programs that allow the sharing of knowledge between older and newer members. This shall assist in closing the generational gap, maintaining an institutional memory system and creating an element of mutual respect and trust among members across all ages.
- Participation should be promoted in equal measures through flexible meetings, such as hybrid or rotational location meetings in cooperatives. This will remove inclusivity barriers for members who have transportation challenges, family obligations or work commitments, thus enhancing inclusivity and attendance.
- Cooperatives should intensify feedback loops by adding a formal follow-up system to demonstrate how member recommendations are considered and acted upon. This openness will strengthen faith contentment in leadership and promote continuous participation in decision-making activities.
- Cooperatives ought to invest in regular observation and appraisal of the measurements of social capital, that is, trust, participation, and effectiveness in communication. The results of such evaluations should be communicated openly to members to inculcate a sense of belonging to the them.
- Efforts should be reinforced to create and foster interpersonal and institutional trust among cooperative members by incorporating open decision-making, harmonious dispute resolution procedures and trust-building exercises to nurture cooperative ideals and the credibility of management.

- Encourage and support the value-driven culture within cooperatives through evolving codes of conduct, ethical guidelines and sharing common mission statements which portray the overall norms and value-based principles of the members and ensure that these aspects are not only discussed but also integrated into all operational and governance processes.
- Opportunities should be enlarged and enabled where members can build and maintain powerful social networks by planning community activities, inter-cooperative sharing, and collaborative projects to help members foster relationships, develop a sense of belonging towards organisation and be more supportive of each other.
- Invest in communication and information dissemination systems by ensuring they are accessible to members, through hosting regular member meetings, handing out and posting printed and electronic newsletters, and organising online discussion forums and feedback generation programs so that the members are always informed, motivated and in a position to make valuable contributions to cooperative activities.
- Cooperatives should focus on creating and maintaining trust-based relationships by maintaining transparency in the decision-making process and open communication channels. Valuing and knowing that members can contribute to governance without any fear enhances a sense of belonging as members of the organisation serve their role in governance.
- Training and capacity-building programs should be made routine to prepare members with leadership, decision-making and problem-solving skills. Such endeavours will not only increase the empowerment of individuals but also decision-making and consistency in organisations.
- Collaborative leadership must develop or establish formal channels through which the members of the organisation can be involved in policymaking, planning and budgetary allocations. Having their voices determine major organisational results will make the members feel like they own organisations and will be satisfied.

- Social networks should be enhanced with structured community engagement activities (including peer-support groups, collaborative projects, member-led committees and small groups within peer-support groups). Such activities will also improve the direct and indirect social capital utility on member satisfaction by strengthening empowerment and interpersonal trust.
- Incorporate institutionalised empowerment activities in cooperatives, emphasising improving economic security, the power to make choices, access to key services and collective bargaining of members. This will ensure that post-membership benefits must be maintained and increased over time.
- Institutionalise systems of continuous monitoring and support that will observe the changes in the level of member empowerment and other targeted intervention services, such as training, provision of resources and networking opportunities to fill gaps and promote equal growth in the social and economic aspects of empowerment.
- There will be a decline in trust within cooperative units due to overbearing political interventions and elite dominance interfering with the internal workings of cooperative units. Policymakers should solve this issue prudently, as it will maintain the long-term sustainability of cooperatives.
- Digitalisation and the implementation of information communication technologies (ICT) in cooperatives are essential requirements. The same is largely needed by management and members. The Government would offer financial aid to assist cooperatives in this aspect. As a prerequisite for digitalisation, proper training should be made available to the members to use digital media.
- The cooperatives shall celebrate international cooperative day and national cooperative week. Individual cooperatives can also introduce the concept of 'Home Day' for members and celebrate the same with various competitions. The national and religious festivals like Onam, Christmas and Deepawali and Ramadan can also be celebrated. These celebrations will ensure the member participation and helps in improving member interactions.

- This study also recommend cooperatives to set up library and recreation room for its members and organize cultural events for members.

7.3 Sector Specific Strategic Recommendations

While the above recommendations provide a general reform-oriented framework, the process of their operationalisation may differ in the various cooperative sectors, depending on their structural characteristics, the complexity of their governance, and membership composition. Accordingly, the following sector-sensitive adaptations are proposed:

7.3.1 Dairy Cooperatives

Given their high rural embeddedness and frequent interaction, trust-building and generational mentorship programs can be incorporated into milk collection centres, procurement meetings, and seasonal review meetings.

7.3.2 Credit Societies/Thrift Societies/Primary Agricultural Credit Cooperatives

Given their role as financial intermediaries, some bottom-up panchayats need transparency mechanisms, including access to the digital ledger, participatory budgeting forums, grievance redressal cells, and structured financial literacy workshops, to enhance institutional trust and reduce elite dominance.

7.3.3 Educational and Training Cooperatives

These institutions can institutionalise leadership development modules, forums of peer learning, and social capital assessments within governance structures to ensure long-term participatory engagement.

7.3.4 Consumer Cooperatives

Communication digitisation, real-time feedback mechanisms, and member engagement analytics can be added to retail management systems to enhance transparency and satisfaction monitoring.

7.3.5 Women Welfare Cooperatives

Gender-focused empowerment approaches, formalised leadership pipelines, intra-group peer support networks, and representation mandates can be explicitly and formally included as part of governance charters.

7.4 Policy Implications

The results of this research provide clear-cut guidelines concerning the development of cooperative environment in the state of Kerala. It is evident from the research that, there are strong associations between social capital and variables such as trust, shared values, network ties, communication and leadership. The researcher thus pointing to those areas where measured policy interventions can make a significant difference. From the findings derived from the study, the following policy implications are suggested, which would help for translating the results to evidence-based policy action that regulators and governments could use to increase member involvement, institutional openness, and the sustained existence of cooperatives.

- Regulators should ensure organised trust-building initiatives in cooperatives in the form of disclosure policies, participatory decision-making mechanisms and grievance redress mechanisms, as they add a lot of social capital among the members.
- Under the cooperative regulatory structure, the codes of ethics and value-alignment charters in all registered cooperatives would be compulsory, considering the significant influence of common norms and values on building social capital.
- Policies can mandate cooperation to have both formal and informal networking platforms, such as member forums, cluster-level associations and inter-cooperative networks, as social networks have the most significant impact on social capital.
- Regulators can establish minimum standards of communication, which include regular newsletters, electronic communications and regular meetings of members. This is necessitated by the fact that better communication has been proven to enhance the levels of trust, collaboration and mutual understanding, leading to the consecutive development of their respective stakeholders.
- Policymakers must demand mandatory leadership development and governance certification among cooperative leaders because good leadership will always increase social capital among cooperative units.

- It would slightly change their cooperative audit framework to incorporate the gauges of social capital, namely trust score, network density and member involvement, to ensure that governance control goes beyond financial grace.
- Policies can push cooperatives to use digital communication systems to enhance the availability of information which contributes to the fact that effective communication translates into a measurable change in social capital development.

7.5 Conclusion of the Study

This study on 'social capital and member empowerment' in the context of cooperative sector in Kerala unravels that social capital is a pivotal factor in shaping cooperative effectiveness and inclusivity. Across various dimensions of trust, social networks, communication and information sharing, norms and values, leadership, and governance, there are significant variations based on age, gender, education and income. Interpersonal trust, convergence on shared values and satisfaction with communication systems were always higher among younger members, leaving the possibility of youth carrying on the cooperative spirit in terms of its being more likely among younger members. Meanwhile, reports were lower by female members in terms of participation, which insinuates that gender-oriented interventions are necessary. In a similar fashion, the level of educational attainment was also a positive predictor in the sense that the higher it was, the better it felt in terms of trust, ethical behaviour and leadership. Interestingly, although there was a lower income level, the economically weaker groups displayed high moral alignment and sound social networks which indicates the untapped use of these groups in increasing cooperative resilience. Nonetheless, there are still issues, particularly among the less-educated members and women, who always experience hindrances in communication access, leadership participation and value congruence. These lessons confirm the importance of balanced and diversity-sensitive policy solutions that acknowledge and respond to these diversities.

The study demonstrates that several major factors are relevant in determining the social capital of cooperative members in Kerala. Social networks were the most powerful factor, which means that robust formal and informal relations, group memberships and communication ties have an enormous impact on social capital.

Another significant influence is norms and values, which underlines the significance of a common value-based culture in cooperative enterprises. It has been discovered that trust is an essential component since the elevated levels of interpersonal and institutional trust have a direct impact on building social capital and fostering cohesion. The transmission of communication and sharing of information is also a useful contribution to enhancing transparency, cooperation and mutual understanding among members. Leadership and governance were also established as consistent and reliable topics, as evidenced by the fact that effective use of leadership and accountability in governance practices sustains and grows social capital in cooperative institutions. Generally, the findings imply that the most effective way to develop social capital by investing in relations, shared value building, trust maintenance, open communication and developing strong leadership by cooperatives.

The results suggest that member empowerment mediates the relationship between social capital and member satisfaction. In addition, it is clear that the membership in cooperative societies had a transformational effect on member empowerment. The fact that all eight key indicators showed statistically significant improvements, such as collective bargaining power, economic stability and improved access to education, healthcare and even decision-making, proves that cooperatives are critical in realising the social and economic prosperity of their members. The results also reveals that not only do members feel more informed and resourceful but also they feel much more included and heard by the societies. Such findings support the fact that cooperatives are effective platforms for grassroots empowerment and make positive contributions to individual development as well as community and socio-economic development.

The results as a whole indicate that the Kerala cooperative sector has deep reserves of social capital; however, there are some significant gaps that might impede its performance. Filling these gaps with specific interventions, including educational outreach, gender-sensitive policies and better access to communication, will not only improve cooperation performance but also provide further support, member empowerment, member satisfaction, member participation and a sense of belonging. The research concludes that the development and maintenance of social capital among cooperatives in Kerala is not a one-time aspect, instead it should be a part of organization culture which ensures nurturing of relationships, trust building aligned

with the core values of cooperatives. Therefore, this study affirms that, social capital is also a determinant of cooperatives and member development along with financial, human and physical capital.

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Appendix

APPENDIX-I

Social Capital and Member Empowerment: An Empirical Study among Cooperatives in Kerala

This survey is conducted to identify the process of social capital formation among cooperatives in Kerala and to examine the impact of social capital formation on member empowerment. All information collected in this survey will be kept confidential.

1. Name of the respondent:
2. Type of cooperative in which you hold membership:
3. Period of membership:

☐ Less than 5 years ☐ 5-10 years

☐ 10-15 years ☐ 15-20 years

☐ More than 20 years

4. Age of respondents

☐ Less than 20 years ☐ 20-30 years

☐ 30-40 years ☐ 40-50 years

☐ More than 50 years

5. Gender of respondents

☐ Male ☐ Female

☐ Transgender

6. Marital status of respondents

☐ Married ☐ Unmarried

☐ Others

7. Religion of respondents

☐ Hindu ☐ Muslim

☐ Christian ☐ Others

8. Locality of respondents

☐ Rural ☐ Urban

☐ Semi-urban

9. Caste of respondents

☐ General ☐ SC

☐ ST ☐ OBC

☐ Others

10. Educational qualification of respondents

- ☐ Up to matriculation
- ☐ Pre-degree/Plus Two
- ☐ Under graduation
- ☐ Post-graduation
- ☐ Others

11. Monthly income of respondents

- ☐ Less than 10000
- ☐ 10000-20000
- ☐ 20000-30000
- ☐ 30000-40000
- ☐ Above 40000

Rate the following statements (SA: Strongly Agree, A: Agree, NO: No Opinion, DA: Dis-agree, SDA: Strongly Dis-agree).

		SA	A	NO	DA	SDA
12	You feel comfortable discussing personal sensitive topics or concerns with other members of your society					
13	Members have a high level of trust on the leaders and management of your society					
14	Members have a high level of commitment in attaining the goals and values of the society					
15	Members and leaders are highly reliable in fulfilling their cooperative responsibilities					
16	Members of your society frequently interact with each other and with external parties					
17	You developed close personal relationships with fellow cooperative members as a result of your interactions					
18	Social network formed among members of your society lead to joint projects and collective actions					
19	you participate in informal and formal gatherings, events and social activities organized by the society or its members					
20	Your cooperative society and members are following all recognized cooperative principles over time					
21	Your society has formed and communicated necessary ethical guidelines and code of conduct to its members					
22	Members of your society are willing to help each other and contribute to the goals of the society					

23	There is a high degree of mutual respect and considerations among members of your society
24	Members of your society frequently have informal and formal communication with each other through various communication channels
25	Members have an easy access to relevant information with in the society
26	There is a strong culture of freely sharing information and knowledge among members in your society
27	Relevant and crucial information are quickly shared among the members of your society including those in remote areas.
28	Members are getting opportunity to participate in governance and decision making process
29	There is a high degree of transparency in the decision making process of the society and members and leaders are accountable for their actions
30	Your society gives representation and opportunity to marginalized members in governance structures
31	Your society often organizes leadership development programmes to enhance leadership skills of members
32	The members of your society collaborate with others and participate in cooperative networks
33	The members of your society often participate in cooperative governance and leadership roles
34	The members of your society often provide support and assistance to other cooperative members
35	The members of your society often engage in knowledge sharing and exchange of information among cooperatives
36	The members of your society actively contribute to the financial sustainability and growth of the society
37	The members of your society frequently meet each other and attend cooperative general assemblies
38	You feel that your cooperative membership has met your expectations in terms of benefits and support
39	You are satisfied with the level of trust and collaboration among cooperative members

		Before joining in a cooperative society					After joining in a cooperative society				
		SA	A	NO	DA	SDA	SA	A	NO	DA	SDA
40	You believe that the cooperative has positively impacted your social and community relationships, and you are satisfied with these changes										
41	You are satisfied with the cooperative's efforts in cultivating the norms and values among members										
42	You feel that the cooperative's collective bargaining power has positively influenced your cooperative achievements										
43	You believe that the cooperative has played a role improving the overall economic conditions of its members										
44	You gained a sense of belonging and inclusion in your community through your cooperative involvement										
45	You experienced increase in access to education, healthcare and other social services through cooperative connections										
45	The cooperative helped you access resources such as technology or										

	equipment to improve your capacity
47	You see an increase in your decision making abilities related to personal or professional life
48	You become more informed about local and national policies and regulations through your cooperative involvement
49	You feel that the cooperative has provided you with a platform to voice your concerns and influence policy decisions related to cooperation

50. Your overall opinion about the cooperative society in which you are a member:
……
……
……
……..

Thank You